

# Property Industry Alliance

## Property Data Report 2015





# Introduction

This document sets out key facts about commercial property, a sector that makes up a major part of the UK economy in its own right. Commercial property is the physical platform for virtually all the UK's other major industries and enterprises, as well as providing places in which people can work, shop and enjoy leisure activities. Similar in size to banking and larger than the telecommunications and transport sectors combined, commercial property is also an important component of how the nation's savings – pensions, insurance and other formats – as well as overseas capital, are productively invested in the UK economy.

This latest *Property Data Report* has been fully updated and includes information on the size of the private rented residential sector. Drawing on the detailed analysis presented in the IPF Research Programme's regular reportage on *The Size and Structure of the UK Property Market*, the report also presents a long time series of the value of the UK commercial property market and other comparative data.

The *Property Data Report 2015* has been produced on behalf of:

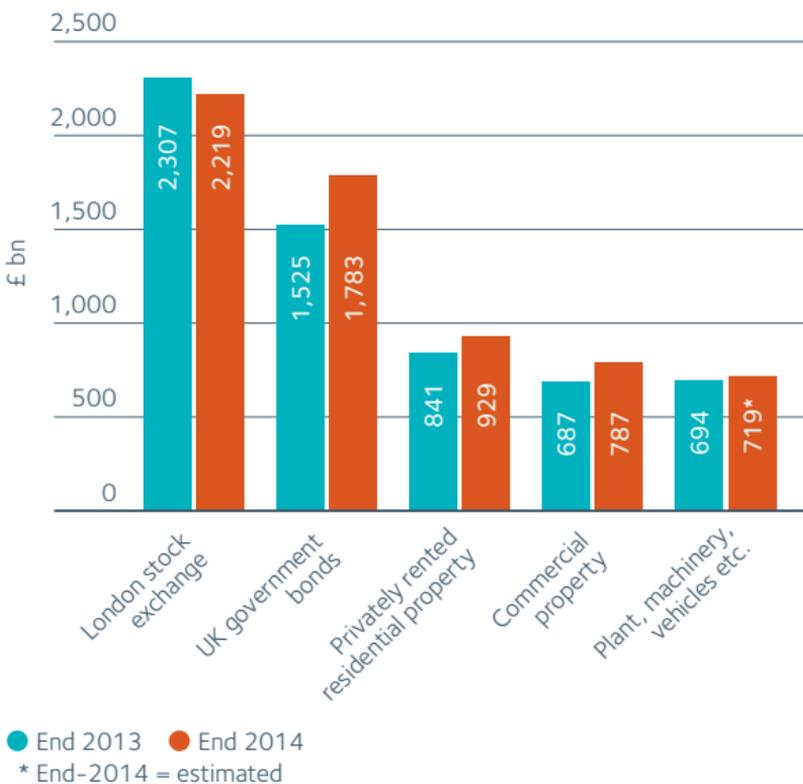
- The Association of Real Estate Funds;
- The British Council for Offices;
- The British Council of Shopping Centres;
- The British Property Federation;
- The Commercial Real Estate Finance Council Europe;
- The Investment Association;
- The Investment Property Forum;
- The Royal Institution of Chartered Surveyors;
- The Urban Land Institute.

All nine bodies are members of the Property Industry Alliance, which seeks to achieve a more co-ordinated and effective approach from leading property bodies on policy, research and best practice issues.

# 1 Commercial property: size by comparison to other assets

The definition of commercial property includes retail, office and industrial (warehouses and most forms of factory), plus 'other commercial' types of real estate typically used for business purposes such as leisure (cinemas, fitness clubs and gyms, leisure parks, etc.), hotels, petrol stations and other miscellaneous types.

The worth of the UK's stock of commercial property rose to £787 billion in 2014. The 15% increase over the year largely reflected a rise in property prices, driven by the willingness of investors to pay more for a given rent as the UK economy recovered and confidence returned. The stock of commercial property represents 10% of national net wealth. Privately rented residential property accounts for a further 12% of the UK's net wealth.

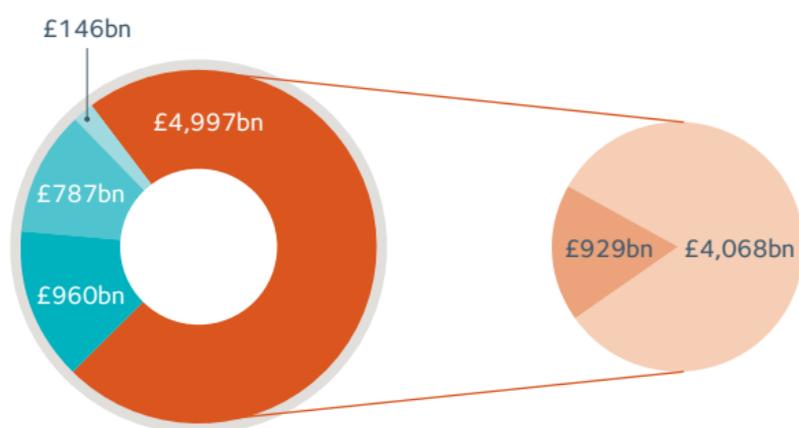


Commercial property's value is comparable to the country's stock of machinery, equipment and vehicles and is the equivalent of 35% of the value of the UK's stock market and 44% of government bonds.

## 2 Commercial property: size in the built environment

Commercial property accounts for 13% of the value of all buildings in the UK. Other non-domestic buildings – mainly healthcare and educational facilities – constitute a fraction of the value of commercial property.

The UK's commercial property floorspace in total measures 7.35 billion square feet.



- Infrastructure
- Commercial property
- Other non-domestic buildings
- All residential
- Residential: private rented
- Residential: owner-occupied and social housing

Residential property dominates the built environment, being over six times greater in value than commercial property. Within the residential sector, the private rented sector (PRS) accounts for £929 billion. While the PRS is dominated by smaller private landlords, many institutional and large corporate investors are showing increasing interest in it as a sub-sector of commercial property.

### 3 Commercial property in detail

Retail (comprising shopping centres and out-of-town retail warehouses and parks, as well as food and department stores and high street shops) is the largest sub-sector, accounting for 43% of the total value of commercial property in 2014.

In the office sector, London dominates, with the capital's offices representing 64% of the sector's total value but only a quarter of its floorspace.

Hotels form the largest part of the fast-growing 'other commercial property' sub-sector.

#### **DISTRIBUTION OF ALL (OWNER-OCCUPIED AND INVESTED) COMMERCIAL PROPERTY 2014**

	<b>£BN</b>	<b>% OF TOTAL</b>
<b>RETAIL</b>	<b>340</b>	<b>43</b>
Shopping centres	66	8
Retail warehouses	52	7
Other retail (incl foodstores)	221	28
<b>OFFICES</b>	<b>234</b>	<b>30</b>
London	149	19
South Eastern	28	4
Rest UK	57	7
<b>INDUSTRIAL</b>	<b>148</b>	<b>19</b>
London and South Eastern	58	7
Rest UK	91	12
<b>OTHER COMMERCIAL</b>	<b>65</b>	<b>8</b>
Hotels	29	4
Leisure	16	2
Miscellaneous other commercial	20	3
<b>TOTAL COMMERCIAL PROPERTY</b>	<b>787</b>	<b>100</b>
<b>of which London</b>	<b>286</b>	<b>36</b>

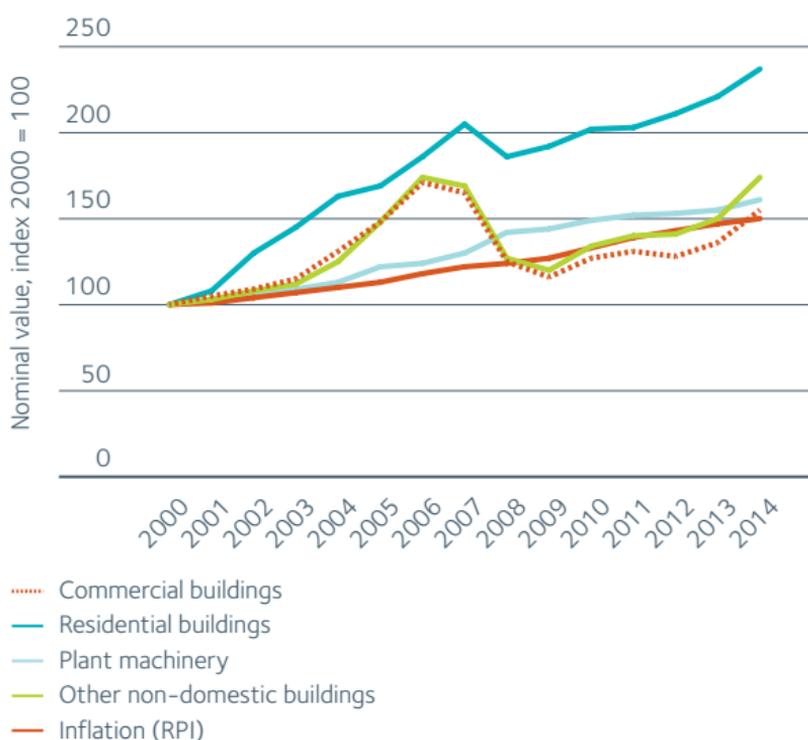
Note: Figures do not necessarily sum to totals because of rounding

Overall, London accounts for 36% of the total value of UK commercial property, compared to its 23% share of GDP. London's share of commercial property has grown from 26% in 2004, mainly because its property values have risen by almost three-quarters, whereas values in the rest of the country are broadly unchanged, despite the rising market in the period leading up to the financial crisis of the late 2000s.

## 4 Commercial property: value trend

Since 2000, the value of the UK's commercial property stock has grown at an annualised rate of 3.2%, slightly ahead of inflation.

All other parts of the built environment have grown at a faster rate than commercial property. In particular, the value of the stock of residential property has grown much more quickly, at 6.2% per annum, reflecting greater increases in both values and the stock of housing. Notably, the number of flats and houses in the UK has grown annually at more than twice the rate of commercial floorspace.



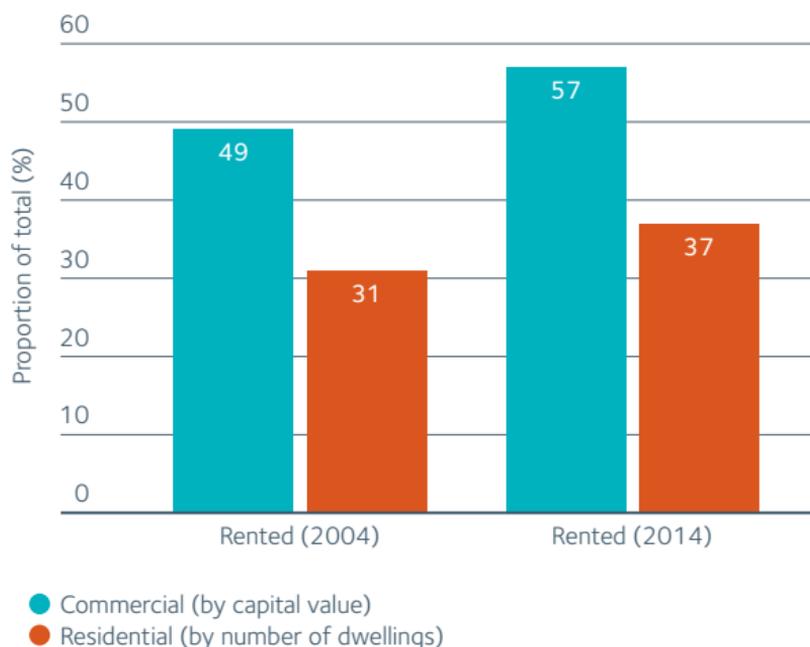
The value of machinery, equipment and vehicles in the UK has, over the cycle, grown at a similar rate to commercial property.

## 5 Renting versus owning

Over half of the UK's commercial property is rented by occupiers, in contrast to residential property, where almost two-thirds is owner-occupied.

With many businesses increasingly reluctant to commit capital and management time to the owner-occupation of their property and with investors having a healthy appetite for commercial buildings, renting grew significantly during the last decade.

The proportion of commercial property that is rented has stabilised since the late 2000s downturn in the economy.



The renting of homes declined in the period leading up to the early 2000s but since then it has been growing, reflecting in particular a doubling in the proportion of those who are renting privately. Privately rented housing now accounts for 19% of the value of the UK's housing stock, according to the IPF's *The Size and Structure of the UK Property Market End-2014 Update*. Commercial property investors are increasingly interested in residential property as an investable asset.

## 6 Commercial property: leases

The average length of a new lease has fallen substantially over the last 15 years, most so during the first half of the 2000s. Before accounting for tenant break options (which were included in the 2014 report), the average length is now 6.8 years, compared to 9.6 years in 1999. This change is most pronounced in the retail sector, and reflects the preference among many, especially smaller, occupiers for greater flexibility in their property arrangements.

Other tenants, particularly bigger businesses and those in better quality buildings, continue to prefer longer leases because of the security of tenure and high fit-out costs. This in turn is encouraged by investors seeking income security and inflation protection over the long run.

### AVERAGE NEW LEASE LENGTH\*



— All property

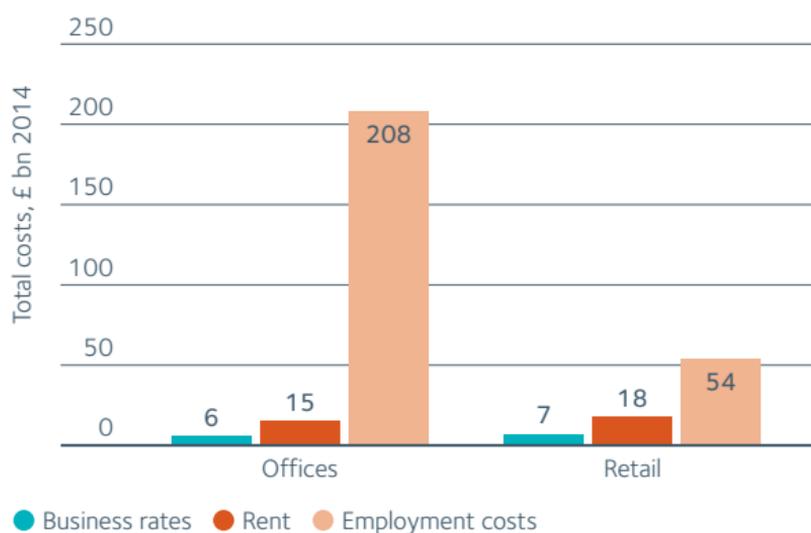
\*including short leases but excluding the effect of break clauses  
(Note: previous reports took account of breaks)

27.5% of leases signed in 2014 incorporated break clauses; including these breaks reduces the average lease length by about a further two years. Break clauses tend to be most common in properties with leases of 6-15 years' length but are less likely in those with longer lease lengths – emphasising the continuing importance some tenants place on security of tenure.

## 7 Commercial property as a business cost

Rents account for a relatively low proportion of business costs. Office rents, at £15 billion, are low (7%) relative to staffing costs.

The rental costs to retailers, of £18 billion, are a third of the level of staff costs. They represent a small fraction (about 5%) of retailer turnover.



Business rates on average add some 40% to the cost of renting retail and office property, although the burden across occupiers has become uneven in recent years. Business rates have become a more significant property cost in recent years, as described in Section 8.

## 8 Commercial property as a business cost: inflation

Rental values, on the whole, have increased at a much slower rate than other business costs over the last 10 years, well below the rate of retail price inflation.

There is a contrast, however, between the retail sector, where rents have barely changed over the last 10 years, and offices where (because of the buoyant London market) rents have grown relatively quickly, albeit still below inflation.



Business rates have increased at a faster rate than rents and, on average, in line with inflation. In the retail sector, the divergence with sluggish rental growth is substantial; business rates have also grown by far more than the rise in sales turnover recorded in retail property.

## 9 Investor ownership of commercial property

£449 billion (i.e. 57% of the total) of commercial property in the UK is owned by investors rather than occupiers.

UK institutions (insurance companies and pension funds) were traditionally the biggest investors in UK commercial property but now account for less than one-fifth of the total, down from almost one-third in 2004.

Overseas investors now own a quarter of UK commercial properties held as investments (but still well below the 50%+ level of overseas ownership in the UK equity market). Their commercial property holdings have grown rapidly over the last decade.

These estimates exclude residential and student accommodation. Large (commercial/institutional) investors own about £24 billion of such property. However, more than £900 billion is in the hands of small private property companies and private landlords.

### OWNERSHIP OF COMMERCIAL PROPERTY BY INVESTOR TYPE

	£BN 2014	% CHANGE 2004-14	% OF TOTAL
Overseas investors	113	137	25
UK institutional (Insurance companies & pension funds)	85	-8	19
UK collective investment schemes	77	98	17
UK REITS & listed prop companies	65	57	15
UK unlisted prop companies	59	1	13
UK traditional estates / charities	20	32	4
UK other	19	-7	4
UK private investors	11	30	2
<b>TOTAL VALUE OF BUILDINGS IN INVESTMENT PORTFOLIOS</b>	<b>449</b>	<b>39</b>	<b>100</b>

Note: Figures do not necessarily sum to totals because of rounding

In aggregate, UK and overseas collective investment schemes now own over a quarter of the amount invested in UK commercial buildings and, collectively, represent the largest owner type, according to recent research for the IPF.

## 10 UK institutional investor exposure to commercial property

Property, in one form or another, accounts for around 6% of the £3 trillion in total invested by UK institutions (insurance companies and pension funds). Property's share grew in 2014, mainly because values increased more rapidly than in other asset classes.

Until the 1990s, these institutions tended to obtain their exposure to commercial property almost entirely through direct ownership of buildings. Today, although direct ownership (in accounting for almost 3% of their total investments) remains dominant, investors deploy a wider range of approaches.

Investments in collective investment schemes have grown as larger investors have used them to complement their direct holdings and gain access to specialist skills, while they have enabled smaller pension funds to gain an exposure to an asset class previously accessible only to big investors.

### INSURANCE COMPANY AND PENSION FUND EXPOSURE TO PROPERTY IN RELATION TO TOTAL ASSETS

	2014 £BN	% OF TOTAL
<b>Total assets (equities, bonds, property, etc.)</b>	<b>2984</b>	<b>100</b>
Directly-owned UK property	85	2.8
Investments in collective investment schemes	51	1.7
<b>Total property</b>	<b>135</b>	<b>4.5</b>
UK & overseas property company shares	39	1.3

Note: Figures do not necessarily sum to totals because of rounding

Institutions have also traditionally invested in property through their equity investments in REITs and listed property companies.

Another growing form of investment is debt, which insurers have increasingly been providing to other property investors. Estimates by De Montfort University indicate that such lending by insurance companies and their (largely institutionally-backed) fund management arms increased by almost 40% between the end of 2012 and 2014, such that the amount invested now rivals their exposure to REITs and listed property companies.

## 11 Commercial property lending

Most investors, other than institutions, and many occupiers acquire commercial property using a combination of their own capital (equity) and external debt.

UK banks and building societies were traditionally the principal lenders but their dominant position has been rapidly eroded in the years since the financial crisis. They now account for only 39% of new lending and half the value of outstanding loans.

A broader range of debt providers (such as insurance companies and debt funds) has emerged over the last five years. They accounted for 25% of new lending in 2014 and a fifth of all outstanding loans, compared to only around 5% of outstanding loans in 2008.



- UK banks and building societies
- Overseas banks
- Insurance company and other non-bank lenders

\*2008 split between UK banks and building societies and Insurance company and other lenders estimated on the basis of further information provided by the authors of the DMU report.

De Montfort University's latest survey suggests that lending secured on commercial property investment (as defined in this report) is approximately £150 billion, indicating that about one third of the capital invested in commercial property takes the form of debt. This compares with around two-thirds five years ago, a change that resulted partly from deleveraging and partly from the recent recovery in property values.

## 12 Commercial property: investment performance

Directly-owned commercial property returns further improved to 17.9% in 2014, from 10.6% in 2013 and 3.3% in 2012, and outpaced the FTSE and the gilt market. Direct property's five year record is now superior to equities and gilts.

Property company shares delivered relatively high returns in 2014. The five-year record is also comparatively good, although property company shares tend to be much more volatile than directly-owned property and other asset classes.



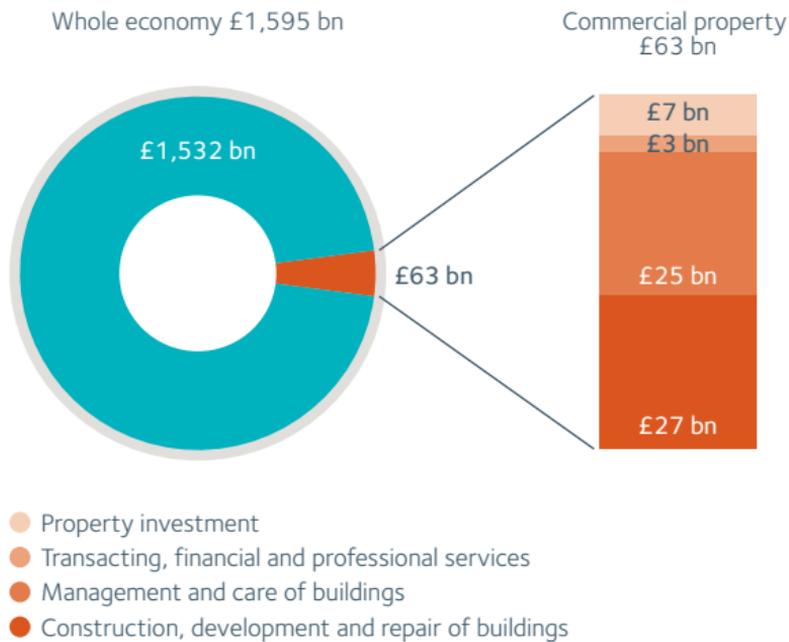
Over the longer term, directly-owned commercial property performance – at 10.8% per annum since 1971 (IPD's earliest data point) – lies between the returns of gilts and equities. This ranking is in line both with surveys of investors' longer-term expectations and with the historic pattern of risk – commercial property returns being less volatile than equities but more volatile than gilts.

# 13 Commercial property: economic contribution

The commercial property industry contributes to the UK economy in many ways. It provides the finance for and undertakes the construction of new buildings. It invests in and manages the accommodation needs of retailers, businesses, distributors, manufacturers, hoteliers and many parts of the public sector. Other bodies within the industry maintain these buildings or facilitate the buying, selling and letting of such property on behalf of owners.

In total, in 2014 these activities (excluding those of owner-occupiers) directly contributed about £63 billion to the economy – representing 3.9% of Gross Value Added. This is comparable to the combined size of the UK’s telecommunications and transport industries, highlighting the sector’s importance to business and to people’s everyday lives.

## COMMERCIAL PROPERTY INDUSTRY GROSS VALUE ADDED 2014



Alternatively, representing commercial property’s economic contribution as the rents paid by tenants and the imputed rents of owner-occupiers, a similar estimate of 3.6% results, rising to 6.2% when privately rented residential property is included in the calculation.

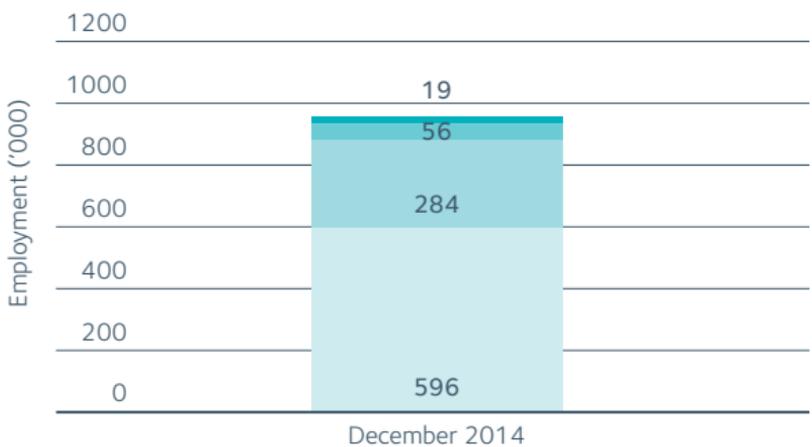
# 14 Commercial property as a major employer

Nearly a million people are employed by the commercial property industry – about one in every 35 jobs.

Most activity involves the construction, development, repair, care and management of buildings.

The commercial property investment sector (and this of course is before taking account of owner-occupiers) is a small but high value-added part of the industry, and the largest in Europe. It generates around £330,000 value-added per employee – almost eight times the average for the economy as a whole.

## EMPLOYMENT IN THE COMMERCIAL PROPERTY INDUSTRY



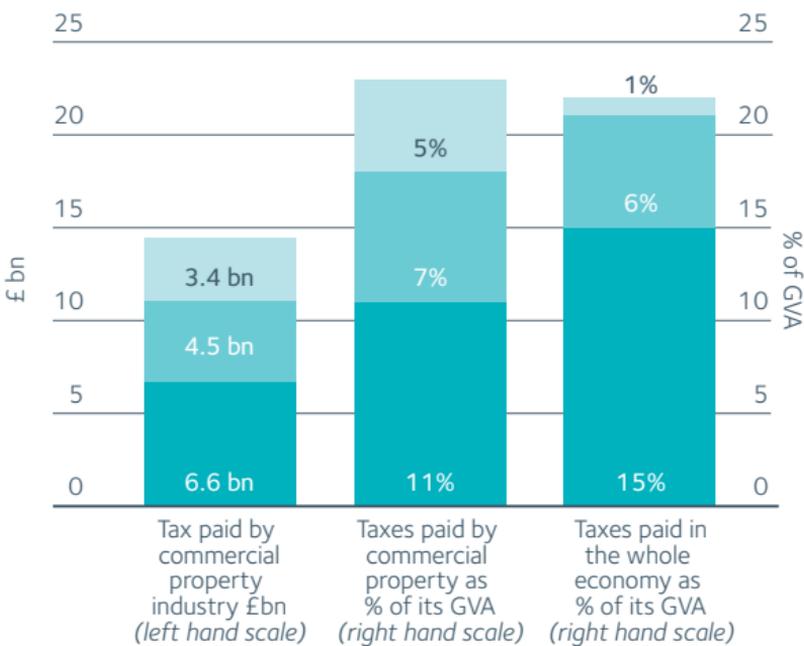
- Property investment
- Transacting, financial and professional services
- Management and care of buildings
- Construction, development and repair of buildings

Across the industry, value-added per person averages around £65,000 – 40% higher than the national average.

# 15 Taxes paid to the National Exchequer

The commercial property industry is taxed both directly and indirectly. The direct contributions from some of these taxes – including Stamp Duty Land Tax (SDLT), VAT, PAYE and National Insurance contributions – can be calculated with reasonable accuracy and are illustrated below.

Such taxes amount to around £15 billion in total, representing almost a quarter of the commercial property industry’s Gross Value Added. This is a greater proportionate tax burden than in the economy as a whole, reflecting the taxation of property transactions through SDLT. Recent research undertaken for the British Property Federation indicates that commercial property is taxed more heavily than residential property.



- Stamp Duty Land Tax
- VAT
- PAYE and NICs

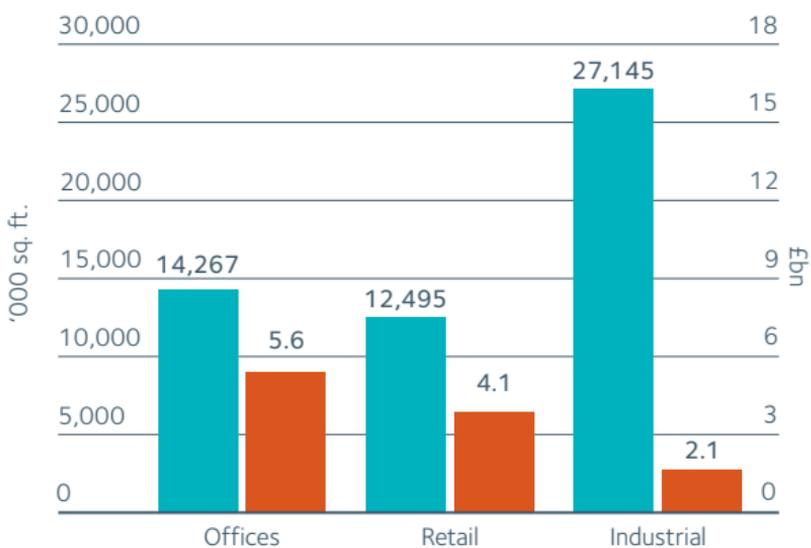
Other taxes directly paid by the industry, ranging from Corporation Tax to business rates on empty property and the Community Infrastructure Levy, are much harder to assess.

In addition, occupiers of commercial property paid over £20 billion in business rates, some of which is, effectively, borne by property owners through lower rents.

## 16 Commercial property: regeneration

The commercial property industry, on average over the last decade, has been adding about 54 million square feet of new space every year, i.e. about 0.7% of the total stock of commercial property. This reflects a value of around £12 billion – contributing almost 1% to the UK's GDP each year.

Activity over the last five years, however, has been running at half the previous rate. This lower rate applies to all the three main sectors – retail, offices and industrial.



- Completions ('000 sq. ft., 10 year average)
- Value £bn (End-2014 prices)

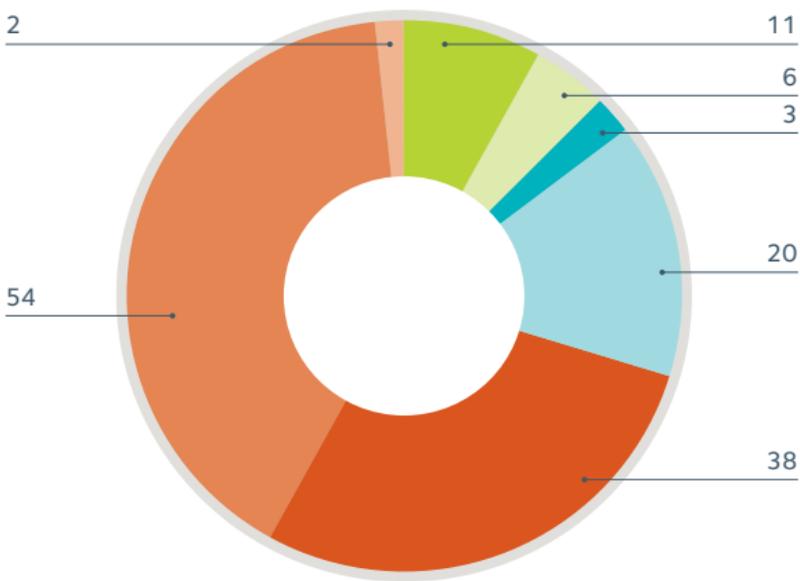
The new building is barely covering the loss of stock through demolition and change in use to residential. The net amount of commercial property floorspace has increased in total by only 0.7% over the last 10 years, according to the IPF's *The Size and Structure of the UK Property Market End-2014 Update*.

# 17 Energy consumption

Commercial property accounts for about 8% of the UK's energy consumption. Other non-domestic buildings, mainly schools, colleges and hospitals, and the heating and lighting needs of factories bring the total used in non-residential buildings to 15%. By contrast, almost a third of the UK's energy consumption occurs in the home. Transport is the country's biggest consumer of energy.

Energy consumption in commercial properties fell in 2014, helped in part by the milder winter. By contrast, the use of energy increased in the transport sector.

**ENERGY CONSUMPTION BY END-USER, MILLION TONNES OIL EQUIVALENT, 2014**



- Activities in commercial property (excluding industrial)
- Activities in other non-domestic property
- Industrial buildings – heating and lighting
- Industry – industrial processes, etc.
- Domestic consumption
- Transport
- Other

Shops are the largest consumer of energy in the commercial property sector, reflecting not only a larger amount of space but also greater energy requirements per square foot. Shops, however, tend to be better at conserving energy, having better than average Energy Performance Certificates (EPCs).

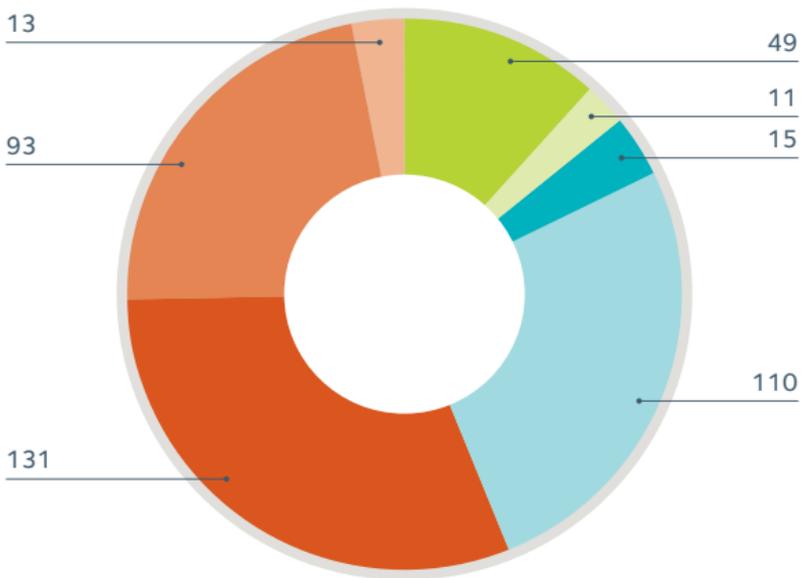
## 18 CO<sub>2</sub> emissions

About 12% of CO<sub>2</sub> emissions are directly and indirectly (i.e. emitted in the production of power) associated with consumption by shops, offices, warehouses and other commercial buildings (occupied by both the private and public sectors) with a further 3% accounted for by the heating and lighting of industrial buildings.

Retail outlets, in line with their higher energy consumption, are the biggest emitters within the commercial property sector.

Domestic buildings and transportation are by far the largest emitters of CO<sub>2</sub> in the UK.

### MILLION TONNES CO<sub>2</sub> EMISSIONS BY BUILDING TYPE/ END-USE, 2014



- Retail, office, warehousing and other commercial buildings (excluding industry)
- Industrial buildings (excluding industrial processes)
- Other non-domestic buildings
- Domestic buildings
- Transportation
- Industry – industrial processes, etc.
- Other

Direct and indirect emissions from commercial buildings fell in 2014, even after taking into account the unusually mild winter.

# Definitions

Commercial property is primarily made up of the core sectors of retail, office and industrial (warehousing and factories) that dominate investors' portfolios. Cinemas and leisure parks, hotels, pubs and restaurants, and garages and petrol stations are also seen as commercial property.

Commercial property activity covers: the construction, development, design, and care and management of buildings; the fund, investment & asset management of investment property; and, transacting (e.g. investment and letting agency). The contributions made to commercial property by the legal and property banking sectors are also included.

All forms of residential property and activity are excluded throughout from the measures of commercial property. However, it is worth noting that any clear line between property with commercial and residential uses has become increasingly blurred in recent years, as investors' focus is on the investable nature of land and buildings with long-term income streams in the form of rent. For many commercial property investors, the three main sub-sectors have in recent years been supplemented by alternatives like primary healthcare facilities, student accommodation and the private rented residential sector.

# Sources and methodologies

- 1 The estimate of commercial property value is from the Investment Property Forum's (IPF) *The Size and Structure of the UK Property Market End-2014 Update* undertaken as part of the IPF Research Programme 2011-2015. The estimate is made by updating the latest (April 2008) rateable values to end-2014 market values (using IPD rental growth) and capitalising these by IPD yields adjusted to reflect the more secondary nature of average property (full details are available in the IPF report).

Plant & machinery from the Office for National Statistics (ONS) *Blue Book 2014*; 2014 figure unavailable at time of preparation so updated to 2014 by Paul Mitchell Real Estate Consultancy Ltd; government bonds from the Debt Management Office and equities from the London Stock Exchange.
- 2 Commercial property, residential property and private rented residential sector from the IPF's *The Size and Structure of the UK Property Market End-2014 Update*.

In making these estimates, total residential is based on the 2013 figure in ONS's *Blue Book 2014*, updated to 2014 by Paul Mitchell Real Estate Consultancy Ltd. The privately rented residential sector is calculated from the product of the number of privately rented residential dwellings (from the Department of Communities and Local Government) and the average value of a privately rented dwelling (full details are available in the IPF report).

Other non-domestic property is a Paul Mitchell Real Estate Consultancy Ltd estimate, made by updating the latest (April 2008) rateable values to end-2014 market values and capitalising these by yields, which are assumed to be 200bps below those of average commercial property. Infrastructure corresponds to that quantified as "other structures" (mainly civil engineering, such as roads, bridges, airports, pipelines, etc.) by ONS in its *Blue Book*; latest data is for 2013, hence estimated to 2014 by Paul Mitchell Real Estate Consultancy Ltd. This measure of infrastructure is not comprehensive with ONS incorporating some elements of infrastructure in its estimates either of buildings or of plant & machinery.
- 3 All estimates from the IPF's *The Size and Structure of the UK Property Market End-2014 Update* (see 1 and 2 above for further details).
- 4 Commercial property 2003-2014 from the IPF's *The Size and Structure of the UK Property Market End-2014 Update*, 2000-2012 are Paul Mitchell Real Estate Consultancy Ltd estimates using the same methodology as the IPF report.

Residential property is from *The Size and Structure of the UK Property Market End-2014 Update* / ONS's *Blue Book 2014* as described in 1 above.

Other non-domestic property are Paul Mitchell Real Estate Consultancy Ltd estimates, made by updating the April 1998, 2003 and 2008 rateable values to the relevant year's market values and capitalising these by yields, which are assumed in 2013 and 2014 to

be 200bps below those of average commercial property and which, in previous years, are assumed to be 75% of the level of the average commercial property yield. Inflation (RPI) is from the ONS.

- 5 Commercial property is based on the IPF's *The Size and Structure of the UK Property Market End-2014 Update*, with the commercial owner-occupied stock estimated as the residual of the total stock and the investment stock; note that the previous estimates have been restated in light of the new IPF report. Housing is from the Department of Communities and Local Government's Table 101 *Dwelling Stock by Tenure*, other than 2014, which is a Paul Mitchell Real Estate Consultancy Ltd estimated update to end-2014, using the latest available DCLG figures for April 2012.
- 6 *British Property Federation: IPD Annual Lease Reviews and IPD Lease Events Report 2014*.
- 7 Rental payments are based on the rental value estimates in the IPF's *The Size and Structure of the UK Property Market End-2014 Update* (note that retail is adjusted to exclude pubs and restaurants). Business rates are based on the total receipts presented in the Office for Budget Responsibility's *March 2015 Economic and Fiscal Outlook* (and estimated to be £27.2 billion for calendar 2014), pro-rated according to retail and office shares of total rateable value (estimated at 28% and 23% respectively – note that it is assumed that any reliefs are distributed proportionately across sectors). Employment costs derived from the ONS (retail relates to SIC(2007) 47 less non-store trade, offices to SIC(2003)s J & K).
- 8 Rental growth from Investment Property Databank Ltd © 2015. Business rates are derived on the basis described in 7 above. For 2004, total business rate receipts of £18.6 billion are pro-rated according to retail and office rateable value shares (estimated at 26% and 23% respectively). To control for the effect of floorspace growth on business rate receipts, changes in business rates between 2004 and 2014 are calculated on a £ per square foot basis. Earnings are derived from ONS's *Monthly Wages and Salaries Survey*. RPI is from the ONS.
- 9 All the estimates are from the IPF's *The Size and Structure of the UK Property Market End-2014 Update*, which, in turn, drew on data from IPD, ONS, Property Funds Research, and Real Capital Analytics/Property Data, and analysis by Paul Mitchell Real Estate Consultancy Ltd; further details are available in the IPF report.
- 10 Insurance company and pension funds' direct property are as estimated in 9 above; indirect and listed property exposures are Paul Mitchell Real Estate Consultancy Ltd estimates, drawing primarily on the research undertaken for the IPF's *The Size and Structure of the UK Property Market: A Decade of Change*. Total insurance company and pension fund assets (long term) are derived from the ONS's MQ5: *Investment by Insurance Companies, Pension Funds and Trusts* latest estimates for 2013, updated and estimated to 2014 by Paul Mitchell Real Estate Consultancy Ltd.

- 11 Debt secured on commercial property is from De Montfort University's (DMU) *The UK Commercial Property Lending Market 2014 Year End* report. Estimate of £150bn debt secured on commercial investment property derived from DMU report but adjusted by Paul Mitchell Real Estate Consultancy Ltd to exclude both private residential and social housing and other non-commercial property types; includes the DMU's estimate of CMBS.
- 12 Investment Property Databank Ltd © 2015 and FTSE. Commercial property returns exclude "Residential Specialist Funds".
- 13 Paul Mitchell Real Estate Consultancy Ltd estimates mainly based on ONS's data on employment and Gross Value Added (GVA). General approach is to apportion employment and GVA in property as a whole between commercial and non-commercial.

The two main industry sectors are Construction (SIC(2007) Section F) and Real Estate Activities (SIC(2007) Section L but excluding the imputed rental value of owner-occupied housing) for which GVA is available from ONS's quarterly national accounts series. For construction, the ONS's *Output in the Construction Industry Tables 4 & 5* indicate that around 25% of construction output is related to commercial property sectors, so this factor is implied to Construction GVA to derive the amount relating to commercial property.

For the Real Estate Activities sector, the indicators used vary according to the specific sector (for example, commercial property's share of total property transactions is applied to SIC68.31 "Real Estate Agencies"); overall, 47% of the Real Estate Activities sector (excluding the imputed rent of owner-occupied housing) is estimated to be commercial real estate.

Part of SIC(2007) Section K (Finance and Insurance Activities is incorporated – for commercial property, this covers property banking, fund management, REITs, stock broking, insurance companies and pension funds). For these areas, estimates of employment relating to commercial property are mainly derived from a survey of company accounts and from fund manager websites (grossing these up to the industry as a whole through the relationship between employment and funds under management), while GVA for REITs, fund managers, etc., is also based on company information relating to employment costs and profits, defined to be consistent with the national accounts measures of GVA SIC(2007) Section M (Professional, Scientific and Technical Activities, mainly relating to legal services, architecture, and quantity surveying), and SIC(2007) Section N (Administrative and Support Service Activities, mainly relating to facilities management). In these sectors, commercial property's share and size tends to be small.

Alternative measure of value-added based on rental value, based on research for the British Property Federation by Toscafund, updated to 2014 using the same methodology by Paul Mitchell Real Estate Consultancy Ltd.

- 14 As above.

- 15 Draws on the approach outlined in the IPF's *The Role of Commercial Property in the UK Economy*. Based specifically on *HMRC Tax Statistics* and relating to the commercial property industry as defined in section 13. Total taxes derived from June 2015 *HM Revenue and Customs receipts*. PAYE, NIC and VAT for commercial property estimated from the corresponding HMRC estimates by broad industry, pro-rated according to commercial property's share of these industries. VAT for commercial property and all-economy relates to "Home" VAT only (i.e. excluding VAT on imports). SDLT estimated by pro-rating HMRC estimates for non-residential, according to Paul Mitchell Real Estate Consultancy's 2014 estimate of commercial property's share of non-residential property transactions. Comparison of commercial's and residential's tax burdens based on the Toscafund report *Britain's Valuable Property Credentials*.
- 16 Paul Mitchell Real Estate Consultancy Ltd estimates derived from estimates of 10-year average floor space completions, generously supplied by Property Market Analysis, and, also, Department of Communities and Local Government data and from 2014 investment values of completed development.
- 17 Paul Mitchell Real Estate Consultancy Ltd estimates derived from the Department of Energy & Climate Change's statistics on energy consumption by final user 2014 and earlier data published by BRE. For information on EPCs, see *UK National Energy Efficiency Action Plan*, Department of Energy & Climate Change, 2014 and *Mapping the Impacts of Minimum Energy Efficiency Standards for Commercial Real Estate*, The Green Construction Board, 2014.
- 18 Paul Mitchell Real Estate Consultancy Ltd estimates derived from the Department of Energy & Climate Change's provisional estimates for 2014 of emissions of carbon dioxide and 2014 end-user estimates presented in the Committee on Climate Change's *Meeting Carbon Budgets – 2015 Progress Report to Parliament*.

# Acknowledgements

Data compiled and estimated by Paul Mitchell Real Estate Consultancy Ltd. The estimates of the total stock of commercial property and the amount in investment portfolios draws heavily on *The Size and Structure of the UK Property Market End-2014 Update*, which was undertaken as part of the IPF's Research Programme 2011-2015. Supporting property market data generously supplied by Investment Property Databank, Property Funds Research, Property Market Analysis and Real Capital Analytics/Property Data, none of whom bear any responsibility for the estimates in this document. Office for National Statistics data is used directly or adopted under the Open Government Licence v.2.0.

