

London & the World

Part four: the future of the city



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CONTRIBUTORS
TONY BARBER is the FT's Europe editor
CLIVE COOKSON is the FT's science editor
EDWIN HEATHCOTE is the FT's architecture critic
JONATHAN MOULES is the FT's enterprise correspondent
MARK ODELL is the FT's transport correspondent
FEARGUS O'SULLIVAN is a freelance journalist
JAMES PICKFORD is the FT's London and southeast correspondent
FIONA WOOLF is Lord Mayor of London

ILLUSTRATIONS
NICK LOWNDES

Special reports editor Michael Skapinker
Head of editorial content Hugo Greenhalgh
Commissioning editor Jerry Andrews
Head of production Leyla Boulton
Sub editor David Scholefield
Art director Derek Westwood
Picture editor Michael Crabtree
Head of B2B & world reports Robert Grange
Head of content activation Alexis Jarman
Head of professional services Stephanie Collier



On video
From landmark projects regenerating rundown areas to London's growth as a science hub, plus the new 'super sewer'
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Capital struggles to meet rising demand for homes

Housebuilding and regeneration are happening – but can they reach levels needed to accommodate the pressures of a growing population and overseas investment? By *James Pickford*



The greatest challenge facing the city in the coming decades is where all the extra people will live

London Transport imagines the future from 1926



Knight Frank said was the biggest site to come on the market since Battersea Power Station. East of the City of London, Irish property developer Tom Ryan is proposing Europe's tallest residential tower, a 74-storey skyscraper on the western side of Canary Wharf; to its east is Wood Wharf, an area for which 1,600 homes are planned, as well as retail and office space. In spite of this acceleration of development, Newham is not yet Chiswick. Tony Travers, an expert on the capital at the London School of Economics and Political Science, says the old image of the East End as unfashionable and threatening has been dispelled. "But if you compare the perfectly nice terraced housing in east London with its equivalent in outer west London, it is still seen as less desirable." Population growth may change this, he adds, as young people will be forced to buy in the east. "The young are going to start living in Leyton and Ilford in a way that they used to live in Shepherds Bush or West Hampstead." The extent to which they are pushed further out of the centre – in whichever direction – will be influenced in part by the flow of foreign capital into London housing. Concentrated at the top end of the market, overseas demand has prised London further apart from the rest of the country in terms of property values. According to figures from Savills, the estate agent, the 10 most expensive boroughs in London have a total property worth of £552bn, the same as Scotland, Wales and Northern Ireland combined. More than £7bn of overseas money went into prime London property last year, the agent said. The Treasury is watching the trend closely: the FT revealed last month it was considering taxing capital gains on foreign sales of British property, which UK citizens, but not foreigners, pay on any home that is not their primary residence. But the role of overseas investment is hotly contested. Many believe there would be a price to pay if its flow were stemmed. A study for Berkeley Group, the developer, by Mr Travers and Professor Christine Whitehead of the LSE, said such investment was essential to the supply of affordable housing. Its loss would threaten improved infrastructure funded through planning obligations. "In short, international investors generate additional housebuilding, which relieves rather than exacerbates the pressure on housing supply," the authors said. The world has recognised London's myriad qualities as a solid investment: but its appetite for the city may end up being something London can neither live with, nor without. See *James Pickford's video on the groundbreaking – and controversial – funding of the massive Nine Elms development project: www.ft.com/nine-elms*

MAKING PREDICTIONS is a perilous business. In a poster produced by London Transport in 1926, an artist imagined how the UK capital would look a century later: in this unrecognisable vista, the skies are filled with a multitude of small aeroplanes and airships, and the streets are overshadowed by unlikely brick-built skyscrapers. The poster (top right) was included by Boris Johnson in his "2020 Vision", a document setting out the long-term strategic needs of the city. While the London mayor pointed out where the early 20th-century transport planners went awry, he agreed with them in one important respect: London in 2026 is likely to be far more crowded, and its public services far more pressed, than its current inhabitants have ever experienced. Population growth is central to any attempt to speculate on London's distant future. Already nearing historic highs at 8.3m, the populace is

expected to rise to 10m by 2031 – equivalent to adding an extra three boroughs. It had already grown by 12 per cent in the decade to 2011, compared with 7 per cent in the UK as a whole. The capital's schools and hospitals will feel the strain, with most of the rise expected to come from a growing number of births rather than immigration. But perhaps the greatest challenge facing the city in the coming decades is the question of where the extra people will live. London housebuilding rates are at half the level needed to meet demand – put by Mr Johnson at 42,000 a year for at least the next decade. There is already evidence of overpopulation: some 12 per cent of people live in overcrowded conditions, as defined by the standard number of bedrooms per head. London's average household size rose from 2.35 to 2.47 people over the decade to 2011, while the national average remained flat. This mismatch of supply and demand has led to steep rises in the capital's house prices. Figures last month from the Office for National Statistics put the rise in the year to September at 9.4 per cent, compared with a national figure

of 3.8 per cent. A London home costs £434,000, on average, compared with £245,000 across the UK. Mr Johnson last month launched a long-term strategy, proposing new incentives and powers to kick-start stalled housing schemes and encourage more low-cost homes – both to buy and rent – for low and middle income Londoners. But with a recovery in the mortgage market, and London property continuing to attract foreign investment, the city is already undergoing a building boom across many areas. King's Cross and the Nine Elms project around Battersea are two of the biggest brownfield sites. But another area of vibrant growth is east London, where the regeneration triggered by the Olympics – still a work in progress – has been followed by a string of proposed business and residential schemes. East London's Royal Docks, which fell into decline in the 1970s, is the centre of several projects, including the creation of an "Asian business port" by Chinese developers ABP. Oxley Holdings, a Singapore developer, last month bought the Royal Wharf site with permission to build 3,385 homes on the land, which agent

Wren's retreat to the country

THE LIVES BEHIND THE BLUE PLAQUES
COMMEMORATING EMINENT LONDONERS:
SIR CHRISTOPHER WREN



Given Sir Christopher Wren's intimate connection with the City of London, it is unexpected to find a blue plaque with his name on a house at Hampton Court, a rural setting during Wren's lifetime. Old Court House was given to the architect as part payment for designing St Paul's Cathedral, though Wren complained that the grand Tudor pile suffered from "great decay" and had it remodelled. As Wren saw his plan for rebuilding London after 1666's Great Fire rejected, Old Court may well have been a welcome refuge from a city returning to muddle and ugliness.

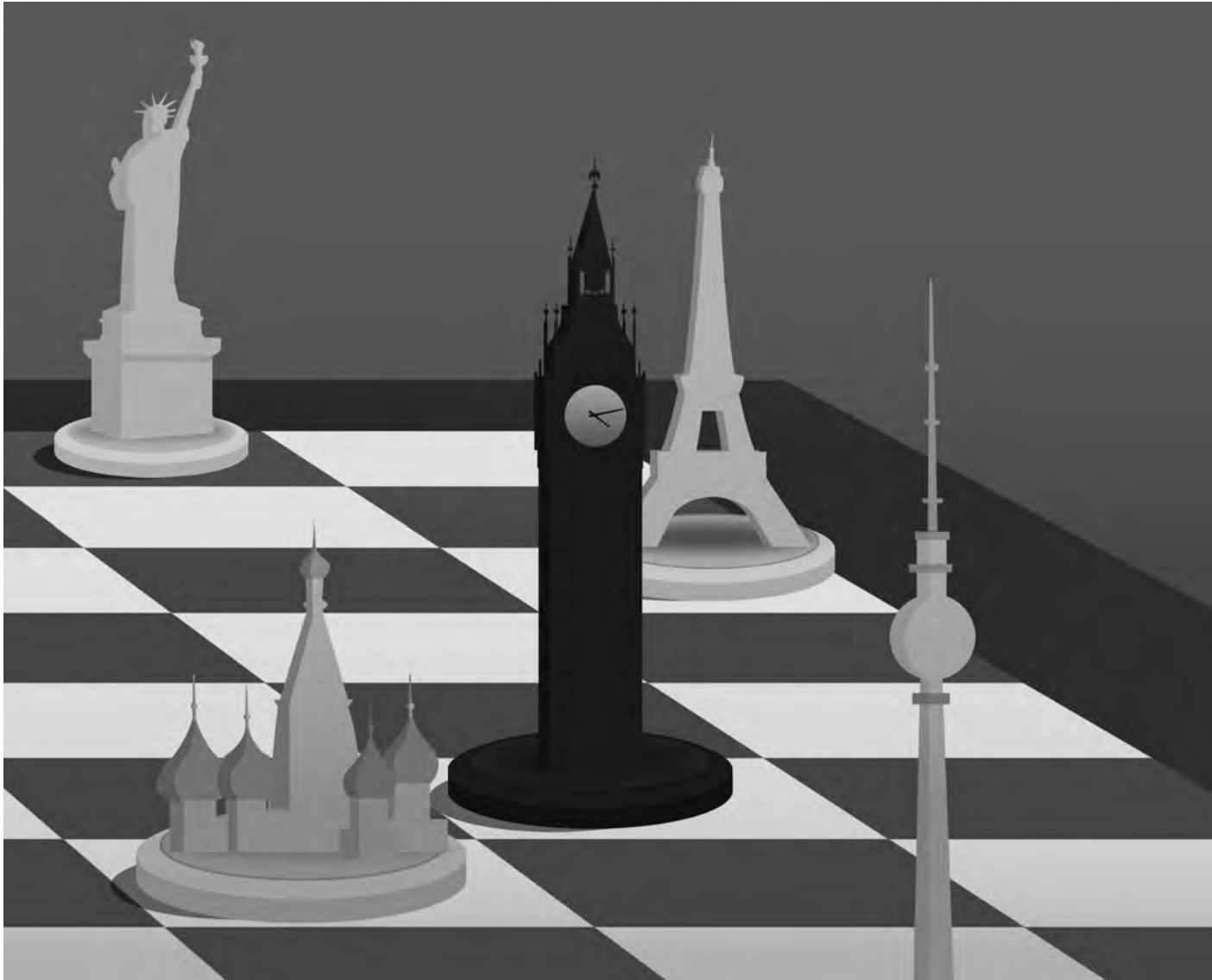
Feergus O'Sullivan



A commanding position

London is rare in combining political and economic power – but it comes at a price, writes *Tony Barber*

SOME CITIES, SUCH AS BRASÍLIA and Washington, are the political capitals of their countries but not their business and financial centres. For others, such as Istanbul and Milan, the reverse is true. London performs both roles. London leads and shapes the nation of which it forms part in a way that only Moscow and Paris, among large European capitals, come close to matching. But London's significance to Britain, Europe and the world extends further than that. More than in any other European city, London life is seamlessly woven into the global economy, global population movements and global culture. This brings both advantages and disadvantages. On the positive side, London generates much of the wealth that helps to protect and raise living standards elsewhere in Britain. According to the Centre for Economics and Business Research, a British-based independent forecaster, London will record economic growth next year of 3.8 per cent, accounting for almost a third of Britain's entire economic expansion. By 2018 the capital's output will be 16 per cent higher than it was before the financial crash of 2008, the CEBR says. On the other hand, London's dominance means that other British cities, including once great imperial commercial and manufacturing centres such as Birmingham, Bristol and Liverpool, struggle to emerge from the capital's shadow. This is not true in Germany, where Berlin is the nation's political nerve centre but Frankfurt is the financial capital, Hamburg is the media capital and other cities, such as Düsseldorf and Munich, compete with Berlin as dynamic business hubs. Neither is it true in Italy, where the glorious artistic heritage and local identities of Florence, Naples and Venice place them beside rather than below Rome in importance. London's centrality to British economic performance, and its role as the nation's chief gateway for trade and investment, will not change in the foreseeable future. But in transport, education and housing, this will present policy makers with great challenges as well as opportunities, as is being discovered by Britain's Conservative-Liberal Democrat coalition government and Boris Johnson, the Conservative mayor of Greater London since 2008. The debate over whether to construct a new airport for London, or just to add a third runway at Heathrow airport west of the capital, is a good example. European cities such as Berlin, Istanbul, Milan and Moscow have responded to the boom in international demand for business and leisure travel either by upgrading old airports or by making plans for new ones. British politicians recognise that new investment in airport capacity is essential to London's future, but they seem unable to make up their minds about which option to take. The cost of a new airport, plus the necessary transport links to London, would run into tens of



PHOTOS: GETTY; ROSIE HALLAM

billions of pounds. It would be an expensive choice for a country whose public finances are stretched and which is already investing very large sums in modernising the capital's creaking overground and underground rail networks. In education and housing, the task is to maintain London's attractiveness and reputation for quality, while not crowding out native Britons. Many Americans, Arabs, Chinese and Russians, not to mention French, Germans, Italians and Scandinavians, want their children to study at top-ranked universities and schools. The wealthiest revel in their sumptuous properties in Kensington, Mayfair and at Tower Bridge. But the impact on Londoners has been enormous. Non-Britons now account for more than one in two students at the London School of Economics, one in three at University College London, and lesser but still sizeable numbers at the finest private schools such as St Paul's and Westminster. High tuition fees and accommodation costs, not easily affordable for many British families, are driving this trend. Meanwhile, London house prices, especially in the most exclusive districts, are soaring thanks to what appears to be the insatiable appetite of the world's most affluent people for a property in the British capital. On the website of Berkeley Homes, the developers who built One Tower Bridge, a luxury complex due to open in 2014, buyers are wooed in Arabic, Chinese, French, Hindi, Russian and Turkish as well as English.

London politicians such as Simon Hughes, the MP for Bermondsey and Old Southwark, on the south bank of the Thames, want restrictions on foreigners' property investments in order to free up homes for local buyers, many of whom cannot possibly afford today's prices. Eric Pickles, the UK minister for local government, points out the legal drawbacks: "You certainly couldn't do it for EU citizens, and it would be dubious in terms of anyone else... I'm more concerned about getting affordable housing into London."

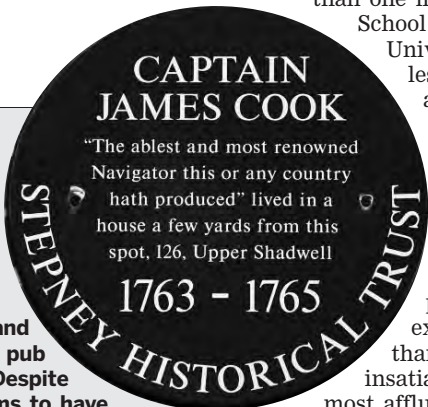
IN CERTAIN RESPECTS, EXPENSIVE housing and living costs are the price Londoners pay for hosting one of the world's largest financial industries and displaying an open attitude to globalisation in all its forms, including foreign investment. The beneficial effects are considerable, as demonstrated in a report by Startup Genome, a private sector project that sought out the world's most favourable locations for innovative entrepreneurship. Top of its list was Silicon Valley. Then came Tel Aviv, Los Angeles, Seattle, New York, Boston and London. Paris, Moscow and Berlin were the only other European cities in the top 20, each well below the UK capital. Berlin is these days the EU's most important capital in terms of political weight. But it will not match London as a business and finance hub as long as Frankfurt remains Germany's financial centre. Arguably, London will face more serious competition over the medium term from rising cities such as Dubai, Shanghai and Singapore than from Europe. New York and Tokyo will still be alive and strong. London will have to keep raising its game to stay at the heart of the world economy.

A stranger in his home port



Even on land, Captain Cook never strayed far from water. Born in Yorkshire, the explorer settled in the Thames-side hamlet and small port of Shadwell, just east of the City, and married Elizabeth, daughter of a pub landlord from nearby Wapping. Despite fathering six children, Cook seems to have studiously avoided both Elizabeth and Shadwell, being largely away on the voyages that would end with him being killed and cooked (as a mark of respect) on a beach in Hawaii.

FO'S



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Building on a tradition of discovery

Could a wave of new institutions help make the capital ‘the leading scientific city on the planet’? By *Clive Cookson*

LONDON HAS BEEN A powerhouse of science and technology for more than a century, from medicine in its teaching hospitals to physical sciences and engineering in its universities. The capital's global reputation for research has recently grown further, as institutions such as Imperial College and University College London invest in new facilities and move closer to the top of the world academic rankings.

“London is already a teeming hive of scientific activity,” says Kit Malthouse, deputy mayor, who is responsible for science policy. “We have four of the top 40 universities in the world and all of our universities are going through an unprecedented period of expansion. But we have decided to make further growth in London's science economy one of our main aims.” His boss, mayor Boris Johnson, told the BioIndustry Association recently that London could become “the leading scientific city on the planet”.

The standard-bearer of London's scientific ambitions is the Francis Crick Institute near King's Cross, named after the scientist who discovered the double helix structure of DNA with James Watson in 1953. It is the biggest biomedical research centre under construction in the world, funded by a £650m investment from the government's Medical Research Council, two charities (Cancer Research UK and the Wellcome Trust) and three universities (Imperial, UCL and King's College London).

The Crick will open in 2015 behind the British Library, on the edge of the great regeneration zone north of St Pancras and King's Cross stations. When it is fully operational, the institute will employ 1,500 staff, including 1,250 scientists, with an operating budget of over £100m a year. Its interdisciplinary work will cover biomedicine on a broad front, to help scientists understand why disease develops and to find new ways of preventing and treating cancer, heart disease and stroke, infections and neurodegenerative diseases.

The chief executive of the Institute is Nobel laureate Sir Paul Nurse, who is also president of the Royal Society, Britain's academy of sciences. He gives several reasons why London is the right place for a UK national biomedical research institute. They include: the breadth of expertise in its universities that can be drawn on to support an ambitious interdisciplinary research agenda; the range of patients from varied genetic and ethnic backgrounds being treated in London's hospitals; the appeal of London for young scientists around the world who love the idea of working in an exciting global city (despite its high prices); and the financial, entrepreneurial and legal expertise available in the UK capital for those wishing to commercialise research.

A life of experimentation



A mile or so southwest of the Crick Institute lived the man behind another great scientific institution. James Smithson, once of Bentinck Street, Marylebone, led a sensational life for a scientist. The European wanderings of the Duke of Northumberland's illegitimate son saw him jailed by both sides in the Napoleonic Wars. His real fame was posthumous: he left his fortune to found the Smithsonian Institution in Washington DC. The grateful city later dug up his bones in Italy for reburial in the US, which he had never visited in life.

FO'S

ENGLISH HERITAGE

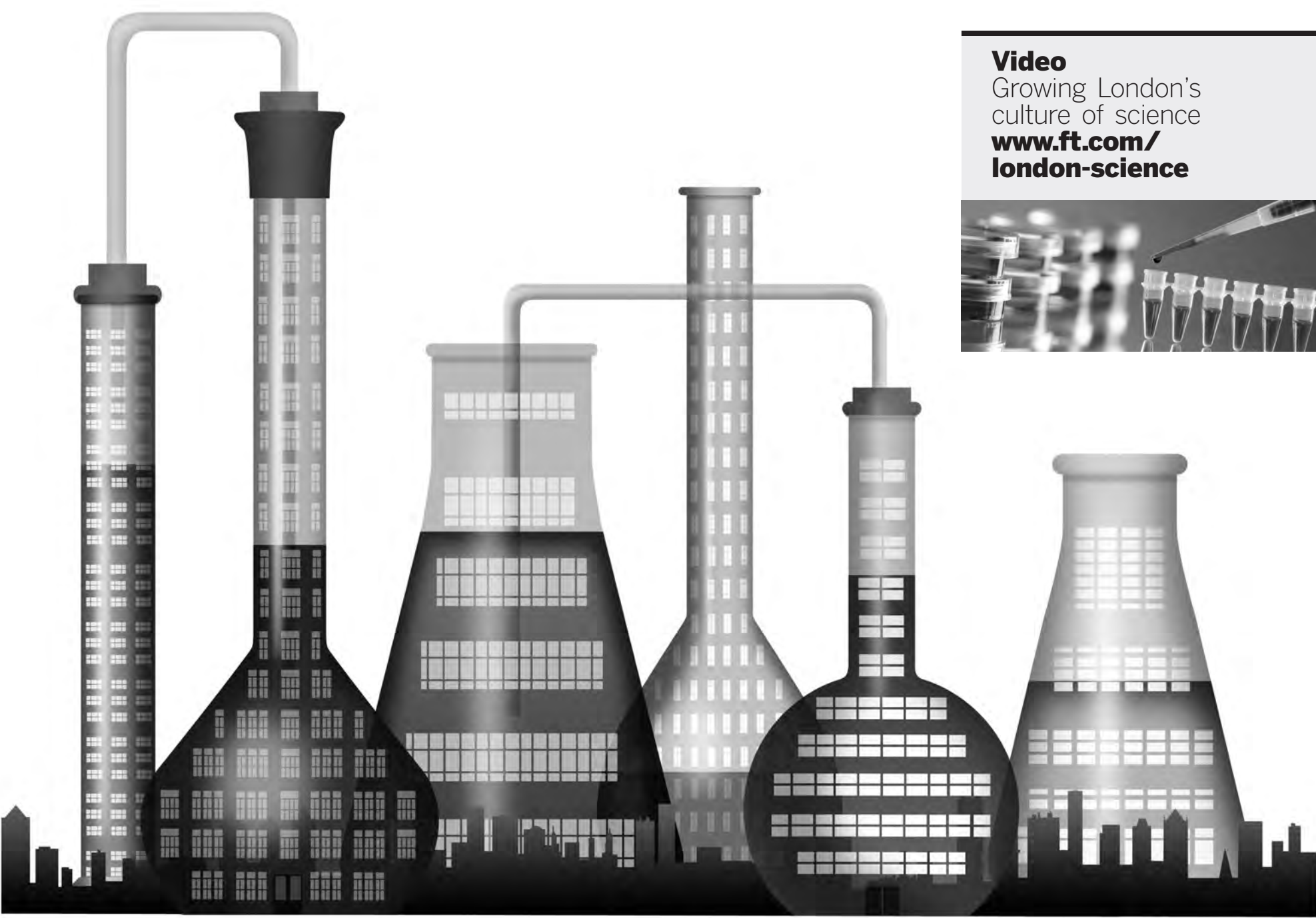
JAMES SMITHSON

1764-1829

Scientist

Founder of the Smithsonian Institution lived here

#



Video

Growing London's culture of science

www.ft.com/london-science

“It’s a national institute which will serve the national biomedical research endeavour,” Sir Paul says. “We see ourselves with a role to support other places throughout the UK. It would be very difficult to do that if we were placed somewhere else, because it would automatically become local if it was in Birmingham or Edinburgh or Manchester, say. In London it can serve the national agenda much more straightforwardly.”

Even more ambitious than the Crick in the long run is the Imperial West campus that Imperial College is establishing on 25 acres of derelict land at White City, about three miles from its home in South Kensington. Its first phase, a £150m research and translation hub, is under construction with funding from the UK government, Voreda Capital (a property finance company) and Imperial itself. Eventually the Imperial West site will need £3bn in capital investment to reach its full potential, says Professor David Gann, vice-president for innovation and development.

“Our plans are to develop a campus for innovation at a scale we could not possibly do [on our South Kensington site] and make that a hub for collaboration and developing ideas to

‘Discoveries made here are exploited elsewhere. We need to energise capital’

market on a scale that has not been seen in Europe before,” he says.

The college's long-term vision is for Imperial West “to develop in a series of phases [over perhaps two decades] rather than one prescriptive master plan, maximising our ability to adapt to changes in science, innovation, research and business”. Imperial is learning lessons from comparable US initiatives such as Cornell's new tech campus on Roosevelt Island in New York, Massachusetts Institute of Technology's Kendall Square and the University of California San Francisco's Mission Bay.

UCL, Imperial's great rival, wants to do something similar in east London but attempts to find a suitable site for a £1bn second campus have not yet succeeded. The first location it explored, Carpenters Estate in Stratford, was

PHOTOS: GETTY; DREAMTIME

dropped this year because of opposition from residents. An option being explored is the Olympic Park, though this may not be big enough to meet UCL's full ambitions.

People who have compared London with the great US science clusters, particularly around Boston and San Francisco, say its weakest point, when it comes to future scientific development, is poor access to capital to build companies out of lab discoveries. “We don't have a strong culture in this city of risk capital going into science,” says Mr Malthouse. “We are finding more and more that discoveries made here are being exploited elsewhere. In Boston and San Francisco, hungry risk capital is hanging around looking for opportunities. We need to energise private capital here, too.”

If that problem can be overcome, the scientific outlook for London really will be bright.

“I believe that London has a golden opportunity to be the premier destination in the world for higher education and, within that context, it can also become pre-eminent in biomedicine, health and life sciences,” says Michael Arthur, UCL provost.

“This won't be easy and it will take time, but over the next 20 to 30 years, we should be able to displace Boston from the top slot. Ambitious? Certainly, but in my view achievable.”

Improvements and growing demand led to rents more than doubling in less than two years

The Shoreditch neighbourhood was renamed Tech City in a 2010 speech by David Cameron, who set out a plan to extend the community east as far as the Olympic Park in Stratford.

Several companies with a large technology element to their operation were already moving into the wider borough of Hackney, where areas such as Homerton, Dalston and London Fields offered similar converted warehouse or industrial space to Shoreditch at a fraction of the price.

Jane ni Dhulchaointigh is the inventor of Sugru, a Plasticine-type silicone rubber that sets to enable repairs to household items and is sold largely online. She started making her product in a studio in Bethnal Green, a neighbourhood close to Shoreditch in 2005. In 2008, when her company FormFormForm prepared for full-scale manufacture, it moved up the street to a light industrial space with better delivery access.

The business moved again two years later, further east, to a former button factory near

Start-up zones Beyond the ‘Silicon Roundabout’

LONDON HAS BEEN DESCRIBED AS a city of villages. Its population of 8.3m people is spread across 33 boroughs, which are themselves further fragmented into a patchwork of neighbourhoods. It is unsurprising, then, that the use of “Shoreditch”, the name of a single district, as shorthand for the city's technology start-up cluster is considered by many aspiring entrepreneurs to be inadequate to describe a community that now encompasses thousands of young companies.

One of the main reasons for choosing to start a business outside the Shoreditch neighbourhood is the spiralling cost. Improvements to the area's Victorian warehouses and growing demand for limited space has led to rents more than doubling in less than two years, from about £15 per square foot to as much as £40 in some locations, according to Brett Sullings, an agent in the commercial acquisitions, sales and lettings department of property firm Stirling Ackroyd.

“This has meant that unless start-ups can find affordable space within the numerous tech hubs, incubators and creative shared spaces now establishing themselves in the area, many are being pushed out,” says Mr Sullings.



London Fields, where it could manufacture Sugru itself. Despite the rent rising by about 30 per cent since then, Ms ni Dhulchaointigh has stayed put, for the convenience and because the area has improved so much as a start-up location.

“There are many more places to be able to get lunch and have meetings and countless other exciting businesses hidden in the streets around us,” she says. These range from Lumi, a social networking site created by the founders of music streaming service Last.fm, to E5 Bakehouse, an artisan bakery and coffee shop.

Thanks to an upgrade and extension of local railway lines to create a Tube-quality service called London Overground, neighbourhoods such as Dalston and London Fields are within a few minutes reach of Shoreditch. London's improving transport links are key to fuelling further expansion of start-up clusters.

Ryan Notz is a US-born stonemason and founder of MyBuilder, an internet marketplace connecting clients with tradespeople. He has been based in Farringdon, two miles from Shoreditch, for more than four years. He considered the area around the Old Street gyratory – which inspired the district's nickname, Silicon Roundabout – but was put off because it was too far from the mainline stations used by his staff.

“We work long hours and the commute would have been longer for everyone,” Mr Notz says. “There's only one Tube station [at Old Street] and a lot of people in our office were travelling into Farringdon Station from outside London.”

Others have gone further afield. Caspar Craven, co-founder of Trovus, which provides business analytics services to multinational clients such as IBM, Deloitte, Eversheds and Dentons, is based across the Thames at the Oval. The area is better known as the home of Surrey Cricket Club, but has many of Old Street's benefits at a fraction of the cost, says Mr Craven.

“We're in a workspace complex with lots of smart businesses,” he says. “Walk along the corridor and you can have lunch in the canteen with smart people from other early stage businesses. We've found suppliers, partners and mental sparring partners here.”

Another fast developing neighbourhood is the area behind King's Cross and St Pancras Stations, where former goods yards and warehouses now house modern office space. Macmillan Group and Central St Martins arts college have relocated to the area, with Google to follow, helping to draw in early-stage technology ventures. However, the lack of smaller spaces on shorter leases is already pushing aspiring entrepreneurs to locate further west, around Euston station.

And there is a danger that productivity can suffer in the wrong environment, which has less to do with where you are and more to do with the type of office you choose, Mr Notz says. “I reckon that from our old office to our current one, we're half as productive as we were,” he says. “People simply need space and privacy to be productive. Distractions kill [productivity], and big open-plan offices are full of distractions.”

He has made two offers for larger office spaces in the area around his current Farringdon base. “We need different working areas, so that the tech, marketing and service teams can have their own space and not feel that they are annoying others when they have work conversations.”

It is not only where your offices are in London that matters, but how you organise them.

Jonathan Moules

Can planners avoid trouble on the horizon?

Transport correspondent *Mark Odell* looks at some of the radical schemes intended to transform travel in a capital braced for a population boom

COMMUTERS IN LONDON IN 2050 will still jump on the Tube, catch a bus or hail a taxi but advances in technology and the pressing need to free up space in an ever more congested city look set to transform both the travelling experience and the face of the capital.

The transport planners cannot afford to stand still. The growth in London's population over the past decade, adding 2,000 people every eight days, has forced them to rip up projections that it would hit 8.5m by 2030. There are already 8.3m inhabitants in Europe's largest urban conurbation, a figure that is now expected to reach 10m by 2030 and could jump to 11.5m by the middle of the century.

Two big variables will influence future transport planning decisions, says Michèle Dix, head of planning at Transport for London (TfL), the body that runs the capital's public services. "One of the big issues that we face here... is how much longer can it continue to grow as a radial city, where most of the commuting is from the periphery into the centre," she says.

Alexander Jan, head of transport, strategy and economics at Arup, the engineering consultancy, points out that central London is the biggest "journey to work area" in Europe, with more than 1m people commuting daily.

Planners are trying to manage this by establishing "transport hubs" to stimulate regeneration, of which Stratford, the site of the Olympic Park in the east, is the first real example. The commuter town of Croydon, which became part of Greater London in the mid-1960s, is another likely candidate – it is already a focal point, with a large rail interchange and the only tram network in the UK capital.

In northwest London, planners have identified a site at Old Oak Common, currently a railway depot, as a likely interchange station between the proposed but controversial high-speed train line to the north, dubbed HS2, and other lines, including the £16bn Crossrail line that will connect west to east under London when it opens later this decade.

The other important issue that needs settling is the location of London's main hub airport. The government is not due to make a decision on whether to expand Heathrow, the world's busiest international airport, or move the hub elsewhere, most likely to the east of London, until after the next general election in 2015.

Something that will not change, says Ms Dix, is the demand for travel. "One thing is certain: people are going to continue to want to travel. We are social animals, we may shop online but we still like to go to the store to browse."

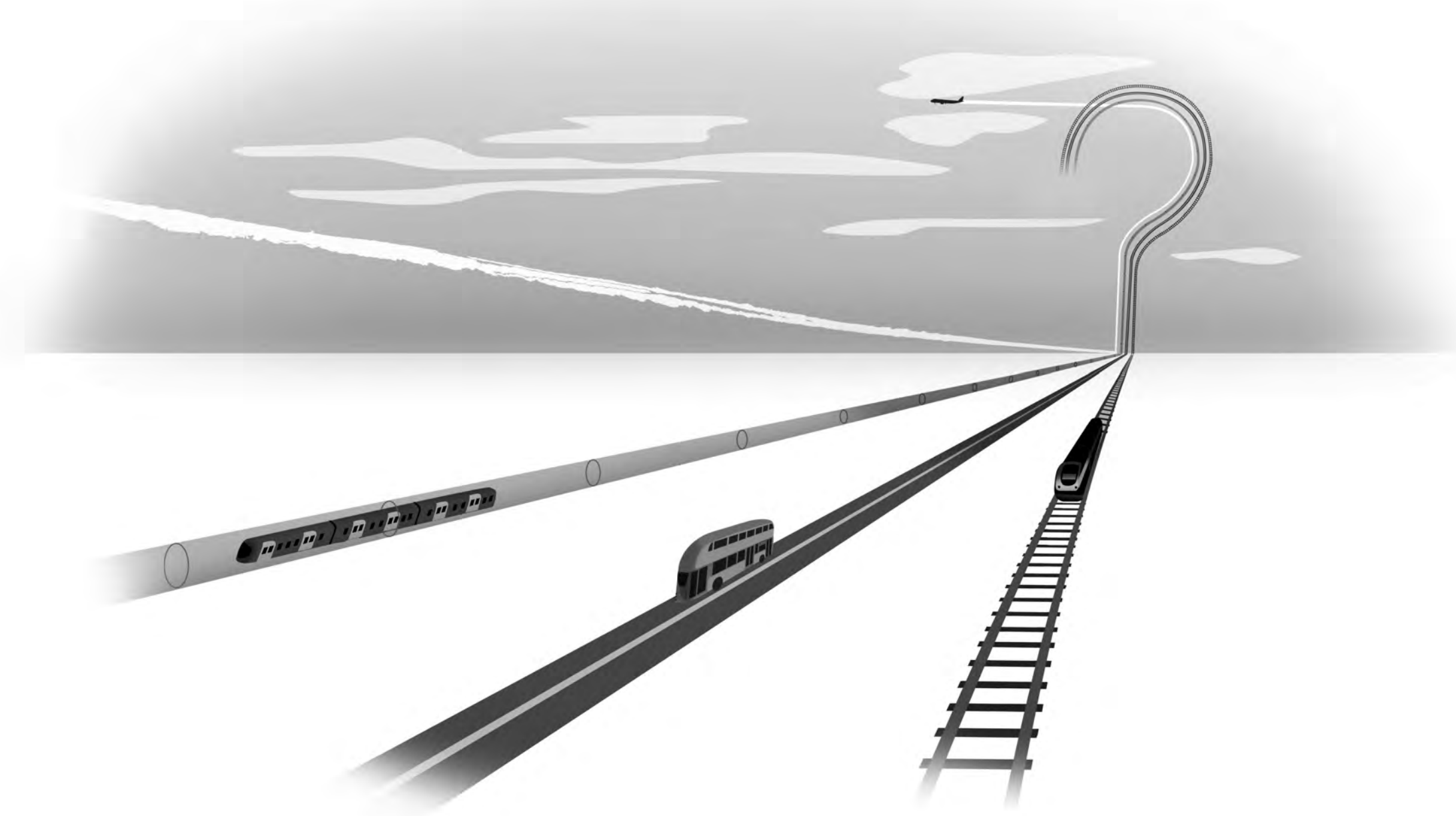
The population explosion has increased fears that London's transport system will grind to a halt irrespective of the projects already planned. "London's population growth is the fastest in modern history," says Mr Jan. "It will be a real challenge for planners as it is hard to ensure the transport system can grow at the same rate."

Ms Dix agrees that there is no time to lose. "Thirty years in planning terms is not that far ahead. Much of what we think will happen is what we think we can make happen."

Billions of pounds is being spent on upgrading London's underground rail service and that is set to continue.

Improvements to signalling and rolling stock have raised the capacity of lines already modernised, with train frequency rising from the mid 20s an hour to the low 30s.

Over the next three decades, frequencies will have to rise to 40 trains an hour, says Ms Dix. The only way to achieve that is to move to a fully automatic metro, following cities such as Paris, and letting computers, rather than drivers, manage the shorter distances between trains.



More controversial than any of the rail projects are proposals to bury roads under the city

London's first orbital railway, the Overground, has recently fully opened, spreading the load by helping people avoid passing through the centre just to make connections.

TfL is not only breathing new life into existing infrastructure. After more than 20 years on the drawing board, work finally started in 2009 on Crossrail, Europe's largest infrastructure project. When completed, the line will run for more than 100km from Reading to the west of London, dipping beneath the centre of the city in tunnels, and on to Essex and Kent in the east. When it opens fully in 2019, it will lift London's rail capacity by 10 per cent.

Lobbying has started in earnest for a similar project, dubbed Crossrail 2, that would run from the south-western suburbs underground to the northeast of the capital. TfL wants work to begin near the start of the next decade to ensure the line opens by the early 2030s. Again the impetus behind it is HS2, with TfL warning the extra passengers would overwhelm its proposed London terminus at Euston.

More controversial than any of the rail projects are proposals to bury some of London's main arterial roads under the city. Ms Dix says such a move would free up land for redevelopment, both for building and to create more green space.

The obvious candidate is the North Circular, part of the capital's hotch-potch inner ring road. Route A501, which links the A13 from east London to the A40 in the west, could be another.

There are precedents, including the so-called "Big Dig" project in Boston in the US, which ran massively over budget. It is the huge cost of tunnelling that Sarwant Singh, a consultant at Frost & Sullivan, believes will stop the roads from going underground. Instead, he says the more cost-effective way of achieving the same thing would be to copy China, where triple-deck roads are under construction.

"Building anything under the city is very expensive," he says. A triple-deck road would carry local traffic on the lower level and long-distance traffic at higher speeds on the upper level – the middle tier would have turn-off ramps and interchanges linking the other two layers.

One technology being developed that is expected to make a significant difference to road congestion is automation, which will allow driverless cars, buses and lorries to interact with a traffic management system. Commuters using public transport will similarly benefit from being linked to the network via their mobile devices.

Creative tension City absorbs the new and adapts the old

THE APPEARANCE OF THE SHARD on London's skyline has reinforced an old cliché about the city – that its one constant is change. The 70-storey skyscraper dwarfs its neighbour, the Brutalist concrete tower of Guy's Hospital. When built in 1974, it was the tallest hospital building in the world.

Side by side, they illustrate the change that has occurred in a generation with crisp clarity: the massive shift from public to private, from the functional concrete of a dominant public sector to the slick glass commercial architecture of superstar architect Renzo Piano. Of course, nothing is that simple, Thomas Guy, who founded the hospital in 1721, made his pile in the South Sea Bubble.

Yet the contrast is clear. The Shard hits the medieval street plan of Southwark clumsily, smashing through London Bridge station and casting its shadow over a 12th-century church, Georgian terraces, and the Victorian ironwork of Borough Market. Every change threatens to transform London, usually for the worse, yet it absorbs each wave, every era reinforcing its quirky blend of old and new.

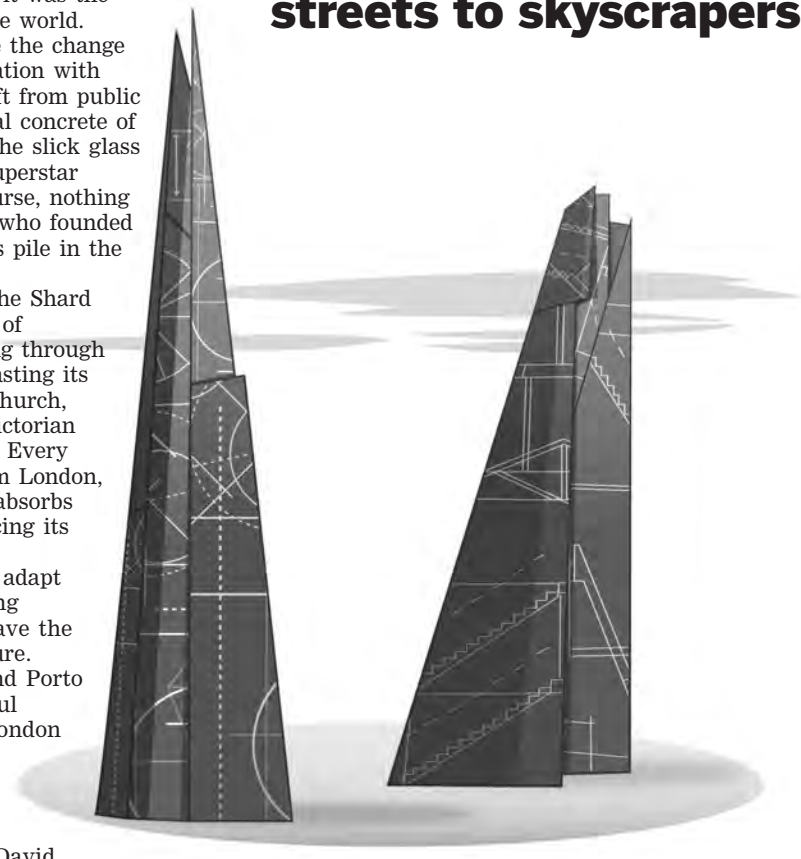
That ability to absorb and adapt has made London an enduring success. The city does not have the most sophisticated architecture. Small cities such as Basel and Porto have bred far more thoughtful architectural cultures. Yet London exports architecture on the grand scale. Practices including Foster & Partners, Rogers Stirk Harbour, Grimshaw, Wilkinson Eyre, David Chipperfield, Terry Farrell and others are among Britain's greatest and most successful cultural exports.

And for years, they were just that, architects building more abroad than at home. This is another paradox of London: its openness has often excluded its finest designers, shut out by big international and corporate practices and forced to become nimble enough to work anywhere. But they have brought home these skills to create a thriving architectural scene probably unmatched anywhere in its commercial and critical success.

London, unlike many continental cities, has no master plan. There are no big ideas; it relies on the market and on piecemeal developments constantly remaking every quarter. The riverside, developed since the early 1980s, shows the execrable results of lacking a master plan in its mongrel mix of ad hoc speculative towers and low-rise tat. Yet elsewhere real intelligence emerges, as in Argent's exemplary redevelopment of King's Cross. Cities in Germany have 10 times as many planners, yet, while they remain provincial, London somehow powers ahead.

The capital's recent reinvention as an asset class for foreign investment promises to change it again. Combined with the government's

Architects must think about the move in scale from medieval streets to skyscrapers



determination to reduce the welfare bill, consequently squeezing out the last working-class Londoners from the centre, this transformation promises to be among the most radical in years.

Yet it also means attention may shift to the less desirable parts surrounding the centre and this leads us to another of the city's paradoxical strengths: the mediocrity of its fabric.

With swaths of poor, postwar housing, dim commercial development and undemanding Victorian terraces, the city has neither the archaeological density of Mediterranean city centres nor the planned and regulated beauty of Paris or Rome. It also lacks the scale and intent of Manhattan's grid or Hong Kong's skyline and its interest lies in demanding that architects think about juxtaposition and about the move from one scale to another, from tight medieval streets to glass and steel skyscrapers.

This constant need to negotiate necessitates (at best) an intelligence in its architecture, an ability to adapt and intervene carefully and thoughtfully – very different from the extrusions frequent in North American cities. It also forces reuse: from Tate Modern in the old Bankside Power Station to Central St Martins art school in a converted granary at King's Cross, the most impressive new spaces are often not in new buildings but in the carcasses of industrial infrastructure.

Ironically, it is this ad hoc environment and blend of the good, the bad and the ugly that allows constant reinvention. It never seems in danger of getting too beautiful and, perhaps, that is a good thing.

Edwin Heathcote

Phones or tablets will act as smart tickets, allowing the user to plan and pay for journeys, while rerouting their owners to avoid delays.

Should a weary commuter decide a train or driverless bus is not for them, they will be able to hail a cab at the touch of a key on their phone. The difference is that by 2050, there will be no chatty cabby behind the wheel.

"The job of taxi driver just won't exist any more," says Mr Singh.

A far-sighted view of the Tube



PHOTOS: KEN GARLAND; STEVE COLE

Even if London's transport network were to double in size, its Tube map would probably retain much of Harry Beck's 1933 original. The east London-born engineering draughtsman broke new ground representing the Underground topologically, altering real distances for the sake of clarity.

Beck's created the map in his spare time and based it on electrical circuit diagrams. It was not until much later that he got to pencil in his own birthplace. Leyton, the unassuming low-income suburb where he was born in Wesley Road, only got its Tube station in 1947. FO'S



The capital’s unique selling point

A concentration of skills has made the city an advertising one-stop shop – but it risks cutting off its own supply

of talent, writes *James Pickford*



LONDON’S PROWESS IN financial services has often masked its formidable strengths in other sectors – not least the creative and media industries. The UK capital is a hub of creative talent, with world-class strengths in advertising, broadcasting, marketing communication, theatre, film, special effects and design. This is reflected in its economic impact.

Creative industries account for 5.6 per cent of UK gross value added, a measure of economic output, and make up 8.7 per cent of all UK enterprises, according to the Institute of Practitioners in Advertising (IPA). This is partly because the UK punches above its weight as a consumer of advertising. It is the world’s fifth largest market for advertising after the US, China, Japan and Germany – in spite of being 22nd in population size. While the French spend 3.5 per cent of GDP on media and cultural products, Britons spend 7 per cent.

Claire Enders, founder of Enders Analysis, says: “We have a gigantic industry because we have complicated behaviour: satellite, Freeview, digital TV, Sky. We have advertising technologies coming out of our ears in the UK.”

Much of this activity is focused on London: the IPA puts the capital’s share of national gross income earned by advertising agencies at more than 80 per cent. The city acts as a cluster for disparate media skills, providing a “one-stop shop” for clients. Ms Enders says only Los Angeles and New York rival London for “end-to-end ability”.

“The economic advantages of the density here are only understood when you participate in it all the time. You can get around all the aspects of a creative problem in an afternoon.”

But the city has nonetheless had to deal with profound long-term changes in the industry. Twenty-five years ago, a company that wanted to get its message out to UK audiences could reach up to 80 per cent of the population by placing a

TV advertisement next to *News at Ten* and another during *Coronation Street*, the soap opera.

Today, there are hundreds of TV channels and the internet and smartphones are tearing up traditional expectations of viewing habits. The shift is happening faster among young people: in the UK, 3 per cent of television viewing took place on the internet and mobile video, but the figure was 10 per cent for 18-34 year olds, according to Nielsen and BARB/InfoSys+, the audience measurement data providers.

So reaching the same proportion of the population is now far more complicated. Paul Bainsfair, director-general of the IPA and a former chief executive of Saatchi & Saatchi, says: “The old clear lines of who did what are changing. Google and Facebook would have been seen as media channels but are morphing into what we used to think of as advertising and media agency territory.”

It is a shift that favours the agile. “London has responded well to fragmentation,” says Richard Exon, former chief executive of agency RKCR/Y&R. “It’s been a huge opportunity for brand owners who understand how to exploit

new developments and smart agencies, whatever their scale or heritage. The field is much more open, both for brands and their agencies, than it was before these changes.”

THE SHIFT FROM PRINT MEDIA TO digital has favoured another growth industry in the capital: technology businesses. A handful of web start-ups scattered around Shoreditch 10 years ago has grown into 1,300 today, according to Tech City, the government’s promotional agency for the sector (*see page 7*). As online activity has grown, many of these businesses are playing an increasingly important role in delivering marketing messages to a fragmented audience.

Small companies have an advantage in London: the UK advertising industry is one of the least conservative when it comes to big brands trusting minnows with their custom. Joint, an agency launched 17 months ago by Mr Exon and Damon Collins, former creative director at RKCR/Y&R, employs 20 staff in Soho and has produced work for TSB, BHS and Air New Zealand.

Mr Exon says this would have been much harder to achieve in the US or Asia, in spite of their entrepreneurial reputations. “One of the great things about London is that if you get the right mix of talent and experience, then big businesses will consider you even when you’re a start-up,” he adds.

London’s reputation as a global centre of excellence in advertising goes back to the 1960s and 1970s and the emergence of creative directors such as Ridley Scott and Alan Parker, who later moved into the film industry. In a society still infused with class, it was a sector in which raw talent counted for more than connections.

But there are worries today about the ability of the industry to keep its doors open to young people from all backgrounds. London’s economic

success has pushed up the cost of living, with housing costs in particular at record levels. Mr Exon says: “We need to guard against only middle-class kids from comfortable backgrounds being able to afford to start in the industry, because, if we get to that stage, we will be cutting off our supply of talent to a high degree. London is at its best when people from many backgrounds have the opportunity to succeed.”

Another potential threat to the UK capital’s predominance is the emergence of new markets in Asia, Latin America and eastern Europe. While they present an opportunity for British expertise, they are also sparking the creation of vibrant advertising industries in places that formerly had none. “The enthusiasm and energy that some clients find in developing countries is very seductive,” Mr Bainsfair says.

For Ms Enders, the key to the continued success of the capital is its openness to outsiders. “Here, the creative culture is full of originality and the reverse of conformism, which is partly to do with its history as a 2,000-year-old city open to outsiders. It creates a demotic sense of an open future for all.”

BBC boss’s place in the middle



Complaints about BBC political bias are almost as old as the corporation itself.

Lord Reith, managing director and later first director-general, was living at Barton Street in Westminster during the General Strike of 1926. He was attacked for barring a radio broadcast by the Labour party. Squeezed as ever, Reith had, in fact, been vetoed by the Conservative government and was afraid of having the BBC commandeered by the then chancellor Winston Churchill.

While the storm blew over, it bred a life-long loathing between Reith and Churchill.

FO’S

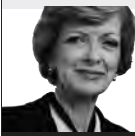


Video: December 11
What lies beneath – London’s ‘super sewer’
www.ft.com/thames-tideway



PHOTOS: GETTY; ROSIE HALLAM

Fiona Woolf, lord mayor of London: we must take the lead



LONDON HAS ALWAYS BEEN A gateway to the world. International trade and commerce have been at the heart of life in the capital since Roman times. In many ways, that is truer today than ever before – even if pottery has been replaced by professional services and timber by technology.

During my legal career, London has opened its doors to 40 countries, from Kosovo to Cambodia, as I have tried to play a small part in bringing cheaper, cleaner and more sustainable energy to people the world over. Only in the past year, while working on a project in four of the poorest nations in Africa – Ivory Coast, Liberia, Sierra Leone and Guinea – I witnessed how poor investment conditions have real human and economic consequences.

Energy and finance underpin economic growth in all corners of this increasingly interconnected world. The global population is forecast to reach 9bn by 2050, and the Organisation for Economic Co-operation and Development predicts 3bn people in Africa and Asia will form a new middle class by 2030 – a transformation far greater in scale and speed than the industrial revolution.

This upheaval makes London’s role as a leading financial centre critically important if we are to rise to the complex, long-term challenges posed by this “new normal”. The City is a global marketplace and can help to deliver global solutions to problems such as climate change, scarce resources and urban planning.

Time and again, London has seized the opportunities of every transformational stage of industrialisation: the first modern joint-stock companies in the 17th century; the birth of a

The capital will lose out if it misses the benefits of diversity

That is why we need to ensure market mechanisms encourage companies to approach value creation in the right way, as identified by the Kay Report on UK equity markets. Improved company reporting is one area that I will be exploring along with Mervyn King, chairman of the International Integrated Reporting Council.

We have seen some big companies move away from quarterly reporting because it can lead to an excessive focus on short-term results at the cost of investing in the future. As Paul Polman, chief executive of Unilever, has said: “We are in the business of maximising returns, but we can maximise social and environmental returns too.” This is a vision of enlightened capitalism that everybody in the City should sign up to.

The 2m-plus people who work in finance across the UK all have a stake in ensuring that consumer faith in the system is restored.

ANOTHER BIG ISSUE THAT THE CITY and London need to tackle is diversity. There has always been a moral case for inclusion, but there is now a clear business case. Recent research found that women hold 6 per cent of executive committee and board positions – a stark statistic that we must address.

The world has changed since I became the first female partner at my law firm CMS 30 years ago. Today, there are 50. But it has not changed fast enough, and we need to make sure far fewer women and people from diverse backgrounds get left behind.

London will lose out if it does not capture the benefits of diversity – fresh perspectives, originality and innovation – by enabling talented individuals to get to the top. This change will not happen overnight but we need to ensure that businesses employ a true meritocracy, so that the best succeed, regardless of gender, race, sexuality or nationality.

Only then will statistics on diversity better reflect modern society.

Finally, London must remain at the forefront of new markets. The Chancellor recently announced plans for Britain to become the first non-Islamic country to issue a *sukuk*, or Islamic bond. The City of London Corporation is also working with government and financial institutions to help the capital develop as a centre for renminbi business – an area in which rivals such as Luxembourg, Paris, Frankfurt and Zurich are trying to steal a march. It is vital we are plugged into these fast-growing forms of finance early on, so we are not left behind as the world changes around us.

It may be true that, as John Maynard Keynes observed, in the long run we are all dead. But, in the meantime, we cannot stand still. London’s success as a global business hub is critical to meeting the challenge of this new normal. We must work together to deliver an enduring revolution that leaves a positive legacy for our grandchildren and the generations still to come.

The City is a global marketplace and can help with solutions to issues such as scarce resources

global insurance market in the 18th; and formalising the rules for stock exchanges in the 19th.

Now, capitalism has to take another gigantic leap. The City must pioneer sustainable models of finance that deliver long-term value and are fit to serve an urban population predicted by the UN to reach 6.3bn by 2050.

Financing, especially private sector investment, will be a critical component of the development of tomorrow’s cities through smarter design and delivery in areas such as power, sanitation and transport. That is why I have launched the Tomorrow’s City programme to bring together leaders across a range of fields to explore how we can work better together to tackle these big challenges through innovative approaches.

Central to this is putting emphasis on creating value for society. It also means behaving responsibly and with integrity from the top to the bottom – which is the most long-term behaviour of them all. Products and services should be designed to meet customers’ genuine needs, such as sustainable infrastructure financing and legal contracts. Similarly, every shareholder needs to be a good custodian for those citizens, savers and businesses to ensure a shared prosperous future.

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