CBRE RESEARCH

2018 UK
REAL ESTATE MARKET OUTLOOK

Including Brexit supplement

CBRE

WELCOME TO THE CBRE UK MARKET OUTLOOK FOR 2018

It's crunch time for Brexit, and the UK economy faces challenges in the form of full employment, higher inflation, and lower consumer spending. In this report we look at how economic, political, and technological forces will affect property markets in 2018 and beyond. This report is the most comprehensive sector-by-sector outlook in the industry, from flexible office space to e-commerce, and from data centres to build-to-rent. Do also explore our special feature on 'proptech' on page 42.

I hope you enjoy reading this report. Please do get in touch with CBRE's research team for further information – you'll find our contact details at the back.

Miles Gibson, *Head of UK Research*

PAGE 04

Economic Outlook

A benign global environment will be supported by a European recovery, though the UK is starting to fall behind, with subdued consumer spending and business investment arising from a weak currency, inflation and Brexit uncertainty. Near full employment means that job growth will be slower than recently. Risks of an overshoot in US interest rates could dampen UK growth in 2019-2020, though increasing clarity over Brexit will help the UK bounce back.

PAGE 08

Brexit Supplement

Brexit

2018 will be crunch time for Brexit. There will be substantial political noise and turbulence throughout the year. Although agreement on withdrawal issues has taken time to secure, these issues are not likely to have significant impact on real estate. Attention will now progress to the much more important question of future trade and migration arrangements. Trade access is likely to be worse than we have now (perhaps somewhere between the Canadian and Swiss deals with the EU), though only to the extent that migration controls are tighter than they are now. Future migration controls remain extremely uncertain. In the face of these uncertainties, some businesses are preparing to move some staff to elsewhere in the EU. However, the extent of such moves is probably overstated, with the majority of threatened moves not yet implemented.

SUMMARY

PAGE 16

Investment Outlook

Rebounding strongly from the uncertainty in the immediate aftermath the referendum, the UK investment market has seen a surge in transaction volumes. Total returns have been similarly buoyant, powered by a thriving industrial sector. Although we forecast a weaker economic outlook, we expect that solid income-driven performance over the medium term, combined with strong demand for property exposure on both the debt and equity side, will ensure investment volumes remain robust.

PAGE 20

Office Outlook

The outlook for UK office markets in 2018 can be characterised as challenging. Our prognosis reflects the fortunes of the UK economy which is slowing and continues to feel the effects of Brexit-related uncertainty. Rental growth will vary across the country, with stable or small increases in the large regional markets, but small declines in parts of Central London. Low levels of availability and relatively strong demand for the best Grade A space will moderate any rental falls. Investment volumes will be resilient.

PAGE 24

Retail, Pubs and Leisure Outlook

A slowdown in consumer spending will make 2018 a tough year for retailers and leisure operators. The weaker pound will provide some comfort for internationally-oriented retailers, but rents are unlikely to grow. Significant amounts of new, high-quality shopping centre space will open and some prominent mergers will continue the convenience retail revolution. Customers and retailers will further exploit new technologies, with the physical store continuing to redefine its role. Pubs and leisure operators will increasingly review their strategies to maximise the return on their real estate.

SUMMARY

PAGE 28

Industrial & Logistics Outlook

Industrial and logistics property put in a star performance in 2017, underpinned by very strong demand and extensive supply constraints. These factors seem likely to continue into 2018. New transport technologies will continue to gain credibility, though it may be tricky to work out which technologies will be so widely adopted as to be labelled 'transformational'. Change in the retail sector will continue to affect industrial and logistics property. These structural factors have overwhelmed Brexit as an influence on the sector so far, and 2018 will begin to offer more certainty once EU trade talks get underway.

The Beds Sectors

In this special section we bring together the collection of real estate investment sectors increasingly categorised as the 'beds sectors' – namely owner-occupied housing, built-to-rent housing, student accommodation, hotels and healthcare. Whilst these sectors display distinct individual characteristics, and are often much more than places to sleep, they do display certain similarities in terms of operational risk, non-cyclical performance and (often) major supply constraints compared with demand.

PAGE 32

Beds Sector

Owner-occupied and rented housing

Home sales have fallen to a 'new normal' of around 1.2 million homes per year, but first time buyers have been resurgent, partly as a result of Help to Buy. House price growth will ease in 2018 to around 1.5%. Affordability constraints are biting hard which will cap first time buyer ambitions, and the surge in renting will continue. Build-to-rent developments will increasingly provide a bespoke family-friendly offer.

PAGE 34

Beds Sector

Student accommodation

Student numbers fell slightly in 2017, but as an investment class student accommodation continues to gain ground. 2017 volumes are up on 2016, with double-digit total returns. Portfolio deals will attract more interest heading into 2018. Planning regulation means supply is tight in London, but this is forcing innovation among operators. Student finances remain a concern for investors and operators, who are responding with more options at the budget end.

SUMMARY

PAGE 35

Beds Sector

Hotels

Hotels performed well in 2017 and we expect this to continue into 2018. Referendum-induced currency and inflation effects have been both a benefit and burden for hotels, and the sector's dependence on EU workers remains a concern. Available rooms will grow at double the long-term average rate in 2018. Investment levels will remain robust, though there will be a shortage of stock available in London.

PAGE 38

Beds Sector

Healthcare

Investment in UK healthcare real estate continues to grow strongly. Prime elderly care remains the focus for investors, but breakthroughs in retirement living in 2017 suggest growth in this sector in 2018.

PAGE 40

Data Centres Outlook

UK (in effect, London) data centres experienced record take up in 2017, and we expect similar levels of take up in 2018. Supply has kept pace with demand so far and we expect significant new supply in 2018, including from new entrants. Investment volumes look likely to remain high. Data centre operators will be grappling with new EU data protection regulations in the first few months of 2018.

PAGE 42

Special Feature

'Proptech'

Proptech is a widely used (and abused) phrase which we will hear much more of in 2018. Proptech is simply any technology which increases the efficiency with which buildings are built, bought, leased, used or managed. The more efficient provision of property market information will be an early focus of proptech innovators and could assist in extracting more value from building stock. It could increase liquidity in property market transactions, attracting more customers, but it could also increase volatility. Some proptech experiments will face barriers in the form of regulation and financier caution.

WEAKER GROWTH IN UK ECONOMY, WITH RISKS FROM BREXIT AND US INTEREST RATES

A benign global environment will be supported by a European recovery, though the UK is starting to fall behind, with subdued consumer spending and business investment arising from a weak currency, inflation and Brexit uncertainty. Near full employment means that job growth will be slower than recently. Risks of an overshoot in US interest rates could dampen UK growth in 2019-2020, though increasing clarity over Brexit will help the UK bounce back.

BENIGN GLOBAL ENVIRONMENT, BUT RISKS IN US INTEREST RATE PATH

The global economic environment looks benign in 2018. Unforeseen shocks aside, the next major international headwind for the UK will be the cyclical downturn expected to originate in the US in late 2019 to 2020. Short-term interest rates have increased four times in the US since the end of 2015 with more increases to come.

The US monetary policy normalisation process, and the unwinding of quantitative easing, look likely to eventually curtail growth as it overshoots in its effort to prevent overheating. By 2019, there is a possibility that tighter monetary policy in the US, plus tight labour and capital markets, will start to bite. This could lead to a sharp slowdown in economic growth before a cyclical rebound from 2021.

EUROPEAN ECONOMY STRONG IN 2018, WEAKER BY 2020

European economic growth in 2017 has turned out stronger than expected. Although unemployment remains high in some countries, there is now a virtuous circle of rising growth, falling unemployment and rising confidence. The European economic recovery is likely to run out of steam by 2020 as higher long-term interest rates and the US slowdown take their toll. Then, if the US economy behaves as expected, there will be a rapid bounce back in European growth in 2021 to 2022. See CBRE's *2018 European Market Outlook* for more information.

UK ECONOMY RESILIENT AFTER REFERENDUM, BUT STARTING TO DRAG

UK growth turned out to be rather more robust than had been forecast immediately after the EU referendum result and UK property returns have surprised on the upside in 2017. But more recently the UK has lagged European growth, with UK GDP growth slowing from 1.8% in 2016 to an anticipated 1.5% in 2017 (Figure 1, page 5). Brexit-related uncertainty has clipped growth and the fall in the pound has hit real spending power.

CONFIDENCE AND CONSUMER SPENDING TAKING A SERIOUS HIT

Over the coming years, household confidence will be important to the outlook. Consumers were more confident in their spending after the referendum than had been expected (supported by credit card borrowing) but spending has slowed recently. Retail sales volumes in the three months to October 2017 were just 1.4% higher than a year earlier. This is significantly below the growth rates of over 5% experienced in 2016. And consumer confidence (as measured by GfK) has waned more recently, falling to a balance of -10 in October 2017 compared to an average of +1.5 for the year preceding the referendum.

Of even greater importance is reduced real spending power, with nominal wage growth currently around 2% and inflation running at 3%. While early 2018 will be tough for households, they should see Consumer Price Inflation (CPI) diminishing to 1.6% by the end of 2018 and a small improvement in wage growth.

Tight household budgets will influence buying decisions. The Q3 2017 Bank of England agents survey found that squeezed incomes are causing households to trade down or focus on essential purchases.

During 2018 we expect the proportion of internet spending, currently around 17%, to rise to just over 19% by the end of 2018. We expect retail spending to grow by 2.3% over the year, but excluding internet sales we forecast a fall in store sales of -0.3%. The domestic consumer is unlikely to provide any economic boost in the early part of 2018 (see page 24 for more on the retail real estate impacts of the consumer spending environment).

WEAK POUND TO BLAME FOR INFLATION AND LOW BUSINESS INVESTMENT, BUT HAS A SILVER LINING

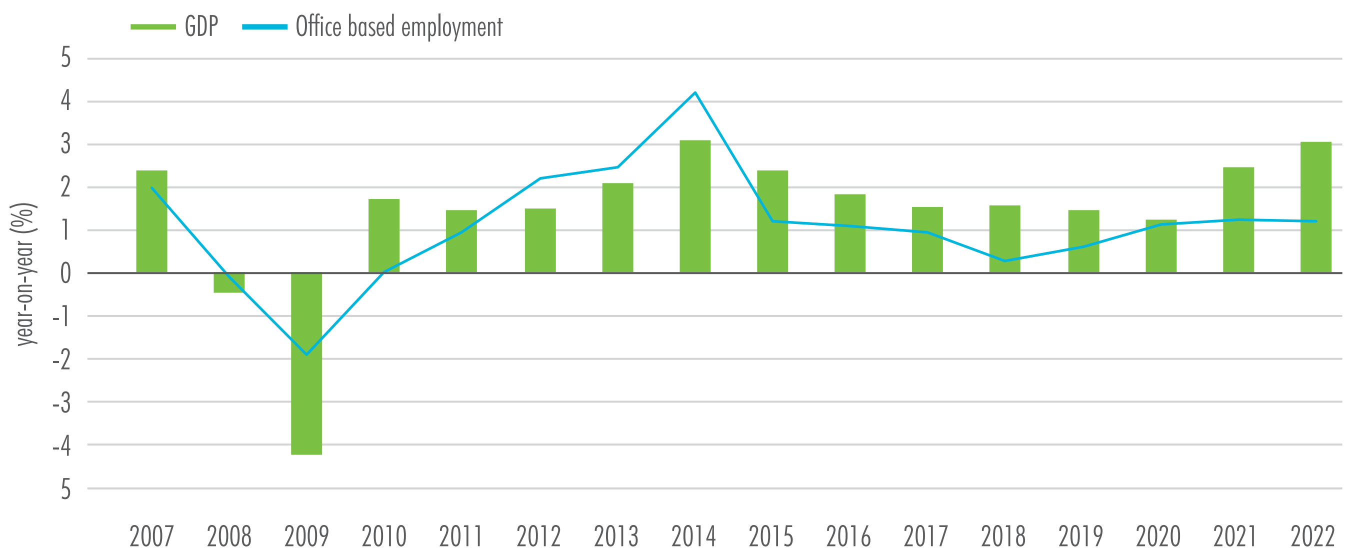
Sterling, on an effective exchange rate basis, has been running roughly 10% down on its pre-referendum level, which was a little elevated in early 2016 against recent historic averages. Higher prices of imported goods are mainly responsible for the rise in inflation.

But the fall in sterling has upsides, with UK exporters and foreign tourists benefitting. With no sign of a resurgence in sterling, these benefits should continue in 2018.

Business investment has been modest, estimated to have increased by 0.9% in the first half of 2017. The strength of the global economy, the availability of finance, company profits and tight labour markets would normally cause business investment to be stronger. The weak pound has had multiple effects with some exporters seeing a boost in competitiveness, while retailers and importers have seen the price of imported inputs rise.

"The fall in sterling has upsides, with UK exporters and foreign tourists benefitting. With no sign of a resurgence in sterling, these benefits should continue in 2018."

Figure 1: UK GDP and office based employment growth, 2007-2016 (actual) and 2017-2022 (forecast)



Source: Oxford Economics, ONS, CBRE

BUSINESS CONFIDENCE UPBEAT BUT PATCHY

The most recent business confidence surveys (October 2017) suggest a reasonably upbeat picture from business:

- The manufacturing CIPS Purchasing Managers' Index (PMI) is at 56.3 (above 50 signals an expansion) with output and new orders being robust. But rising input prices remain an issue
- The UK's Office for National Statistics (ONS) manufacturing output data now mirrors the survey data with Q3 2017 growth of 2.7%
- The construction sector is more subdued with a PMI of 50.8 in October, and a mixed outlook between commercial (weak) and residential (stronger)
- The service sector PMI has picked up too, after a few weak months, to 55.6, due in part to improved domestic demand, although this reading is little different from the long-term average. Increases in operating costs are being absorbed to improve competitiveness

These upbeat business surveys should provide growth momentum into 2018, even if investment is not as robust as it could be, and even if operating costs remain a concern.

FULL UK LABOUR MARKET MEANS WEAKER JOB GROWTH IN 2018

We envisage continued, if low, job creation, partly due to weaker activity but also partly due to labour scarcity in some sectors. The unemployment rate is currently 4.3%, which we expect to fall a little more during 2018.

"The Bank of England increased the rate back to 0.5% at its November 2017 meeting. CBRE thinks this was a one-off move"

Countrywide data hides regional differences, with inner London office-based employment having grown by 2.6% per annum over the last ten years compared with 0.6% in the rest of the UK (outside the south east). In 2018 we predict a moderation in office based jobs, to 0.4% in inner London and 0.1% in the rest of the UK outside of the south east. With employment growth so modest the office outlook will be determined more by supply conditions during 2018 (see pages 20-23).

UK BASE RATE ON HOLD UNTIL 2019, BUT LONG RATES DRIVEN UP BY US

Having cut its Bank rate in 2016 after the referendum result, the Bank of England increased the rate back to 0.5% at its November 2017 meeting. CBRE thinks this was a one-off move to bring the Bank rate back to the pre-referendum level. That cut had been made to stave off a recession and, as this didn't occur, its reversal was always on the cards.

However, and much to the currency markets' dismay, the Bank was at pains to stress that it did not herald the start of a pacy series of rate rises. Indeed, the Bank made it clear that it was an isolated incident, and that until economic strength is more embedded, further increases are unlikely. We believe, as we did last year, that the next increase will be in early 2019 – very possibly late 2018.

However, we think that long-term interest rates will be driven mostly by international factors rather than domestic policy. International long-term interest rates are highly correlated, so the increased US long-term interest rates which we expect will feed through to higher rates in the UK. This looks likely to raise real estate yields to some extent.

BREXIT UNCERTAINTY IS TEMPORARY

Our UK economic forecast assumes another three years of subdued growth followed by a strong bounce back once the Brexit-related uncertainties are resolved (see pages 8-15), bolstered by stronger global economic growth. But clear uncertainties remain and the slow pace of Brexit negotiations has been another cause for concern. The level of ambiguity around the UK's future relationship with Europe should diminish as the year progresses. Brexit-related uncertainty will be an issue for UK property for the next three years but our view is that prospects will improve from 2021.

"In 2018 we predict a moderation in office based jobs, to 0.4% in inner London and 0.1% in the rest of the UK outside of the south east. With employment growth so modest the office outlook will be determined more by supply conditions during 2018."

BREXIT

2018 will be crunch time for Brexit. There will be substantial political noise and turbulence throughout 2018. Although agreement on withdrawal issues has taken time to secure, these issues are not likely to have significant impact on real estate.

Attention will now progress to the much more important question of future trade and migration arrangements. Trade access is likely to be worse than we have now (perhaps somewhere between the Canadian and Swiss deals with the EU), though only to the extent that migration controls are tighter than they are now. Future migration controls remain extremely uncertain.

In the face of these uncertainties, some businesses are preparing to move some staff to elsewhere in the EU. However, the extent of such moves is probably overstated, with the majority of threatened moves not yet implemented.

BREXIT: 2018 IS CRUNCH TIME

After a lengthy and unproductive series of opening salvos in the Brexit negotiations during 2017, 2018 will be the year in which Brexit becomes real. Because of the need for the UK Parliament, the EU Council of Ministers, and the European Parliament to ratify any deal reached between the UK and the EU before March 2019, negotiations must reach a conclusion before the end of 2018 to provide time for ratification.

As we went to press it looked likely that significant progress would be made in the December 2017 EU Council discussions. But even if withdrawal issues (money, the Northern Ireland border and the rights of EU citizens) are indeed settled in late 2017, that leaves only 12 months in which to thrash out the future trade agreement. And in European politics 'nothing is agreed until everything is agreed', which means that negotiations are likely to get more complex and more demanding as the year progresses. We predict substantial political noise and turbulence throughout 2018.

WITHDRAWAL AGREEMENT

Of the three main issues to be settled as part of the withdrawal agreement, the question of **rights for the 3 million EU citizens** (2.4 million workers) in the UK is economically the most significant. We think the chances of an agreement on this subject are high, though it may be used as a negotiating tool by both sides in the interim.

In the scheme of things, the amount of **money** which the UK might need to pay as part of the withdrawal agreement is not economically significant, though it certainly affects the pace of negotiations and is very important politically. Although the headroom created by not having to contribute to the EU budget might be spent on different things in the future, or perhaps be returned to the population in the form of tax cuts, we think the economic effects are likely to be marginal.

Much of the returned money seems likely to be spent compensating those who might lose out from EU exit, such as farmers, higher education establishments, and local and regional government. And it will take some time to appear: it is now widely expected that the UK will face a 'divorce' bill of tens of billions of pounds, and the EU may also ask the UK to pay substantial sums in the long term for whatever market access can be agreed between them.

For now, the future of the **Northern Ireland border** is also being treated as a withdrawal issue. However, it is very difficult for the negotiators to decide how cross-border commerce and migration will be managed in Ireland without a clear agreement on trade and migration more generally. So, this issue looks very likely to be swept up into the question of the future relationship between the UK and the EU. We do not think it will be a major barrier to talks proceeding to the next phase.

SOME KEY REAL ESTATE IMPACTS OF BREXIT

• **Economy:** Brexit uncertainty will continue to dampen confidence and growth, and currency-induced inflation has not yet fully dissipated, slowing consumer spending. But the weak pound has attracted international real estate investors and tourists to the UK and boosted domestic exports, increasing demand for the offices, prime retail, industrials and hotels sectors.	• **Labour market:** Net migration may fall and firms may pause on hiring, reducing demand for office space; after 2021, new controls could produce particular shortages in construction, retail, healthcare, and hospitality, raising occupier and developer costs.	• **Trade access:** Trade can happen without any agreement in many areas but costs would rise; the most exposed are highly-regulated sectors which cannot trade at all without licenses. The impact on financial services may present particular risks for Central London. In the logistics sector, supply chains and warehousing may need to be reorganised.	• **Regulation:** Although EU law will be imported into UK law at the point of exit, the UK Government is examining whether EU-derived planning and environmental law could be adjusted after the UK has left the EU. In the short term, the need to get Brexit legislation through Parliament means there is little space for major real estate legislation (for example planning law or infrastructure projects).

CBRE thinks it's likely that the main 'divorce' issues will be settled by the end of 2017. Attention is likely to then turn to the future relationship between the UK and EU. Assuming that the EU will not compromise the integrity of the 'four freedoms', the UK's access to trade will be proportional to whatever it is prepared to agree on migration.

MIGRATION AND TRADE IMPACTS ARE THE MOST SIGNIFICANT FOR REAL ESTATE

Longer term, real estate decision makers will be paying attention to the impact of:

- Migration controls on the UK labour market, economy and occupiers
- Trade restrictions on the UK economy
- Regulatory and tax change

Regulatory change looks likely to be minimal even in the medium-term, not least because of the government's commitment to bring the entire body of existing EU law into UK law at the point of exit. Tax change might be more significant, particularly in VAT and customs duties where the EU has specific influence; but most other taxes have always been nationally-determined and so Brexit is unlikely to induce much change.

So, the migration and trade impacts are the least certain and are likely to have the biggest effect.

> "Assuming that the EU will not compromise the integrity of the 'four freedoms', the UK's access to trade will be proportional to whatever it is prepared to agree on migration."

WHAT IF THERE'S NO DEAL?

We place the probability of a 'no deal' scenario at around 25% – high enough for it to be worth real estate decision makers considering this as a serious downside risk.

However, even 'no deal' is an ambiguous phrase. For example, there might be a deal on withdrawal issues but no deal on the future trade relationship. If so, the UK would exit smoothly from the proposed transition period in 2021, but on the basis that it was transitioning to trade based on WTO rules, rather than continued preferential market access. Such an outcome might leave open the option of a UK-EU free trade agreement in the future, though this delayed agreement would be little comfort to UK firms with significant exposure to EU markets (and vice versa).

The most serious risk is of 'no deal' on both the withdrawal and the future relationship. Article 50 provides that the UK can leave the EU without any deal, and it is important to the UK negotiating position that this remains a credible threat. Such an outcome is likely to be damaging for short-term confidence in the UK economy, especially if the UK is not well prepared.

Even if the UK and EU cannot agree much, there will probably be a minimal agreement on the future relationship to limit the damage of failing to agree something wider – what some are now referring to as a 'bare bones' agreement.

Most commentators argue that exit without a deal would cause more severe and (in the short term at least) disruptive consequences for the UK economy. So in this scenario we would expect occupier demand for all types of property to be weaker from 2018 to 2020 than if the UK exits with a deal. Furthermore, if corporates and investors conclude during 2018 that there won't be a deal, there may be some anticipatory impacts in the form of relocation decisions, or inertia relating to real estate decisions in 2018, even if their assessments eventually turn out to be wrong.

MIGRATION CONTROLS IMPLY LABOUR SHORTAGES AND INFLATION

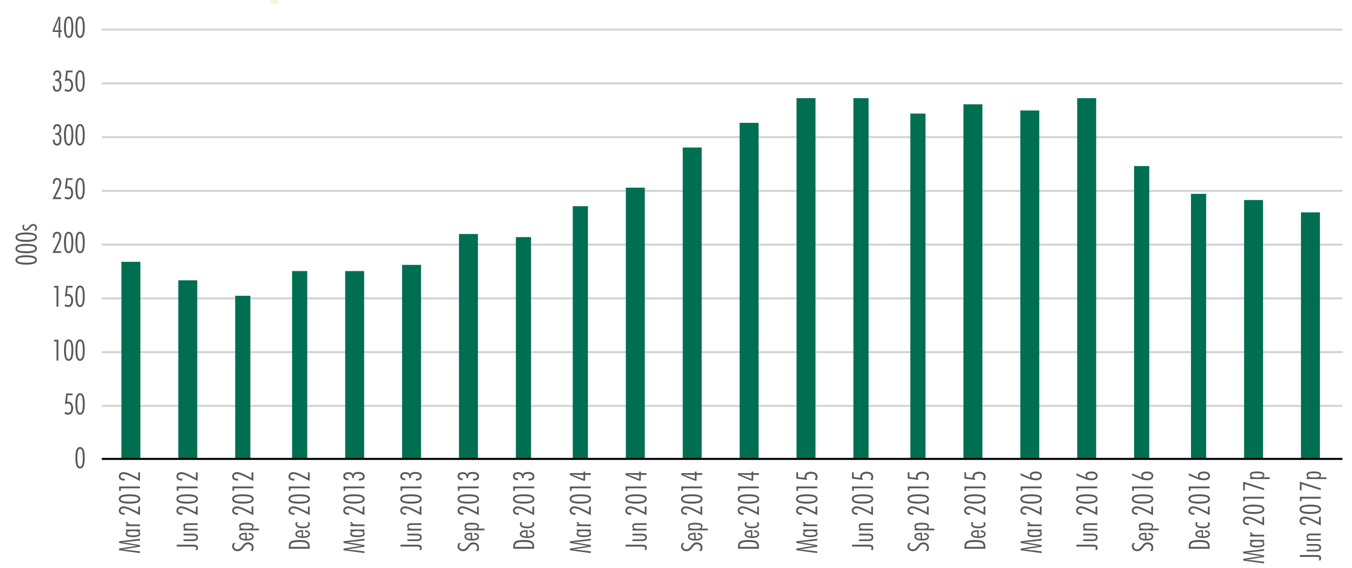
Migration effects on employment growth (and thus real estate demand) could be significant. In the 2017 UK general election, the government restated its target to cut net migration to below 100,000 people per year. This will be challenging given that net migration into the UK is currently more than double that amount. And it is already clear from statements by Philip Hammond, Chancellor of the Exchequer, that the government wants to allow high skilled EU migrants to continue to come to the UK. So the achievement of political goals on migration remains very challenging.

According to the UK's Office for National Statistics, the number of EU nationals working in the UK between July and September 2017 increased by 112,000 to 2.38 million compared to the same period in 2017. Annual net in-migration has, however, fallen by 75,000 people since the EU referendum (see Figure 2). Uncertainty about the status of EU migrants into the UK will have been a factor in this fall, but economic factors are likely to have been equally powerful – the 10% drop in sterling's earning power relative to the euro, and a general recovery in the EU economy, also made the UK look less attractive. The relative weakness in the UK economy referred to on page 4, combined with Brexit-related uncertainty, suggests that EU migration into the UK will not recover any time soon. Ironically this easing of migration potentially makes it easier for the UK Government to sell a more liberal migration policy to the UK population as part of the future relationship.

If cuts in migration are indeed delivered, real estate occupiers dependent on lower-skill workers could experience staff shortages and wage increases. This might lead to inflation and dampen growth – on top of the inflation and growth-suppressing effects of Brexit which the UK has already experienced.

Hotels (page 35), food and retail (page 24), and healthcare (page 38) are at particular risk. EU citizens currently make up 6% of the 170,000 retail industry's work force according to the British Retail Consortium (BRC); and KPMG found that 75% of all EU workers in the hospitality industry and 75% are waiting staff. So negotiating an immigration policy which is similar to that which already exists, or alternatively providing training for unemployed UK workers to enter these sectors, could be crucial for the retail and hospitality industry to retain staff.

Figure 2: Long-term international net migration, UK, 2012 to 2017, 000s, quarterly, 12 month rolling



Source: Office for National Statistics, November 2017

The construction industry is also likely to face labour shortages, something implicitly recognised in the UK Government's November 2017 Budget in which £34m was allocated to retraining the unemployed to work in this sector.

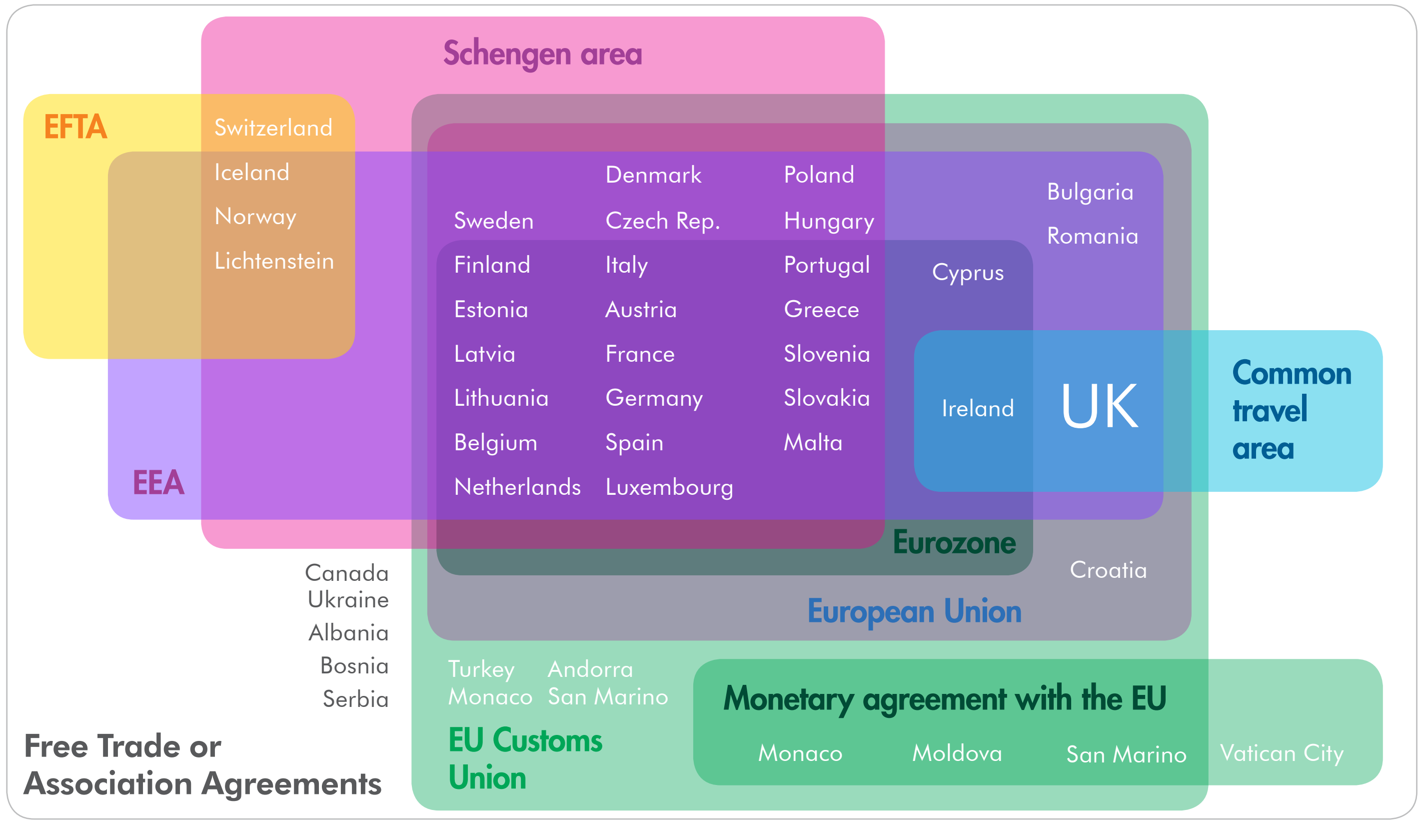
Whatever the effects of new migration policies, they will take some years to arrive. Given the proposed two year transitional period, it looks likely that meaningful new EU migration controls will not take effect until 2021 at the earliest. The government's Migration Advisory Committee will not even be reporting until Autumn 2018. We do not think that the proposed requirement for 'registration' of EU migrants from March 2019 onwards will have much practical effect – if indeed it ends up being put into place.

RESTRICTIONS ON MARKET ACCESS LOOK LIKELY

Trade impacts will also take some time to be felt. We judge that it is essential politically for the Prime Minister to show that new migration controls will be introduced after an EU exit. Assuming that the EU position on 'no preferential trade without migration' holds (and we think it will), EU market access will be worse than the UK has now.

Quite which markets the UK might lose access to, even partially, is not yet clear, though car manufacturers and financial services providers have had public reassurances from UK Ministers that their needs will be prioritised by the UK in the negotiations. These reassurances seem very likely to prompt 'me too' calls from other sectors, but it remains too early to tell whether they will be heeded. Given the importance of services trade to the UK's future, we suspect that services will be prioritised.

Figure 3: European groupings



Note: EFTA - European Free Trade Agreement; EEA - European Economic Area

£246bn
UK services exports, 2016

27%
Services share of exports, 1990

45%
Services share of exports, 2016

Source: HM Government, *Future Customs Arrangements*, August 2017

Trade negotiations are usually lengthy and complex: the EU - Canada deal took seven years to agree. There is, however, one crucial difference between the UK and Canada: the UK is already in a very deep trade agreement with the EU. So the UK task is to *withdraw* to some extent from that agreement, not create a whole new agreement from scratch. It will still be politically complex for the parties to decide what market access they no longer want, but the process is likely to be substantially faster than creating a new trade agreement from scratch.

STILL A WIDE RANGE OF POTENTIAL OUTCOMES ON FUTURE TRADE ACCESS

Figure 3 illustrates the possible 'landing zones' for the future trade relationships. CBRE thinks that the likely outcome will sit somewhere on a spectrum between the Canadian deal and EFTA membership (the Government has ruled out EEA membership, as this is tantamount to single market membership and submitting to the jurisdiction of the European Court). However, that still leaves a huge range of possible outcomes, especially for trade in services. One possible outcome is that the UK agrees a very simplified version of the EU's relationship with Switzerland, which over the decades has signed over 120 bilateral treaties with the EU.

TRADE LEGAL DETAILS MIGHT NOT BE SETTLED UNTIL AFTER 2019

In any case, the chances of every detail of the UK's market access to the EU (and vice versa) being settled by March 2019 look increasingly low, with some commentators now suggesting that a 'heads of terms' agreement is all that will be agreed by then. If this is right, businesses (including financial services businesses) can expect uncertainty over the precise level of access even after the UK has entered the transitional period planned after March 2019. This may not matter for many businesses – but for those facing the most complex regulation (such as banks), the absence of legal precision could be the difference between activating contingency plans to move to the EU, and staying in the UK.

OCCUPIERS WILL 'WAIT AND SEE'

CBRE's analysis suggests that it is principally financial services businesses which are contemplating significant moves to the EU in case market access is withdrawn – and only a small subset of those businesses. The European Medicines Agency and the European Banking Authority (the two EU bodies together occupying 340,000 sq ft at Canary Wharf) will move to Amsterdam and Paris respectively. Of around 130 publicly proposed or confirmed relocations identified by CBRE, around 85 relate to financial services. Few tech or law firms of any significance are indicating that they might move – and indeed some major tech firms have made big commitments to take space in the UK, especially in central London, since the referendum.

Even within financial services, many firms appear to be adopting a 'wait and see' approach which threatens a move but does not actually commit to it. Many firms which CBRE advise say they would rather be pushed out than jump out unnecessarily, not least because of London's position as the top international financial centre (according to Z/Yen). This would imply that most firms currently share the CBRE's view that a deal will be secured and are, for now, prepared to wait for corroboration of this view to emerge from negotiations. Of course, they also have 'no deal' contingency plans (see page 10), and one area of uncertainty relates to when, and under what circumstances, they might execute these. The Bank of England has warned that banks will need around 18 months to plan any move, so some precautionary moves may need to occur at the beginning of 2018.

SOME RELOCATIONS LIKELY, BUT LOWER THAN SPECULATED

Estimates published by TheCityUK suggest that, in a worst-case scenario, some 60,000 to 80,000 financial services jobs might move out of the UK. However, the Frankfurt, Dublin and Paris business associations, combined, expect only 30,000 jobs (10,000 each), implying that even these cities do not believe that the worst-case scenario will actually come about, given the magnet that the UK has become for global financial services.

Assuming that there is an acceptable UK-EU deal over trade in services, CBRE's view is that financial services job relocations will in the end amount to low tens of thousands, over a very extended period, and not just because of Brexit. Other drivers such as cost reduction, tax issues, or restructuring will also be relevant. These other issues have been prominent in driving the location strategies of banks and others for some time, especially since the 2007 to 2008 financial crisis.

'Relocation' can itself describe a range of different situations. Some companies may attempt to register corporate entities without moving many jobs or people (although it is debatable whether regulators would accept this); or accelerate hiring in a city where they already operate (most European banks for instance already have offices in other cities as well as London). Where they do need or decide to physically move people, they will often be senior and expensive, and so have a fair amount of say in where they end up.

There is no single destination that will be the sole obvious 'winner' from relocations. All the alternative candidate cities have some drawbacks compared with London in terms of scale, skills base, business infrastructure, and cultural offer. So we expect the impacts to be diffuse across several locations rather than confined to any single one.

RELOCATIONS WILL BE OFFSET BY FINANCIAL SERVICES SEEKING NEW MARKETS

Most studies have only looked at possible relocations and not considered how UK financial services will refocus on other non-EU markets. For example, UK insurance services are a genuinely global export, with (according to IEG) 38% of insurance services exported to the US compared with 18% to the EU in 2013 – without the benefit of a services trade deal with the US. If new jobs are created to focus on non-EU markets, then the net losses arising from Brexit will be lower than the gross losses being cited by financial services firms. Those losses would be still lower if trade agreements with other non-EU states can be signed in due course, though such agreements are likely to take many years to agree and cannot be relied on for support in the short term.

In combination, these factors make it likely that the UK real estate market will be able to absorb this source of changing demand.

2018 will nevertheless see extensive media speculation about possible moves. But political pressure to clarify the headline level of market access will also intensify, and progress on agreeing a transitional period will give firms significantly more time to plan.

BREXIT WILL BE A LONG AND SURPRISING JOURNEY

Exiting the EU will be a long and complex process with many twists and turns. Our current view is that it is more likely than not that the UK will, in the end, secure an agreement with the EU and thus that a 'hard exit' will be avoided. However, 2017 did bring a surprise (a snap UK general election) and we would expect 2018 to also contain its fair share of surprises.

ROBUST INVESTMENT VOLUMES IN 2018 IN FACE OF ECONOMIC HEADWINDS

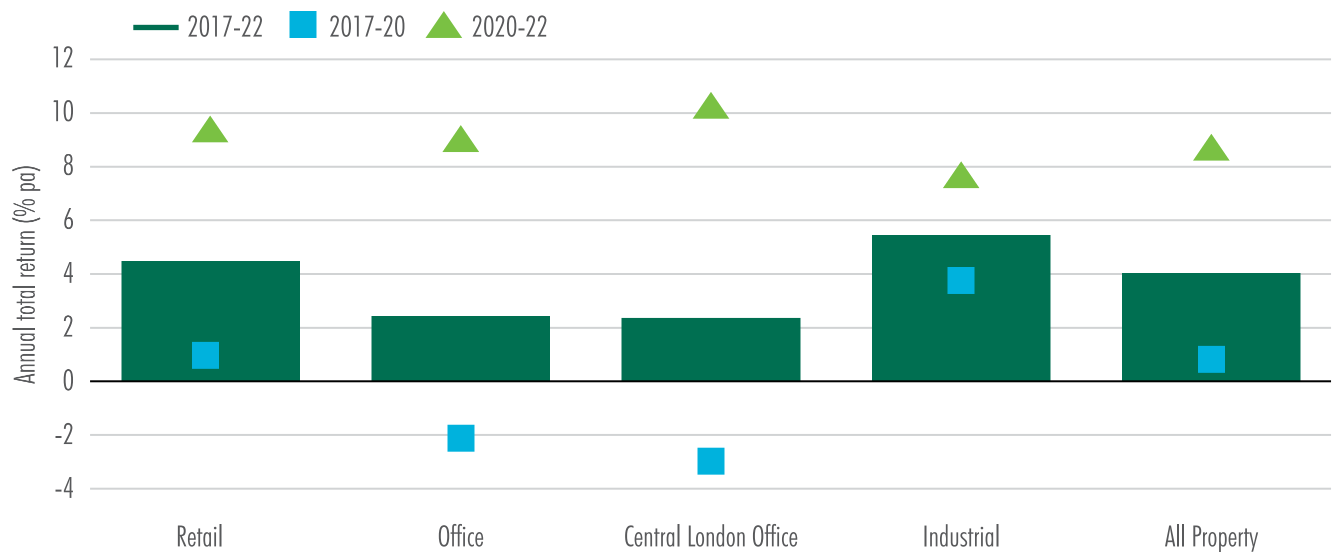
Rebounding strongly from the uncertainty in the immediate aftermath of the Brexit referendum, the UK investment market has seen a surge in transaction volumes. Total returns have been similarly buoyant, powered by a thriving industrial sector. Although we forecast a weaker economic outlook, we expect that solid income-driven performance over the medium term, combined with strong demand for property exposure on both the debt and equity side, will ensure investment volumes remain robust.

Property, in common with all other asset classes in developed markets, has had to get used to a 'new normal.' Previously, when buying at yields of 4% to 5%, investors would have been doing so with the expectation of significant income growth. When all property net initial yields oscillated between 4.5% and 5.0% in 2005-07, IPF Consensus expectations of rental growth varied from 2.6% to 3.3% pa. But today, with real short-term interest rates closer to -3% than the +3% average from 2005 to 2007, ungeared return expectations are significantly lower than a decade ago.

PROPERTY OFFERS SOLID MEDIUM-TERM RETURNS, WITH 2021-22 PARTICULARLY STRONG

Against this backdrop, our forecast total returns for UK property should be fairly appealing to investors, even though by more historic standards they appear low and that there seem likely to be a few wobbles, including Brexit, along the way. Figure 4 shows our investment performance forecast over the next five years by sector, but also into two time periods. At the All Property level, we expect total returns of just under 4% pa for the five years to 2022. Income return will be the mainstay of performance, with a slight rise in rents being offset by a modest rise in yields as interest rates trend upwards.

Figure 4: Forecast ungeared total returns, key UK sectors, 2017-2022



Source: CBRE, November 2017

Within the five year period there are two distinct phases of slowdown (2017-2020) and recovery (2020-2022). In the former, total returns average only 0.8% pa as capital values fall by a total of -11% driven by a 50 basis point rise in yields. In the latter, total returns improve to 8.6% pa thanks to a 7% rise in capital values as yields return close to the 2017 low. Throughout, income return is solid at just under 5% pa as rental values hold firm.

LONDON CYCLICAL, INDUSTRIAL STABLE

At the sector level, we expect London offices to swing from being the weakest performer in 2017-2020 to the strongest in 2020-2022, as rental value growth returns to positive territory from 2021 onwards. The industrial sector, which has out-performed the wider market by some margin in 2017, is set to offer both the highest and the most stable returns over the period, while retail will deliver slightly above average returns.

THE WIDER PERSPECTIVE – A 'FOUR QUADRANTS' VIEW

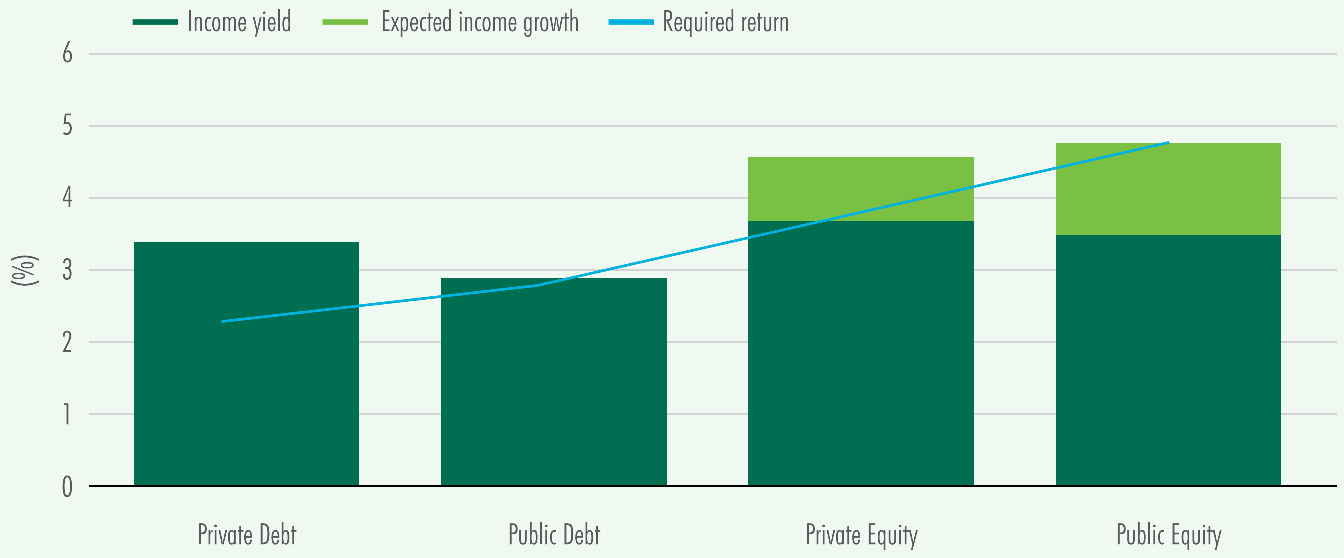
With investors increasingly taking a more holistic approach to real estate investment, it is no longer sufficient to think purely in terms of ungeared direct returns. Figure 5 compares the prospects for four different routes to real estate exposure, public and private, and debt and equity.

The chart compares, for the next five years, Required Return (the risk-free rate plus an appropriate risk premium that an investor would demand) with Expected Return (the market consensus for the level of return that will be achieved, composed of prevailing yields and expected income growth where relevant).

Our analysis shows that value may currently be found in all four quadrants, but that private debt and private equity are particularly appealing and indeed significant volumes of capital have been raised for these strategies in recent years. Preqin data suggests that private equity funds targeting the UK have raised over £45bn of capital in the last five years. Meanwhile the surge in alternative lenders targeting the UK market saw insurance companies and other non-bank lenders originate almost 20% of new loans in the five years to 2016, up from practically nothing in preceding years.

Such depth to both the debt and equity side of the market will support investment volumes over the next few years.

Figure 5: Expected versus required return, UK four quadrants, Q3 2017



Source: CBRE, September 2017

INVESTMENT OUTLOOK

INVESTMENT WILL REMAIN STRONG, WITH PLATFORM DEALS TO THE FORE

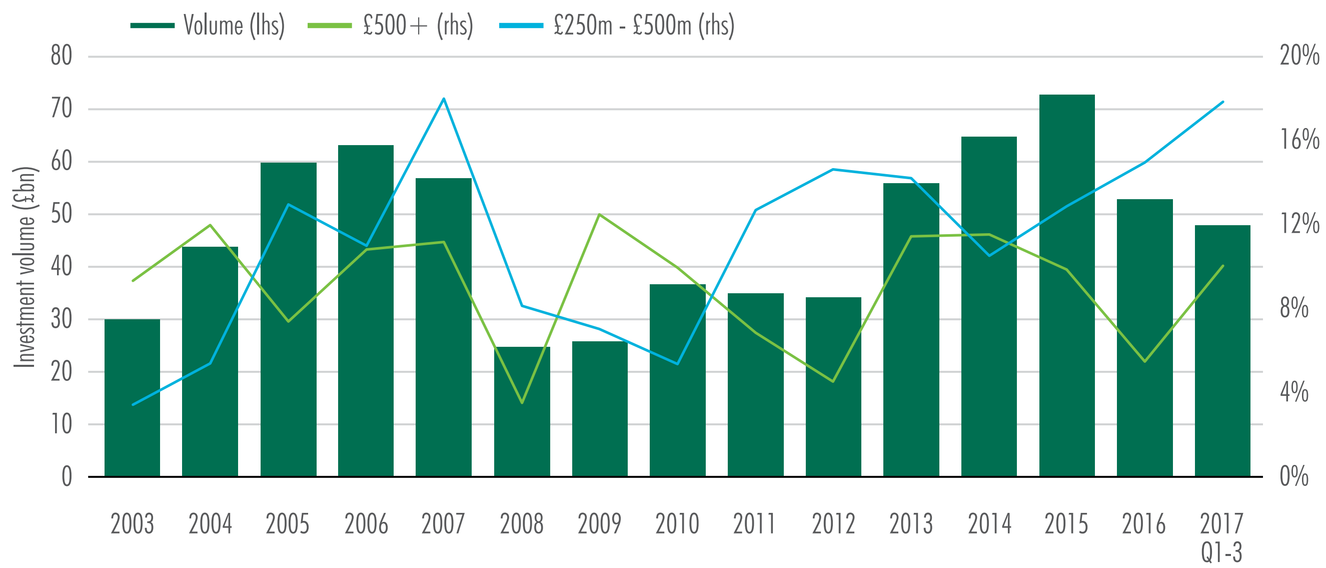
Investment volume in the UK over the first three quarters of 2017 totalled £47bn, 23% higher than the same period in 2016. Factoring in seasonality, this would imply a full year total of around £63bn.

The strength and depth of investment demand is not just a reflection of the swift return of confidence following the Brexit referendum. On a relative basis, London is among the most attractively-priced of the global cities, and remains one of the most liquid. Investors seeking protection against short-term fluctuations readily find solace in the long leases the UK market offers – the high-profile purchases of trophy London assets should be seen through the lens of ten-year plus income streams secured by high quality tenants. And the UK is still under-pinned by a strong and open legal and regulatory framework.

These factors seem unlikely to dissipate in the face of weakness in returns in 2019 and 2020. Indeed, savvy investors are likely to use short-term pockets of market turbulence as a means of entry to assets and markets that have been challenging to access recently.

So investment volumes will hold up well over the next few years. There will also be a continuation of the trend for large "platform" deals that has been growing steadily over the last couple of years (see Figure 6). Investors seeking significant exposure to real estate are deploying significant volumes of capital in single transactions that will deliver a market return from the outset.

Figure 6: UK investment volume and share of £250m+ and £500m+ deals, 2003-Q3 2017, £bn / %



Source: CBRE, PropertyData

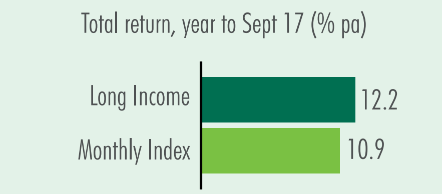
POPULARITY OF LONG INCOME ASSETS WILL ONLY GROW

The Long Income sector (traditionally sale and leaseback assets on leases of at least 25 years, but increasingly incorporating ground rents on income strips backed by real estate) has grown considerably in recent years.

It is proving attractive to investors seeking a secure income return and a premium over other fixed income assets. With a degree of turbulence expected over the next five years, we expect demand for the sector to remain high, given its defensive income profile and the premium it still offers against Gilts and corporate debt.

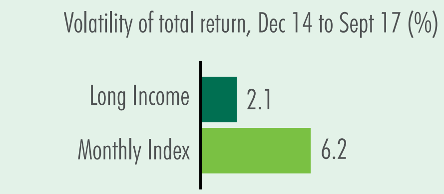
Strong performance

In the year to September 2017, the Long Income sector delivered total returns of 12.2%, comfortably ahead of the CBRE Monthly Index at 10.9%. The Long Income sector has been out-performing the wider mainstream market since the EU referendum, on a rolling yearly basis.



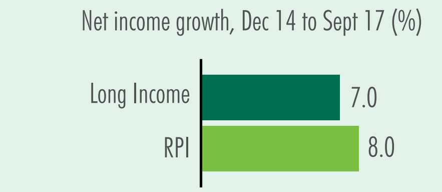
Low volatility

In addition to competitive levels of return, Long Income offers investors a much more stable return profile; the volatility of rolling 12 month returns is three times as high for standard commercial property as it is for the Long Income sector.



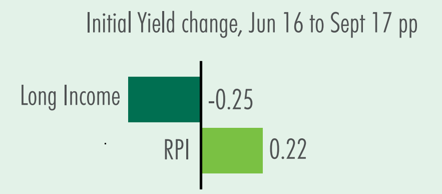
Liability matching

With a large number of leases in the Long Income market pegged to RPI on a yearly basis, income growth is guaranteed, and closely tracks inflation over the long term, allowing investors to match liabilities (such as pension payments).



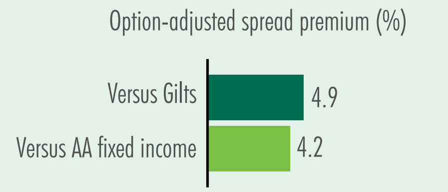
Protection against instability

In the 15 months since the EU referendum, uncertainty around the prospects for the UK occupational market drove yields on conventional commercial real estate upwards, by 22 basis points. Conversely, those on Long Income have fallen by 25 basis points.



Return premium

Currently, Long Income real estate offers a premium against Gilts of 4.9%, and against comparable fixed income of 4.2%.



Source: CBRE (all charts above)

WEAKER UK ECONOMY WILL TRANSLATE INTO WEAKER OCCUPIER DEMAND AND RENTAL GROWTH

The outlook for UK office markets in 2018 can be characterised as challenging. Our prognosis reflects the fortunes of the UK economy which is slowing and continues to feel the effects of Brexit-related uncertainty. Rental growth will vary across the country, with stable or small increases in the large regional markets, but small declines in parts of Central London. Low levels of availability and relatively strong demand for the best Grade A space will moderate any rental falls. Investment volumes will be resilient.

SURGE IN FLEXIBLE OFFICE SPACE WILL CONTINUE

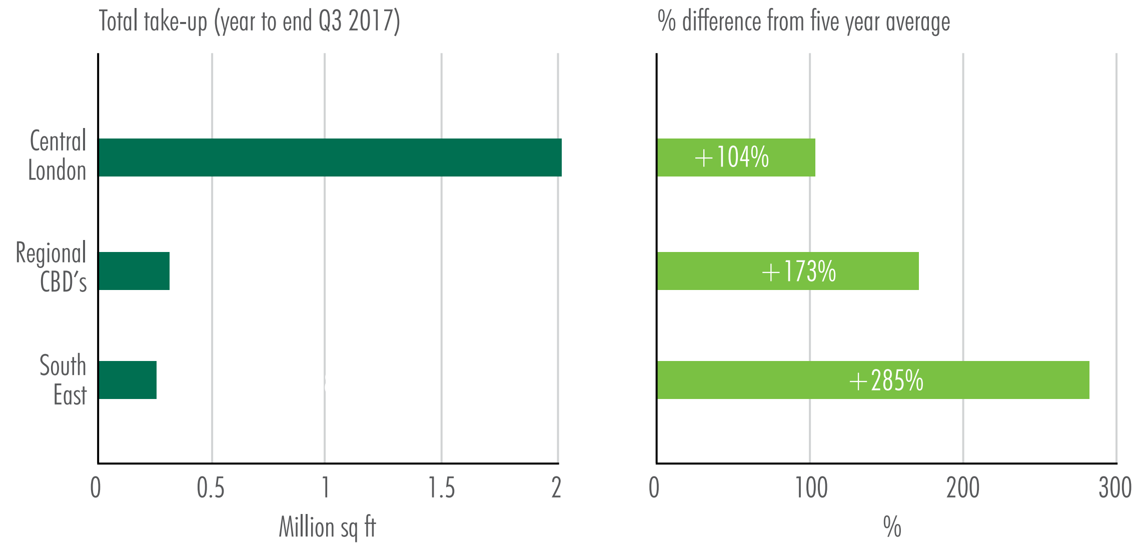
The UK's flexible office space operators expanded rapidly in 2017. This trend will continue to affect the market in 2018. Occupiers with smaller requirements (under 5,000 sq ft) are increasingly acquiring space direct from flexible office providers rather than taking conventional office space. Already this trend appears to have affected the volume of transactions in Central London under 5,000 sq ft, which have reduced noticeably since Q2 2016.

Established flexible office space providers also significantly expanded their presence beyond London in 2017, into the south east and regional cities such as Birmingham and Manchester (see Figure 7). This momentum looks likely to continue into 2018, for a variety of reasons:

- Uncertainty around Brexit will increase desire for lease flexibility
- New lease accounting standard IFRS16 (in 2019) will make flexible office solutions more attractive to some occupiers
- The flourishing creative industries sector and the huge numbers of new start-up businesses who are known to favour flexible office space
- The shortage of modern smaller sized office units may force some occupiers down the flexible office space route

At the time of going to print, the availability of modern offices of less than 20,000 sq ft in the regional CBD markets monitored by CBRE was a third lower than the five-year average. Occupiers will be looking for alternatives.

Figure 7: Take-up surge from serviced office space operators comparison against five year average



Source: CBRE Research

FINANCIAL SERVICES REMAIN A KEY AREA OF BREXIT UNCERTAINTY FOR THE CENTRAL LONDON OFFICE MARKET

As we note in the Brexit section of this report (pages 8-15), 2018 may finally bring clarity on EU market access after the UK leaves the EU. Some London-based financial services occupiers are expected to start preparing for life outside of the EU, and depending upon the likely settlement, this may include moving roles from London to other EU member states.

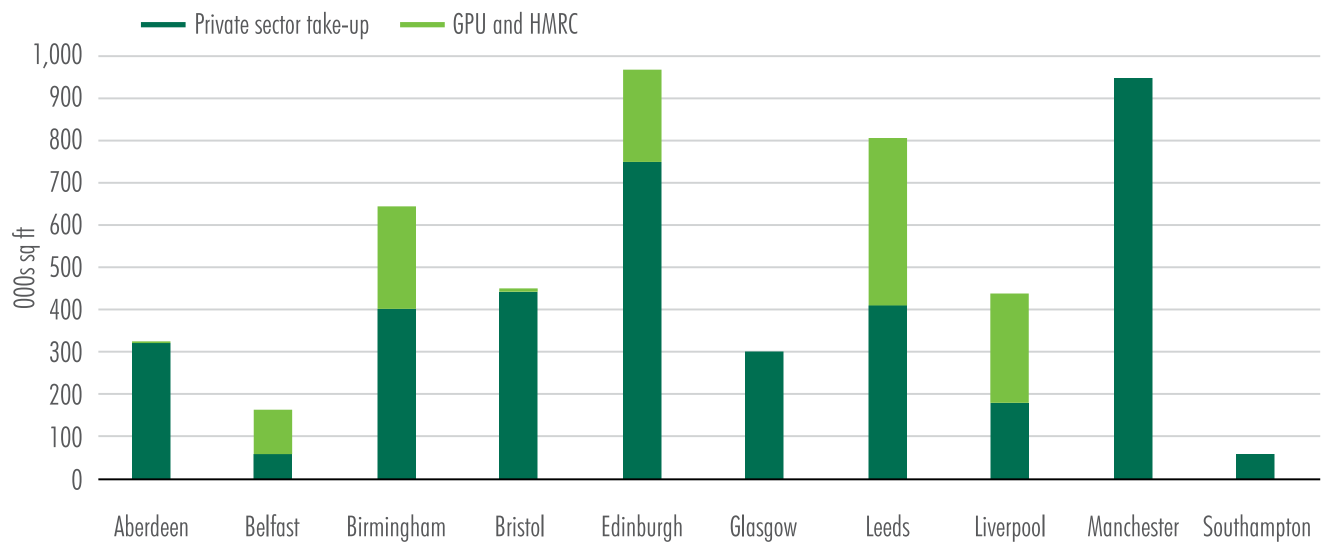
Current estimates as to the scale of relocations are based on public statements by financial institutions and predictions of the level of access to markets after the UK leaves, so need to be treated with some caution. Given that full access to the Single Market seems unlikely, the so-called passporting rights are clearly at risk. So the settlement could, at least initially, create a negative impact on UK financial services real estate.

IN OTHER CITIES, THE PUBLIC SECTOR WILL AGAIN BOOST OFFICE DEMAND

In contrast to London, the regional cities are less exposed, but not immune, from the risks of Brexit-driven job relocations. They are also vulnerable to falling levels of business confidence. If sentiment weakens we can expect to see longer decision-making times from occupiers.

However, there are some large requirements for office space circling and CBRE expect demand from smaller occupiers to continue at a steady rate from a broad sector base. Many markets benefitted from sizeable Government Property Unit (GPU) requirements in 2017 which resulted in record levels of take-up in some cities (see Figure 8). The public sector will continue to account for a significant share of office space demand in 2018 as there are still some outstanding GPU requirements to be satisfied – notably in Manchester and Glasgow where deals are yet to be agreed.

Figure 8: Regional office take-up, year to Q3 2017, public vs private sector occupiers



Source: CBRE Research

NEW DEVELOPMENT TO SLOW WHILST PRE-LETTING LEVELS WILL INCREASE

Development activity across the UK will slow in 2018 as developers wait to see the full impact of the Leave vote before proceeding with new projects. This is most likely to affect the speculative new build market, where uncertainty, combined with the weak pound and rising build costs, could lead to a pause in new starts in 2018.

5.4 million sq ft of Central London office development is expected to complete in 2018, down from 6.4 million sq ft in 2017. Of the space due to complete in 2018, 48% has already been pre-let, with just over 2.5 million sq ft still available. Coupled with the relatively low-levels of new Grade A availability (a tenant looking for immediately-available new Grade A space over 100,000 sq ft has a choice of just four units across the whole of Central London) it is likely that pre-letting activity will remain strong throughout 2018.

Pre-lets will also be more prevalent in regional city markets. Development completions in the core regional cities are forecast to total 0.5 million sq ft in 2018, down significantly on the 2017 total of 2.2 million sq ft, of which 61% is already pre-let. Grade A space constraints will be an ongoing issue in certain regional cities such as Bristol, Edinburgh and Glasgow where the development pipeline has not kept pace with demand. These shortages will drive further pre-let activity. In contrast, the south east received a large injection of circa 1.85 million sq ft of new speculative office space in the first nine months of 2017 and has a healthy Grade A supply (33% above its five year average at the end of Q3 2017).

INVESTOR INTEREST WILL STILL BE STRONG FOR THE RIGHT ASSETS IN THE RIGHT LOCATIONS.

Investment activity in 2017 was strong and demand for stock in Central London is expected to remain high. At the end of Q3 2017 an estimated £39bn of equity was targeting Central

London offices. However, only £7-8bn of stock was available. So much of the demand is unlikely to be satisfied. Asian investors, especially private buyers from Hong Kong, are expected to continue dominating the London market in 2018. More new entrants from Hong Kong, Malaysia and Singapore will enter the market to build a portfolio of stock. Other likely sources of capital include German property funds, attracted by London's pricing relative to other cities elsewhere in Western Europe.

High quality, well located buildings let to a strong tenant will outperform the rest of the market in 2018. Buildings with a lot size of circa £100m are expected to see the most interest, especially from private investors.

Beyond Central London, office investment activity in the south east was strong in 2017 and resilient in the core regional cities. In the south east, by the end of October 2017, a total of £3.2bn had transacted, with a further £410m under offer. 2017 south east office investment is thus expected to surpass 2016's total. Healthy transactional activity is expected again in 2018.

Investment in regional city office markets in 2017 has been resilient, but unspectacular. £2.8bn was spent around the UK (beyond London and the south east) in the first nine months of 2017. This was slightly lower than the £3bn spent over the same period in 2016. There is a competitive pool of investors, with capital to deploy in the regions despite the uncertain political and economic outlook. Cities with strong underlying market fundamentals such as Birmingham, Bristol and Manchester will all attract strong investor interest. The yield differential between some regional markets and Central London will be a key attraction, in part drawing in opportunistic investors looking for discounted assets. However, as in London, a current shortage of investable grade stock in some cities could act as a brake in investment volumes in 2018.

In summary, office investors will continue to favour well located, high quality assets despite the uncertainty of the future relationship between the UK and the EU. However, we expect them to exercise greater caution when it comes to secondary stock. Investment demand for these assets is likely to slow and we anticipate that average that capital values across the UK will fall by 4% in 2018 and to continue falling into 2019 for most markets.

CONSUMER SPENDING WILL SLOW, DRAGGING ON RENTS. BUT INNOVATION WILL CONTINUE APACE

A slowdown in consumer spending will make 2018 a tough year for retailers and leisure operators. The weaker pound will provide some comfort for internationally-oriented retailers, but rents are unlikely to grow. Significant amounts of new, high quality shopping centre space will open and some prominent mergers will continue the convenience retail revolution. Customers and retailers will further exploit new technologies, with the physical store continuing to redefine its role. Pubs and leisure operators will increasingly review their strategies to maximise the return on their real estate.

SLUGGISH CONSUMER SPENDING GROWTH AND BREXIT IMPACTS WILL POSE CHALLENGES FOR RETAILERS

2018 will continue to be a challenging year for the retail industry, given the economic outlook outlined on pages 4-7. PwC forecasts consumer spending growth will slow to 1.1% in 2018 (from 1.6% in 2017). This is partly due to inflation, the effects of which have so far been offset by higher consumer borrowing. While retailers within the UK are likely to feel the pressure, the weak pound and relatively strong world economy could benefit those retailers exporting outside of the UK.

The favourable pound will continue to draw overseas tourists to the UK in 2018. The weak pound will allow tourists to spend more and contribute to retail sales. In addition, many UK residents will opt to spend their holidays in the UK and therefore spend more locally than abroad. According to Visit Britain, a record number of 17.6 million EU tourists visited the UK during the first eight months of 2017, a level likely to have been boosted by the weak pound.

Uncertainty around EU citizens' rights to remain after 2019 will also pose further challenges to the retail and hospitality sector (see our views on Brexit, pages 8-15).

Figure 9: Standard shops: % Rental growth Central London vs. UK (inc. London)

Source: CBRE Research

"While retailers within the UK are likely to feel the pressure, the weak pound and relatively strong world economy could benefit those retailers exporting outside of the UK."

LITTLE RENTAL GROWTH IN 2018

Although demand for Central London high street units remains high, rents are likely to remain unmoved, as the shift from physical to online sales will continue to put pressure on rents. For the rest of the UK, rental growth continues to soften due to lower demand of secondary locations. However, Central London average rental growth will improve to 2.9% per annum by the end of 2022.

OVER 4.45 MILLION SQ FT RETAIL SPACE TO OPEN IN 2018

Excluding schemes under 50,000 sq ft, over 2.75 million sq ft of new shopping centre space is expected to open in 2018, most of which are extensions of existing schemes. The majority of the new space represents the extension of Intu Watford and Westfield London.

According to PMA, 1.7 million sq ft of retail park space is expected to open in 2018, an increase of 35% from 2017 (again, excluding schemes under 50,000 sq ft). Newly developed retail parks will continue to be attractive for retailers to open new, larger scale store formats. Convenient parking options and easy access make them particularly attractive for customers. So occupier demand for units on retail parks will continue into 2018.

The supermarket sector continues to see a shift towards convenience. The Tesco-Booker merger and the takeover of Nisa by Co-op complete in spring 2018. The merger of Tesco-Booker will increase Tesco's access to a wider group of consumers, and the takeover of Nisa will almost double Co-op's portfolio to 7,000 stores. However, Marks & Spencer, Aldi and Lidl will undertake the most significant organic growth, opening 80, 70 and 60 new stores respectively in 2018.

"Over 2.75 million sq ft of new shopping centre space is expected to open in 2018, most of which are extensions of existing schemes."

RETAIL, PUBS AND LEISURE OUTLOOK

RETAIL INVESTMENT

UK Retail investment volumes reached £5.8 billion between Q1 and Q3 2017, down 26% compared to £7.8 billion in 2016. CBRE predicts that average yields for the UK will remain stable for shopping centres at 6.2%, all retail warehouse at 5.8% and supermarkets at 4.8% in 2018. Average yields for standard shops and department stores are expected to rise from 4.9% to 5.1% and 5.1% to 5.3% respectively.

In Q3 2017, Central London had £700 million worth of retail stock available for transactions. This included six large lot sizes which represented 90% of the total. The remaining 19 assets are all lot sizes below £10 milllion. Volumes are expected to recover slightly toward the end of 2017 and pricing to remain stable with Oxford Street and Bond Street yields at 2.50% and 2.25% respectively.

"UK Retail investment volumes reached £5.8 billion between Q1 and Q3 2017, down 26% compared to £7.8 billion in 2016."

TECHNOLOGICAL INNOVATION WILL CONTINUE TO ENHANCE EXPERIENCE FOR CONSUMERS

The UK retail market is the most advanced in Europe. Online sales will continue to grow and increase its share in the UK to circa 19% at the end of 2018. This shift from physical to online retail will continue to have profound implications for how retailers are using physical space to showcase their brand. Boden, historically an online fashion retailer, opened its first flagship store in Chelsea to showcase the brand and allow customers experience the products. FarFetch, the luxury online platform, showcased its 'store of the future' design earlier this year. Farfetch will roll out a selection of technologies at the boutique Browns to create an experiential environment that connects internet and in store experience.

From May 2018, UK businesses must comply with the General Data Protection Regulation (GDPR). This new legal framework is for the protection of personal consumer data. Retailers with an omnichannel strategy will have to get customer consent across all channels, so they will have to rethink the way personal data is collected. In a challenging retail environment, not complying with GDPR could result in fines of up to 4% of global annual turnover or €20m, whichever is higher.

Figure 10: The key pubs and leisure deals of 2017

MARCH
Onex wins battle for Parkdean Resorts, completing a £1.35bn acquisition. Quickly followed by Intermediate Capital Group's purchase of Park Holidays for £362m. Both successful bids notable for incorporating ground rent transactions at circa 3% NIY.

JULY
Aprirose becomes the eleventh largest operator of managed pubs with acquisition of 73 pubs and restaurants from Mitchells & Butlers. Their near-simultaneous acquisition of Kew Hotels makes this real estate investor a significant hospitality business.

AUGUST
Punch acquired by Patron Capital. After a sale of 1,900 pubs to Heineken, Patron becomes the sixth largest PubCo with 1,300 pubs.

OCTOBER
US real estate fund manager Proprium acquires Admiral Taverns in partnership with Magners brewer C&C. This £220m deal confers control of 845 UK pubs.

DESIRE FOR LONG INCOME AND OPERATIONAL CONTROL WILL DRIVE PUBS AND LEISURE REAL ESTATE

CBRE's *2017 UK Market Outlook* identified two themes for the year in pubs and leisure: the importance of Long Income, and real estate investors taking greater control of operational businesses. And indeed the pubs and leisure markets have been transformed by these twin real estate influences. Most significant transactions were led by either real estate capital, Long Income or both (see Figure 10).

The 'march to the mainstream' we predicted for operational assets generally is exemplified by these deals and is likely to continue for the foreseeable future. In fact, the pace looks likely to increase in 2018 as capital builds in the sector with some interesting potential consequences for investors and owners alike.

CAPITAL BUILDING ACROSS THE PUBS AND LEISURE MARKETS

CBRE estimates that over £30bn of segregated funds are aiming to invest in operational assets. Some funds are starting to adjust their strategies to accommodate shorter leases and higher rents, to match investor appetite currently running at £1bn per month.

By the end of Q3 2017, £8bn had been raised by investment companies via IPOs and secondary issuance. Over £3bn of this total was used to acquire specialist real estate and infrastructure. That is nearly as much as was raised in the entire IPO/Secondary market over the same period in 2016.

The pubs and leisure markets look likely to attract higher levels of capital in 2018.

TIME FOR PUBS AND LEISURE BUSINESSES TO RECONSIDER THEIR REAL ESTATE STRATEGY?

This concentration of capital in operational asset classes is unprecedented and is likely to have a significant impact on the deal landscape and pricing in 2018. The real estate component of many corporate transactions remains under-priced or subsumed by wider trading issues. Many pub and leisure operators still hold property freehold, citing operational flexibility and long term security as key advantages. But with long income evidencing yields below 3%, and billions of capital raised for deployment, owners look increasingly likely to reconsider long-held views.

MISMATCHES OF DEMAND AND SUPPLY PLACE INDUSTRIALS IN STRONG POSITION IN 2018

Industrial and logistics property put in a star performance in 2017, underpinned by very strong demand and extensive supply constraints. These factors seem likely to continue into 2018. New transport technologies will continue to gain credibility, though it may be tricky to work out which technologies will be so widely adopted as to be labelled 'transformational'. Change in the retail sector will continue to affect industrial and logistics property. These structural factors have overwhelmed Brexit as an influence on the sector so far, and 2018 will begin to offer more certainty once EU trade talks get underway.

INDUSTRIALS PROPERTY AHEAD IN 2017

The sector has been the star investment performer during 2017, with capital growth well ahead of any other major commercial real estate sector. All industrial capital values are expected to finish the year around 12% higher than they started it, around nine to ten percentage points ahead of either the office or retail sectors. That growth has been driven by a combination of strong rental value growth and continued yield compression, as investors see continuing evidence of a supply/demand imbalance which has defined the sector for some years.

SUPPLY SIDE CONSTRAINTS

These circumstances show no immediate signs of dissipating, particularly in and around London. Within London, industrial land is rapidly being lost to other land uses. Recent research by SEGRO found that the loss of industrial land in London was happening three times as fast as had been predicted five years ago. Collectively this loss of land could have housed 3,000 new businesses. However, as London's population continues to expand, the collective demand for goods and services also continues to mount. So the need for industrial land and buildings is exceptionally high, although the word 'industrial' is arguably a misnomer. Nevertheless, spaces are required to support the functions of the city, from food preparation to construction site consolidation centres, via the collective challenge of delivering online orders to London's residents and workforce. The only way to accommodate this space is to opt for new building models, for example multi-storey logistics, and those concepts look more likely to be realised in 2018 than ever before.

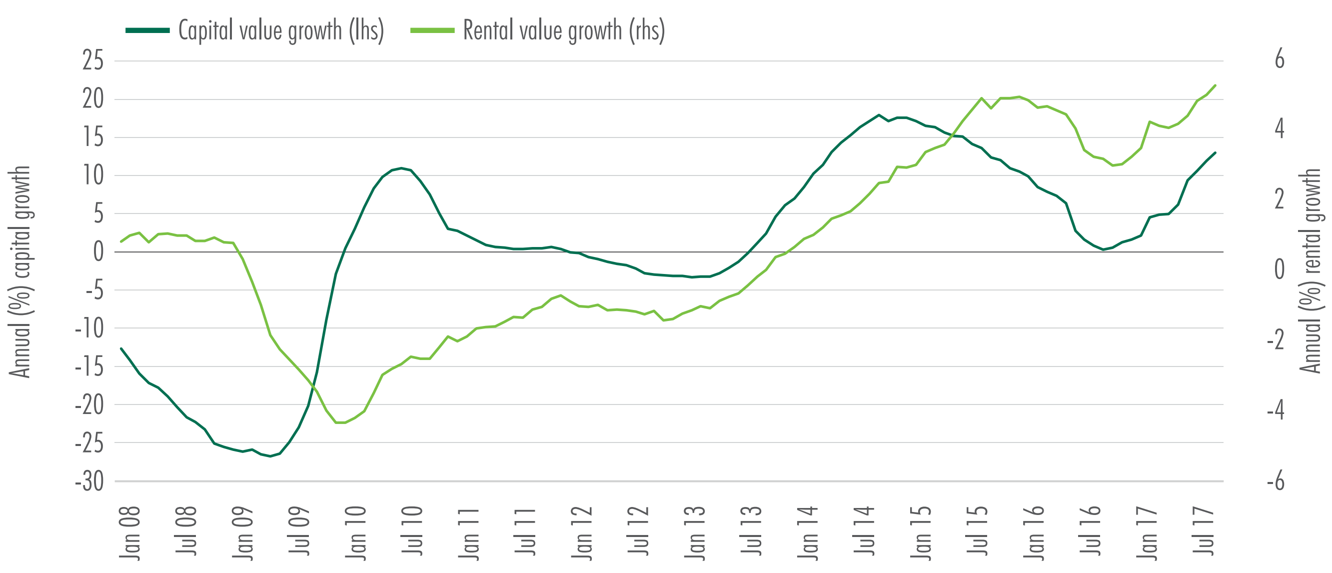
Whilst speculative development has eased supply constraints slightly, vacancy rates remain low by historic standards, in almost all regions. In the 'big box' market, speculative development has been concentrated on 100,000 - 250,000 sq ft units. Whilst the isolated developer may bring forward larger units (for example IDI Gazeley's 574,000 sq ft Altitude development, currently under construction at Magna Park, Milton Keynes), the market for these larger units will remain pre-let driven. Either way, there are very few potential new sites for logistics uses.

TECHNOLOGY CONTINUES TO INFLUENCE THE SECTOR

New technology has been a key influence on the sector in recent years, and will undoubtedly be so again – even more so – in the year ahead. The challenge for industrials futurologists will be in identifying the digital wheat from the chaff: which applications will be adopted widely by the sector, and thus have a transformative impact?

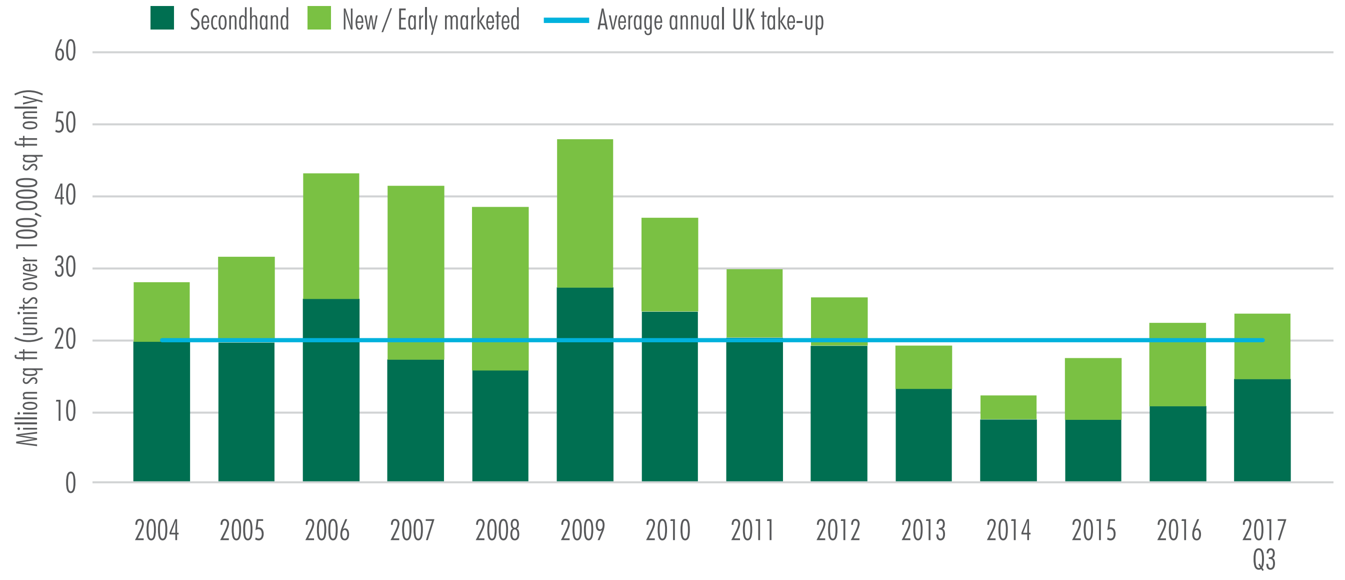
We are likely to hear more about truck platooning in the year ahead, following the UK Government's announcement in August that a UK road trial would proceed. This technology has potentially significant implications for property markets, if it provides relief to drivers from the strict but necessary rules governing driver hours. Warehouses within the strategic supply chain may no longer have to be located a safe driving distance from their customers.

Figure 11: Industrial rental and capital growth, 2008-2017



Source: CBRE Monthly Index

Figure 12: UK logistics availability, 2004 - Q3 2017, units over 100,000 sq ft



Source: CBRE Research

Vehicle technology will also move forward, and not just in relation to autonomous vehicles. For example, we expect further advances in electric vehicle technology. Tesla, for instance, have unveiled designs for a new articulated electric truck that has a range of 500 miles at gross vehicle weight and speed and can reach 60 mph faster than a conventional diesel HGV.

ECONOMICS, POLITICS AND BUSINESS CHANGE

Other changes are also likely to affect demand in 2018, perhaps generating new demand in some instances. These include further consolidation in the wholesale food business as the traditional boundaries between grocery retailers and wholesalers begin the blur (see also our views on retail, page 24). Add to this trend the continued growth and evolution of e-commerce. Towards the end of 2017, for example, online fashion retailer ASOS saw its market capitalisation push ahead of Marks & Spencer for the first time.

Despite innovations in delivery solutions, the emphasis on the so-called 'last mile', together with the increasing volume of online orders, is expected to drive further demand for warehouse space, particularly smaller units in urban settings. The transformative effect of the internet on retail and distribution is by no means complete.

BREXIT IMPACT LIMITED SO FAR, BUT 2018 SHOULD PROVIDE CLARITY

So far, the above structural factors affecting the industrial and logistics sector have overwhelmed any of the potential impacts of Brexit (see pages 8 - 15). The sector saw only a marginal fall in values following 2016's referendum, a loss that was reversed within months. It is likely that the implications of Brexit on the sector will become evident during 2018. Brexit issues will be particularly important for those logistics and transport firms operating close to the UK's ports and borders.

Some have argued that life outside the EU will boost container traffic, and benefit east coast ports, at the expense of roll-on-roll-off traffic along the English Channel ports. Brexit may also imply the need for more portside logistics stock, should goods (including perishable items) need to be held at borders for longer in the event of a hard, cliff-edge Brexit.

> "The sector saw only a marginal fall in values following 2016's referendum, a loss that was reversed within months."

SUPPLY CONSTRAINTS AND STRONG DEMAND WILL SEE 'BEDS' SECTORS OUTPERFORM IN 2018

In this section we bring together the collection of real estate investment sectors increasingly categorised as the 'beds sectors' – namely owner-occupied housing, built-to-rent housing, student accommodation, hotels and healthcare. Whilst these sectors display distinct individual characteristics, and are often much more than places to sleep, they do display certain similarities in terms of operational risk, non-cyclical performance and (often) major supply constraints compared with demand. But we start with the biggest UK real estate sector of all – owner-occupied housing.

OWNER-OCCUPIED AND RENTED HOUSING

Home sales have fallen to a new normal of around 1.2 million homes per year, but first time buyers have been resurgent, partly as a result of Help to Buy. House price growth will ease in 2018 to around 1.5%. Affordability constraints are biting hard which will cap first time buyer ambitions, and the surge in renting will continue. Build-to-rent developments will increasingly provide a bespoke family-friendly offer.

RESIDENTIAL SALES TRANSACTIONS FALL TO A NEW NORMAL, BUT FIRST TIME BUYERS RESURGENT

The UK residential market levelled off in 2017, with close to 300,000 sales each quarter for the past year and a half. Although this is markedly lower than the pre-crisis average of 380,000, it reflects a significant, 34%, recovery from the post-crisis sales rate. We consider this transactional rate to be the new normal, and thus expect a similar level of sales in the coming years. However, transactions will be lower if the economy is weaker than expected or interest rates rise faster and higher than expected.

"The UK residential market levelled off in 2017, with close to 300,000 sales each quarter for the past year and a half."

The composition of transactions has also been changing; a marked increase in first time buyers takes the level of this cohort almost back to the long-term average of 365,000 pa; first time buyers now account for 48% of all mortgages, above the long term average of 41%. But mover numbers are around half the long-term average.

This increase in first time buyers partly reflects the government's Help to Buy initiative, whereas movers have been hindered by a lack of stock coming onto the market. This trend is most pronounced in London (see Figure 13). However, muted earnings growth, and already-stretched loan-to-value and income multiples, imply that the ability of potential first time buyers to enter the market will soon reach a ceiling.

HOUSE PRICE GROWTH WILL SLOW TO AROUND 1.5%

According to Nationwide, the annual rate of house price inflation has slowed to 2.6%, down from 4.1% at the start of 2017 , and a peak of 11.6% three years ago. The slowdown was largely driven by London. In contrast, annual growth picked up in some regions, with East Midlands posting the strongest price increase of 5.1% in Q3.

In 2018, reflecting the more uncertain economic and political environment, we expect subdued house price growth in London of around 2% and we expect total growth of 21% over the next five years. In the long term, inner London tends to outperform, with average growth of 9.6% per annum compared with 8.7% for outer London. However, inner London leads during a recovery while outer London outperforms towards the end of the cycle. We expect growth of 17% across the UK over the next five years.

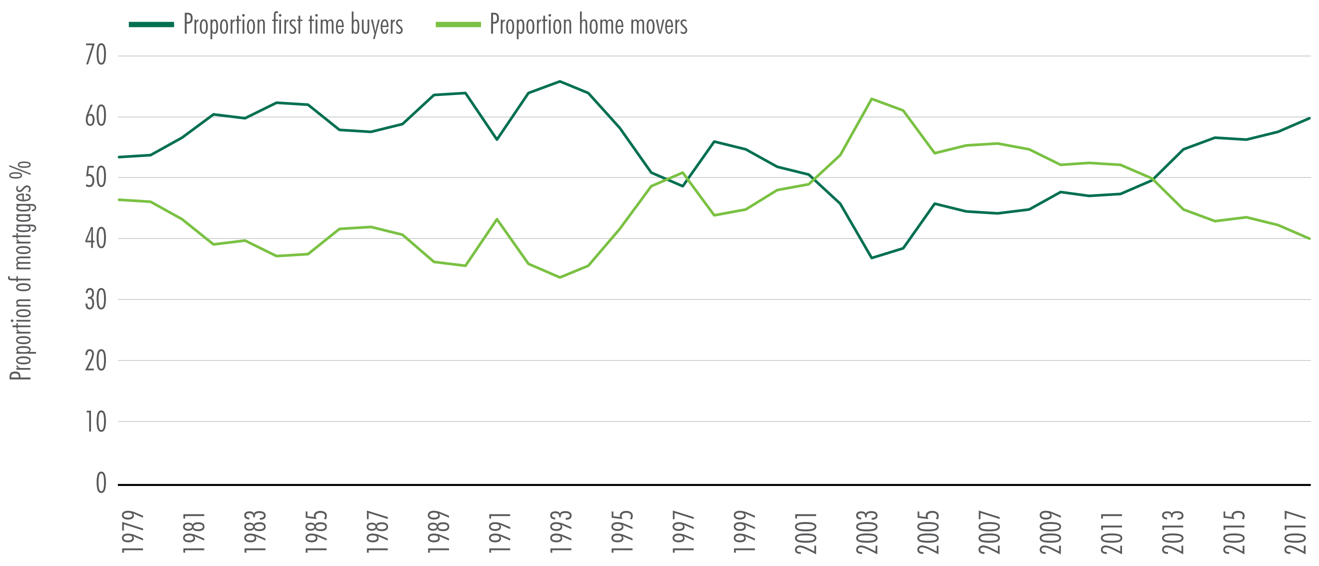
SURGE IN RENTING TO CONTINUE, WITH MORE FAMILY-FRIENDLY DEVELOPMENTS

Affordability constraints, coupled with less quantifiable factors including lifestyle shifts, has led to a rapid increase in the size of the private rental sector, which has more than doubled in the last decade. We expect this trend to continue. PwC have forecast an additional 1.8 million private rented households by 2025.

The build-to-rent sector has thus recently attracted significant investment. And with approximately £30bn targeting the sector over the next five years, this growth looks set to continue. The majority of investment has focussed on London and the prime regional cities. However, as investors become more familiar with the sector and willing to take more risk, investment will spread into secondary towns and cities.

The rented stock will further diversify. The majority of development is in the form of city centre apartments, but there is an increasing concentration of families living in the sector.

Figure 13: Share of mortgage lending in London, 1979-2017, first time buyers and home movers compared



Source: CML, CBRE

According to the latest English Housing report, households with dependent children now account for a third of renters. Developers are likely to respond to this demographic group with more bespoke build to rent developments. For example, Sigma launched its PRS REIT in 2017, with a mandate to provide family homes for rent across England (outside London).

2018 brings with it the prospect of a ban in letting agents' fees. Recent CBRE research on the impact of this ban shows that letting agents' fees vary widely. While such fees are partly a revenue generating exercise, there are legitimate costs which need to be covered. It is possible that agents will pass these costs onto landlords, who may in turn pass onto tenants in the form of higher rents. However, the letting agency market is highly competitive, with over 4,500 for landlords to choose from. So it seems unlikely agents will be able to pass the costs on. As a result, we find that the costs are likely to be absorbed by letting agents.

STUDENT ACCOMMODATION

Student numbers fell slightly in 2017, but as an investment class, student accommodation continues to gain ground. 2017 volumes are up on 2016, with double-digit total returns. Portfolio deals will attract more interest heading into 2018. Planning regulation means supply is tight in London, but is forcing innovation among operators. Student finances remain a concern for investors and operators, who are responding with more options at the budget end.

September UCAS statistics show that the 2017 student intake was 1% lower than 2016, but exceeded 2015. Applicants to English universities fell 4% (-24,240), and English domiciled applicants fell 5% (-21,570), although acceptances for both

Figure 14: House price and rental forecasts 2018-2021 UK, %

%	2018	2019	2020	2021	Total
Rent	3.2	2.9	3.4	3.6	21.0
Price	1.5	4.7	3.9	2.3	17.1

Source: CBRE Research

cohorts were down by only 2%. EU enrolments fell 3% (-1,500), but non-EU enrolments were up by 2% (+1,530); this is probably because of the weak pound. These changes were expected, and we expect a similar pattern of applicants and enrolments next year. The prospect of student visas being imposed by the Government seems less likely now since government data has been published showing that 97% of students leave the UK at the end of their studies.

INVESTMENT INTEREST STILL GROWING, ESPECIALLY FOR PORTFOLIOS, WITH STRONG PERFORMANCE

Student accommodation continues to gain mainstream acceptance among investors. Investment volumes for 2017 will slightly exceed 2016's total of £3.4bn. CBRE's valuation index of 65,000 bedspaces showed total returns of 11.9% in the 12 months to September 2017, significantly outperforming the IPD All Property index over the same period of 9.5%. It also showed 4.1% net rental growth nationally, compared to IPD ERV growth of 2.2%.

Portfolio investment deals will continue to sell for high prices to investors aiming to add scale to their operations, with two large portfolios (Enigma and Regent) on the market at the end of 2017.

Yields are stable in regional towns. In London, yields for operational stock are falling as planning constraints create scarcity, and that scarcity is finally translating into rental growth for existing assets.

LONDON PLANNING POLICY CONSTRAINING DEVELOPMENT AND FORCING OPERATING MODEL INNOVATION

However, London offers no comfort for developers. The newly revised London Plan policy requires 35% of rooms to be offered as 'affordable' (at a maximum annual rent of £6,051 in 2017-2018 terms) and a majority of rooms must be nominated by universities. This will present further viability challenges, resulting in a severely constrained pipeline. Hybrid operating models (with location and asset appealing to more than one user group) are thus becoming more common, such as The Collective, the first student/PRS co-living scheme to come to the market. And in central London, several student accommodation assets have traded this year which allow non-student users out of term time.

FINANCIAL PRESSURES ON THE YOUNG ARE INFLUENCING THE OFFER

The financial pressures facing young people, and thus the affordability of student accommodation, will continue to be a theme in political debate, and thus among investors. Some operators are deliberately seeking to purchase assets with cheaper room types, as a hedge against the rising costs of a degree, and 2017 has seen deep demand for larger assets and portfolios with mainly cluster accommodation. However, our recent research shows that, students have a range of budgets, and thus catering to a range of rental points can be a strategy for success.

For further information, please refer to 'UK Student Accommodation Storylines: Applications, Affordability and Appetite from Investors'.

HOTELS

Hotels performed well in 2017 and we expect this to continue into 2018. Referendum-induced currency and inflation effects have been both a benefit and burden for hotels, and the sector's dependence on EU workers remains a concern. Available rooms will grow at double the long-term average rate in 2018. Investment levels will remain robust, though there will be a shortage of stock available in London.

2017 A STRONG YEAR FOR HOTELS PERFORMANCE

There was a marked increase in hotels investment activity in 2017, continuing the pattern of year-on-year growth. Despite Brexit-related uncertainty, impressive operating performance growth spurred investment appetite for the sector and yields held stable at circa 6.25% and 4.5% for assets with vacant possession in prime regional UK and London respectively.

In the UK provinces, hotel turnover increased for the seventh consecutive year, mostly driven by growth in room rates. Other revenue centres also exhibited marginal gains including food & beverage, leisure and meetings and events. However, the opening of new supply risks diluting demand and affecting performance in some areas of the UK, including parts of London.

BREXIT EFFECTS COULD BE SUBSTANTIAL: INFLATION, CURRENCY, AND LABOUR

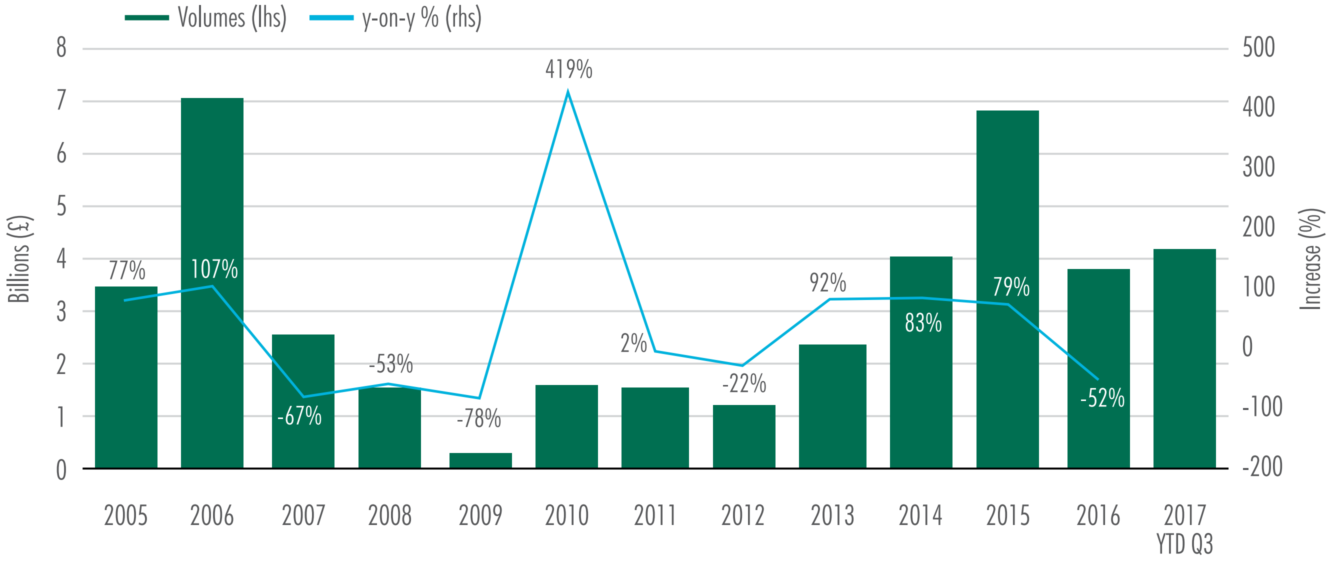
The weak pound will continue to be both a benefit and a burden for UK hoteliers. Inflation is increasing the cost of goods and services procured by hotels. Given the lag time for inflation to work through supply chains, operators are now experiencing a material impact and will need to be stringent with their purchasing in the year ahead, to maintain both profitability and the guest experience. Hoteliers also have medium-term concerns about the impact of inflation on household disposable incomes, particularly outside London where much of the tourism is domestic.

The weaker pound did however allow hoteliers in the UK's more international markets, chiefly London, to increase prices through 2017. Whilst the UK will continue to represent good value to inbound travel markets, much of the currency-related growth was captured by hoteliers in the 12 months after the EU referendum. Revenue management and sales teams will have their mettle tested as they seek continued year-on-year growth in 2018.

In the coming months, skills shortages and a tightening labour market are also likely to create recruitment and staffing difficulties for UK hotels.

A shortage of chefs and kitchen staff remains a perennial, sector-wide headache; however, rising emigration and falling immigration could further minimise the labour pool for Britain's hospitality industry. The hotel sector has a high proportion of foreign-born workers, many of which see the UK as a less attractive place to work following the weakening of sterling. And uncertainty around future rights to work and remain is also playing a role as Brexit negotiations rumble on

Figure 15: Hotels investment volumes, 2005 - Q3 2017 (£bn)



Source: CBRE

(see pages 8-15). It is likely that hotels will be required to pay higher wages or use expensive agency staff to fill the shortfall.

STRONG SUPPLY GROWTH ACROSS THE UK

The confirmed construction pipeline implies 13,500 new UK hotel rooms by the end of 2018. This represents a 3% addition to existing stock – around double the annual long-run average growth rate.

About half of the new stock will be delivered at the budget end of the market. Development in this market has been fuelled by domestic consumer recognition of the leading brands (Premier Inn and Travelodge) and their association with value-for-money. On the supply side, both offer long-dated index-linked leases to their asset owners.

Development hotspots include Belfast, Glasgow and Manchester. All three cities can expect to see some of the newer hotel concepts and brands, including Motel One, which has expanded rapidly in the UK – it is not coincidental that Motel One also operates on a lease model. Nonetheless, hotels to be operated under management and franchise agreements are also present in the pipeline. This includes the 187-room Hotel Indigo Manchester.

In London, almost 8,500 new rooms will open in 2018, a 6% addition to existing supply. London, given its large and international audience, remains a firm favourite for new brand rollout. Europe's first Standard Hotel is set to open in King's Cross, complementing the regeneration of that area and providing an accommodation option for those firms migrating to it. Hoxton Hotels will also add a third property to their London collection, with a 192-room hotel on Blackfriars Road in Southwark.

ROBUST INVESTMENT ACTIVITY EXPECTED TO PERSIST

Robust investor appetite is expected to persist across the UK. Outside London, some large portfolios are expected to transact in the opening half of the year. In the regions, opportunistic North American funds will be significant net sellers. Asian buyers will be active, although from countries other than China, given the state-imposed restrictions on outbound Chinese investment. Hotel companies will also seek to increase their UK brand presence by aligning with equity sources.

In London, investment activity will be limited by the availability of stock; however, the pent-up demand for assets in the capital is likely to keep yields under 5% for centrally-located assets with vacant possession.

Indeed, yields in prime UK locations are likely to remain stable across the board, including for assets operated under a lease. Gilt yields have edged up following the Bank of England's decision to lift interest rates, thus marginally reducing the risk premium for fixed-income hotel investments. However, growing investor demand and the prospect of higher inflation-linked rents will offset the impact on yields.

Yields are likely to increase marginally in secondary locations for hotels with vacant possession and those operated under a management agreement. As portfolio owners dispose of their non-strategic assets in non-core locations, an over-supply of stock on the market and buy-side funding challenges could result in a fall in prices.

HEALTHCARE

Investment in UK healthcare real estate continues to grow strongly. Prime elderly care remains the focus for investors, but breakthroughs in retirement living in 2017 suggest growth in this sector in 2018.

Elderly care, primary care centres and private acute hospitals still dominate investor activity, with the integration of health and social care starting to create new areas of investment. By the end of October 2017, healthcare real estate investment in 2017 was already almost double (£1.4bn) investment levels in the whole of 2016 (£720m).

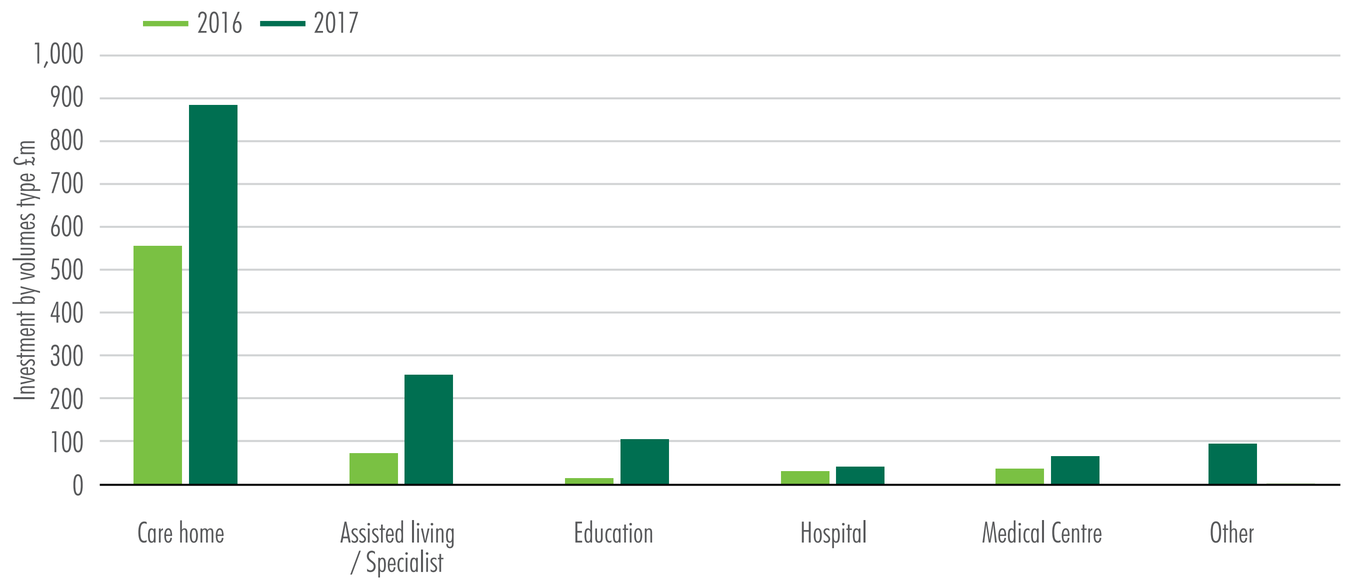
ELDERLY CARE BECOMING A MORE VARIED INVESTMENT MARKET

The elderly care home market experienced record prices in 2017, but also illustrated a range of emerging models for structuring real estate.

Alpha Real's £100m sale and ground-lease back of 110 care homes in HC-One's portfolio showed that long income property investment can play an integral role in the refinancing of a complex operational business whilst retaining operational flexibility.

Yields for good quality care home investments let to 'close to investment grade' covenants fell decisively below 5.0% with exceptional cases below 4.0% for the first time. Prime yields are now lower than at the peak of the last cycle, but on much more sustainably structured leases.

Figure 16: Healthcare investment volumes, 2016 and 2017 (£m)



Source: CBRE

In November 2017, CBRE sold Porthaven Group, the premium nursing home operator on behalf of Phoenix Partners to Fremont Realty Capital in a sale-and-manage-back transaction, setting a new benchmark for the market.

RETIREMENT LIVING AND SPECIALIST CARE ATTRACTING MAJOR CAPITAL

2017 proved to be a watershed for the Retirement Living sector, with the first significant institutional investors entering the UK retirement living sector. AXA's acquisition of Retirement Villages, and L&G's acquisition of Inspired Villages and Renaissance Villages, were all purchases involving established operators with a development pipeline. These investments will help the sector transform into a diversified institutional asset class and deliver a significant social impact.

Three new listed vehicles dedicated to specialist social housing launched in 2017 with a combined £1bn first-round investment target. Capital is attracted by unsatisfied demand for community-based care for vulnerable persons, as well as rents ultimately underpinned by local authorities.

SIGNIFICANT MISMATCHES OF SUPPLY AND DEMAND IN 2018

More than any of the 'operational' real estate markets, healthcare will experience the biggest excess of demand over supply in 2018. More REITs are focusing on the market, UK Pension Funds regard healthcare as fulfilling both social and financial objectives, fixed/Long Income buyers will continue to be very active, and international buyers remain committed. Capital waiting to deploy comfortably outstrips 2017 investment volumes.

There will be winners and losers in 2018. The winners will be the investors with the best underwriting and the deepest relationships with operators. The losers will be those relying on a superficial analysis of the growing elderly population as the basis of their investment strategy.

VERY STRONG DEMAND FOR DATA CENTRE CAPACITY LIKELY, BUT SUPPLY KEEPING UP

UK data centres experienced record take up in 2017, and we expect similar levels of take up in 2018. Supply has kept pace with demand so far and we expect significant new supply in 2018, including from new entrants. Investment volumes look likely to remain high. Data centre operators will be grappling with new EU data protection regulations in the first few months of 2018.

RECORD DEMAND OF OVER 50MW LIKELY TO CONTINUE INTO 2018

The UK data centres market is in effect London. There is no other sustainable market elsewhere in the UK yet. 2016 and 2017 were record years for take-up in London, of around 50MW each year (see Figure 17).

We expect 2018 to follow suit continuing the trend of recent take-up being around double the long-term average prior to 2016. In 2018, we expect a continuation of demand from US tech companies, and some new entrants, including some major Asian (mainly Chinese) cloud and telecoms companies.

A BURGEONING MARKET, BUT SUPPLY KEEPING UP

Data centre providers have so far been able to keep up with this rapidly growing demand. CBRE expects over 90MW of new supply in the market by the end of 2018. This equates to an increase of 20% on the current supply level of 437MW, and a capital spend of over £540 million.

NEW ENTRANTS EXPECTED

In recent years, much of the new London supply has come from existing providers expanding their UK operations. However, the continued strong level of take-up has piqued the interest of data centre developers yet to enter the UK market.

In 2018 we expect this interest to turn into something more concrete. Developers from Europe, the US and Asia are likely to enter the London market for the first time. But these companies may find it a challenging experience, as sites suitable for data centre use, especially freehold, are scarce.

HEIGHTENED INVESTMENT

The European data centre sector has experienced an unprecedented level of investment in the past 24 months. London has been at the centre of this. The low cost of capital available to large data centre developers, and a shift from private equity to more longer-term institutional and infrastructure investors, will mean that both investment volumes and prices paid in London will remain at historically high levels.

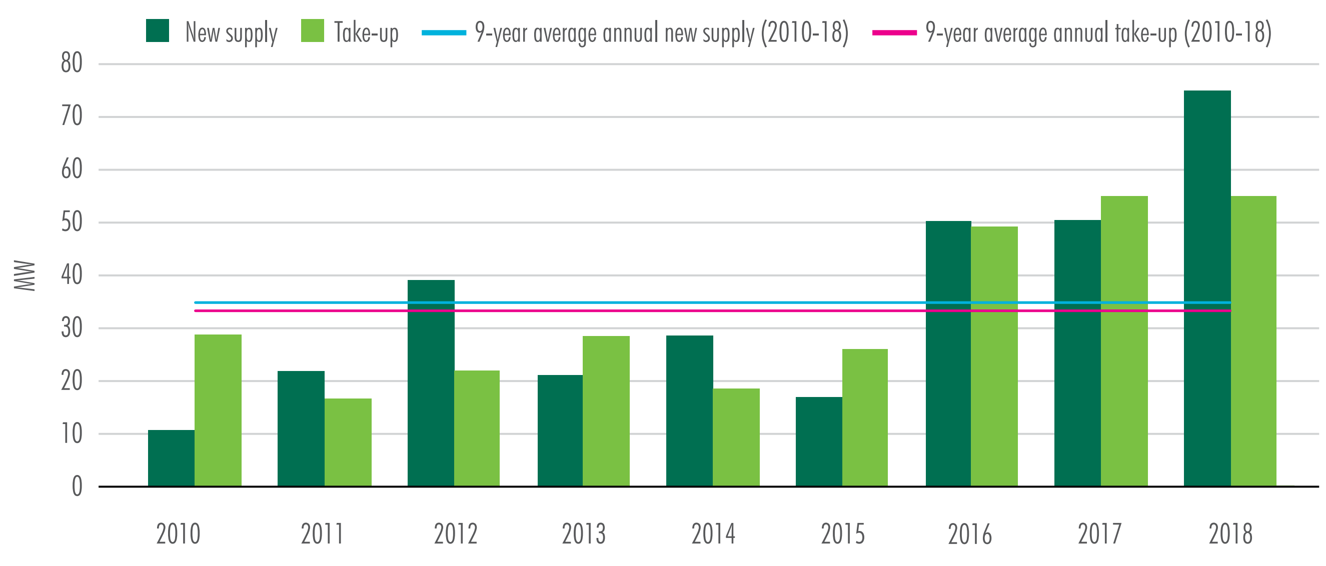
GENERAL DATA PROTECTION REGULATION

The EU General Data Protection Regulation (GDPR) will come into law in May 2018 and applies to all data controllers, data processors or data subjects based in the EU. The failure to comply is expected to lead to heavy fines. There is uncertainty over the role of a data centre operator under the regulations, which may catch some companies out if they have not sought the right advice. The UK Government has confirmed that the UK's decision to leave the EU will not affect the commencement of the GDPR.

> "2016 and 2017 were record years for take-up in London, of around 50MW each year."

DATA CENTRES OUTLOOK

Figure 17: Supply and take up in the London data centres market, 2010-2018 (MW, 2018 forecast)



Source: CBRE

INFORMATION SERVICES LIKELY TO BE EARLY WINNERS IN THE PROPTECH REVOLUTION

PROPTECH

'Proptech' is a widely used (and abused) phrase which we will hear much more of in 2018. Proptech is simply any technology which increases the efficiency with which buildings are built, bought, leased, used or managed. The more efficient provision of property market information will be an early focus of proptech innovators and could assist in extracting more value from building stock. It could increase liquidity in property market transactions, attracting more customers, but it could also increase volatility. Some proptech experiments will face barriers in the form of regulation and financier caution.

PROPTECH – 2018 WILL CUT THROUGH THE CONFUSION

'Proptech' – property technology – has become a big buzzword in recent years. However, it covers a wide range of possible applications of technology to real estate. Since real estate is a factor of production in almost every economic activity, it's very easy to believe that proptech is all pervasive.

To this already-wide usage is often added any technology which operates at the city level, rather than the building level, such as driverless vehicles. So debate between 'smart cities' and 'smart buildings' often overlaps. And further confusion is added by the GPS tracking capability of mobile phones. This technology is inherently spatial and could in the long term have profound effects on urban form – but it is not the same thing as real estate technology.

While the real estate industry tends to focus on technological innovations that apply specifically to the built environment, the impact of technology on these organisations more generally is sometimes also bundled into the proptech concept. For example, the way in which corporations incorporate artificial intelligence and blockchain into their business processes; or the way manufacturers and distributors of goods are already utilising robots to squeeze efficiencies in supply chains; and the way in which consumers do their shopping. These are increasingly dependent on a wide range of technologies and all have a more or less direct impact on use of space. While these technologies are not 'proptech', they can affect the built environment. As these technologies become more engrained in everyday life, they will become ever more important for real estate decision makers to understand.

CBRE defines proptech very simply as *any technology which increases the efficiency with which buildings are built, bought, leased, used or managed*. This definition is admittedly still very wide, but it does begin to focus debate. For example, it would not include data centres (see page 40) which are themselves a form of real estate; and it would not include rankings or ratings of the technology content of real estate (such as WiredScore or BREEAM) – as this is just information.

In 2018, CBRE expects that the proptech debate will sophisticate further as decision makers begin to sift through the implications of new technologies more forensically.
How to approach this task? A useful starting point is PwC's classification of eight essential technologies likely to transform the future (see Figure 18) – a mix of hardware (robots, drones, 3D printing) and software (blockchain). An immense amount has already been written about the impact of each of these technologies on real estate. Examples include the impact of the hardware technologies on logistics and warehouse locations; or the impact of AI on rent reviews or transaction due diligence. And the 'Internet of Things' is a pre-requisite for buildings to become truly 'smart'.

INFORMATION-HANDLING TECHNOLOGY WILL BE AN EARLY LEADER

But even this categorisation seems to miss significant areas of debate for real estate – for example, much of the proptech debate centres around the creation of more efficient and transparent markets through information exchange (such as Zoopla, AirBnB or CBRE's own PropertyMatch). These are novel uses of existing technologies rather than new technologies. In the short term, this element of proptech looks likely to be the most disruptive to existing market practices – not least because many new products are easily to deploy through smart phones and can be scaled up quickly to reach large audiences.

For example, with better information about available office space and tenants seeking to take that space, the office stock should become more efficiently used. If so, structural office vacancy rates would fall, and occupational densities would rise. The overall falls in office stock in England and Wales from 2014 to 2016 might be partly attributable to this factor.

The UK financial services 'big bang' in the 1980s offers an example of how this might play out in property markets. At that time, knowing the price of shares and offering that price discovery to clients was a service that was of value. Ten years later, the price of the same share was a commodity piece of data that every fund manager could access at very little cost. There was complete price transparency in the market, which led brokers to instead offer cheaper and more reliable execution services, and to sharpen their advisory skills. We can perhaps expect a similar trend in real estate of digitally-enabled brokerage.

Proptech of this sort might, by improving market efficiency, smooth out cycles in real estate markets, and prevent surprise pricing shocks. Alternatively, it might increase volatility by removing some of the long timing lags and transaction costs which usually characterise the real estate market. Either way, a new equilibrium seems likely. If, as some hope, proptech also enables whole buildings to be bought and sold more efficiently (and potentially unitised), liquidity will rise. With liquidity comes further volatility – but also potentially new customers who currently find it difficult to access the market.

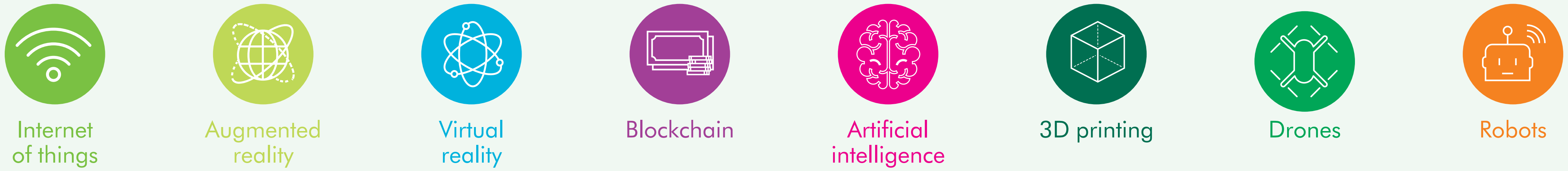
PROPTECH WILL FACE BARRIERS AND FALSE DAWNS IN 2018

Although this might seem alarming, there are counteracting forces which may mean that proptech's effects take a long time to become apparent. For example:

- AirBnB has come into conflict with planning regulations in London precisely because it puts real estate to wider use. Erosions of the distinctions between work and leisure space may produce similar tensions as the flexible office space model grows (see page 20)
- Traditionally cautious lending institutions may also be slow to adapt to proptech because of regulatory demands on quality and quantity of lending
- There are likely to be many false starts and blind alleys – for example, flawed business models for information exchange which don't create digital revenues, and don't monetise data and analytics, are much more likely to fail

Nevertheless, in 2018 we predict steady improvements in the efficiency of real estate decision-making, with new entrants and innovation aplenty.

Figure 18: Eight essential technologies



Source: pwc.com/techmegatrend

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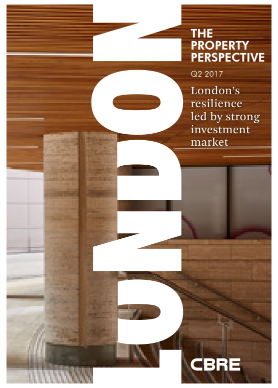

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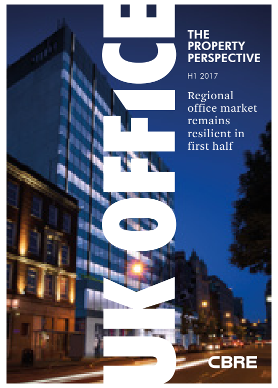

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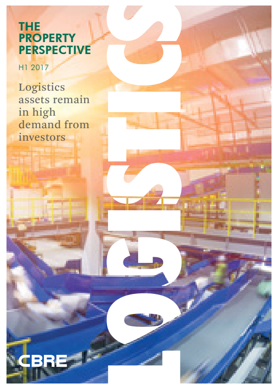

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