

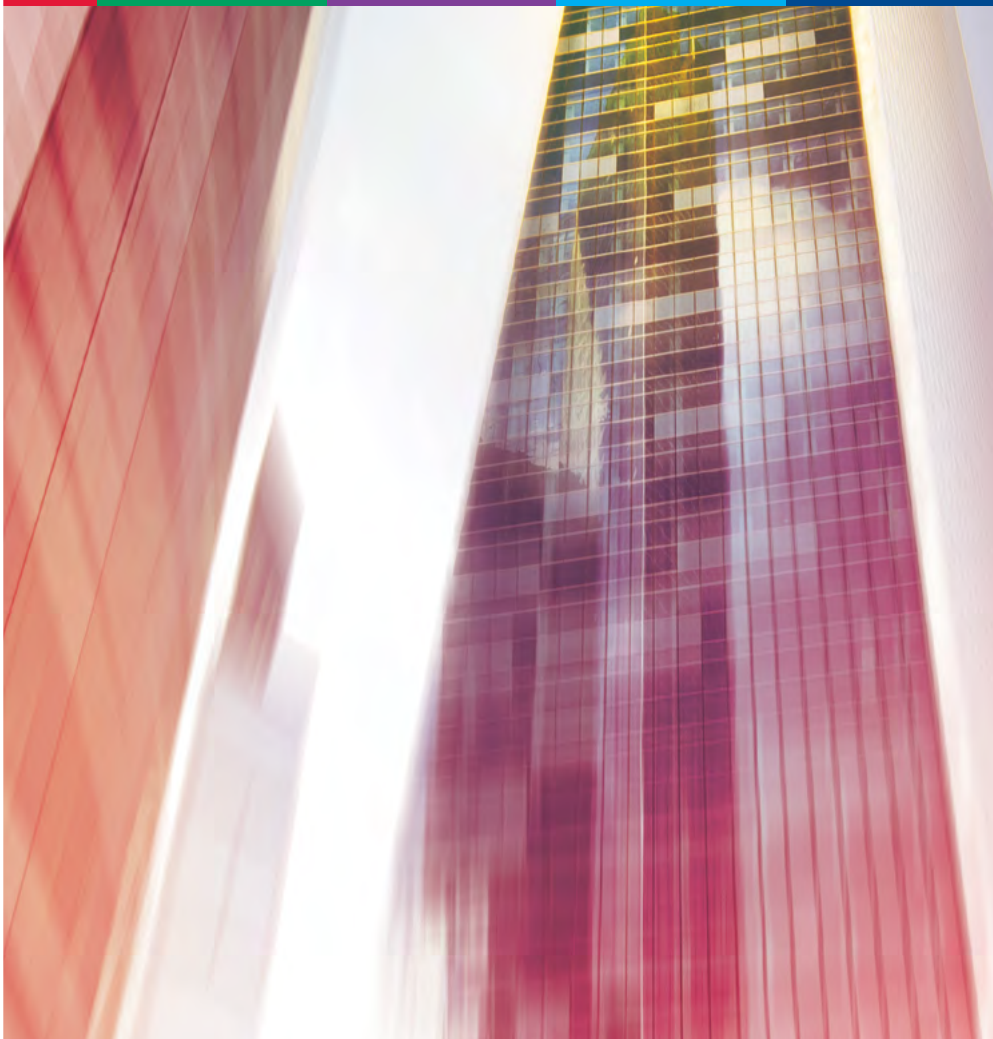


Research



# Research Newsletter

AUTUMN 2017



A summary of research commissioned by the IPF and other property industry bodies

The IPF Research Programme supports the IPF's wider goals of enhancing the understanding and efficiency of property as an investment. The initiative provides the UK property investment market with the ability to deliver substantial, objective and high-quality analysis on a structured basis. It encourages the whole industry to engage with other financial markets, the wider business community and government on a range of complementary issues.

The 2015-2018 Programme is funded by a cross-section of businesses, representing key market participants. The IPF gratefully acknowledges the support of these contributing organisations:



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The IPF Research Programme is the largest property investment-focused research programme in the UK. The Programme is fundamental to the pursuit of the IPF objectives of improving the efficiency of the property investment markets and raising awareness and understanding of property as an asset class. It is one of the most important IPF activities, along with the education and CPD programmes. As one of the benefits of membership, IPF members can download the full findings of all IPF-funded research free of charge from our website. Non-members can download At a Glance, summary reports and short papers free of charge.

This newsletter provides an up-date of the outputs of the IPF Research Programme since publication of the previous bulletin, together with advance notification of new projects in the pipeline.

In order to provide readers with as wide a view of relevant research activity within the industry, the newsletter also summarises recently completed and current projects being undertaken by other members of the Property Industry Alliance (PIA), which comprises: Association of Real Estate Funds (AREF), British Council for Offices (BCO), British Property Federation (BPF), Commercial Real Estate Finance Council Europe (CREFCE), Investment Association (IA), Revo (formerly British Council of Shopping Centres), Royal Institution of Chartered Surveyors (RICS) and Urban Land Institute (ULI). Details of research undertaken by EPRA, the European Public Real Estate Association, and INREV, the European Association for Investors in Non-Listed Real Estate Vehicles, are also included in this newsletter.

## Dissemination

The IPF is very keen that the outputs of Research Programme are disseminated to as wide an audience as possible. Research reports are disseminated as:

- Summary reports, annual surveys and short papers, available to download from our website free of charge to members and non-members alike.
- Full research reports, available to download from our website by Research Programme Sponsors and members only for the first three months following publication and thereafter free of charge to all.

Full research findings are made available to university libraries. Non-members seeking access to any reports during the exclusive access period should contact Pam Craddock, IPF Research Director, at [pcraddock@ipf.org.uk](mailto:pcraddock@ipf.org.uk) in the first instance.

The IPF Research Programme has developed as an important provider of high quality independent research, focused specifically on property investment. We can only continue to fulfil this role due to the support of our sponsoring organisations. We are very grateful to this group for their support of the Programme.

## Recently Published IPF Research

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### Major Research Projects

#### **An Investigation of Hurdle Rates in the Real Estate Investment Process (May 2017)**

This joint research by the Universities of Cambridge and Aberdeen investigated the extent to which and how hurdle rates are used in investment decisions. The study identified a range of approaches, reflecting diversity of investor type, asset and market focus, investment horizon and objectives. Findings also included that IRRs are the dominant decision metric and investment decision-making processes vary greatly in complexity and are typically adjusted to a specific project or investment, although some investors take an overall hurdle rate approach for all investments.

The full report and At a Glance summary are available to download from the IPF website.

<http://www.ipf.org.uk/resourcelibrary.html>

#### **Changing Sources of Real Estate Debt Capital Flows: Facts & Implications (May 2017)**

The research examined the emergence of new non-bank lenders post the GFC and the impact of regulatory changes on different lender types over recent years, as well as the broader market implications for the UK and beyond. The report looked at what drives loan pricing, in particular the effect of regulation on different sources of finance, identifying the benefits brought by diversification, and considered the implications of these changes for borrowers and lenders.

Full and Summary reports are available to download from the IPF website.

<http://www.ipf.org.uk/resourcelibrary.html>

#### **Solvency II Update (March 2017)**

Funded jointly with INREV, AREF, BPF, BVI and ZIA, this latest report adds six years of European investment market records, updates the capital risk analysis to December 2015, and includes data from five additional countries. As a result, the report offers a more comprehensive and robust basis for concluding that an evidence-driven pan-European property shock factor need be no more than 15%, confirming the findings of the 2011 study. In addition, new analysis undertaken for this update indicates that such a shock factor might be further reduced to 12% for broadly balanced European composites that exclude the U.K.

The study confirms the original finding that the current SCR of 25% stipulated under the Solvency II Directive for investment in European real estate, including through funds, exceeds the most extreme 12-month downside values at risk documented for geographically diverse real estate investments across Europe.

<http://www.ipf.org.uk/resourcelibrary/msci-solvency-ii-update-march-2017-report.html>

## Recently Published IPF Research

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### Short Papers

#### Real Estate Crowdfunding: Gimmick or Game Changer? (November 2016)

An investigation into the origins and scale of the real estate crowdfunding industry, this study compares growth in the UK to that in the US and China and the drivers behind the expansion of this new source of capital. Its potential to disrupt the established market for debt and equity provision is also explored.

The Short Paper and At a Glance summary are available to download from the IPF website.

<http://www.ipf.org.uk/resourcelibrary.html>

### Regular Reports and Surveys

#### Size and Structure of the UK Commercial Property Market: End-2016 Update (July 2017)

This research records the total value of invested and owner-occupied commercial property in the UK at the end of 2015. In addition to the published update, an excel file of tables and charts provides summary data in a readily accessible format.

This report and At a Glance summary are available to download from the Resource Library of the IPF website.

<http://www.ipf.org.uk/resourcelibrary.html>

## Regular Publications

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Regular Reports & Surveys are also available to download from the IPF website.

### UK Consensus Forecast

Published on a quarterly basis, the IPF UK Consensus Forecast provides a consensus view of the likely performance of the UK commercial property markets annually over the next five years. The 25 plus regular contributors to the consensus are drawn from the fund management, agency, research and equity broker communities. The latest version is posted on the IPF website with an At a Glance summary report together with full historic reports and summaries are available free of charge to both members and non-members. The most recent survey results were published in September 2017.

<http://www.ipf.org.uk/resourceLibrary/investment-property-forum-uk-consensus-forecast--summer-2017--report.html>

<http://www.ipf.org.uk/resourceLibrary/investment-property-forum-uk-consensus-forecasts--summer-2017--at-a-glance.html>

### European Consensus Forecast of Prime Office Rents

Published on a six-monthly basis, the European Consensus survey of prime office rents in 28 European cities gathers views from over 15 independent property consultants and fund managers for each of the next five years. The results of this survey are published in May and November of each year.

<http://www.ipf.org.uk/resourceLibrary/ipf-european-consensus-forecasts-report-may-2017.html>

## IPF Work in Progress

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### Major Reports

#### Costing Energy Efficiency Improvements in Existing Commercial Buildings

Since the last edition of this research was published in 2012, improving the energy performance of existing buildings within the commercial property sector has become even more critical. The imposition of tougher energy efficiency standards and carbon reduction targets (including the MEES Regulations, effective from April 2018, and the Paris Agreement, to which the UK is a ratified signatory) will have a significant impact on the real estate industry. To maintain consistency and clarity, the same case studies have been used as in previous reports and analysed in accordance with current building regulations; for each, the project assessed the value of a broad range of energy efficiency measures to upgrade the energy performance of base line buildings, including new strategies that reflect current market standards. To supplement these core tasks, the research has been extended to wider commercial considerations, system specific recommendations, predicted actual energy savings and planning for the future.

Scheduled for publication Q4 2017

#### An Investigation of the Management of Currency Risk in Real Estate Investment

Exchange rate fluctuations substantially alter the expected risk and return characteristics of international real estate investment. The University of Cambridge has been commissioned to examine contemporary industry practice in managing currency risk for foreign real estate investment. By reviewing different currency risk management approaches and analysing their advantages and disadvantages for different types of investor, different objectives and different markets, the study aims to provide the industry with a better understanding of these issues and how different approaches could minimise overall risk, as well as where responsibilities should lie in evaluating and executing these strategies. The investigation will extend beyond the UK, to consider current practice in a number of locations, including China/Hong Kong, Australia, US, Germany and the Netherlands.

Scheduled for publication Q1 2018

#### Residual Land Values: Measuring Performance and Investigating Viability

This study, by the University of Reading will investigate and propose a framework for the regular estimation of residual land values for different areas based on a consistent approach. The research will estimate residual land values for different hypothetical scheme types in all UK regions and for selected major cities and will examine the time-series characteristics of these measures, comparing trends in residual values, as well as analyse the key drivers of changes in development viability over time.

Scheduled for publication Q1 2018

## IPF Work in Progress

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### Real Estate in UK DC Pension Fund Investment

A follow up to the 2013 research, this investigation will determine the extent of defined contribution (DC) pension investment in real estate (listed/unlisted). Using the existing resources of the appointed researcher, Spence Johnson, (including proprietary DC Market Intelligence research), the study will establish the current state of DC investment in real estate, and the principal constraints that pension providers face (including daily pricing and liquidity requirements, as well as the key issue of fees) and will forecast future growth in direct real estate investment in UK DC.

Scheduled for publication Q1 2018

### Regular Reports

#### UK Residential Attitudes and Investment Survey 2017

This annual survey monitors the level of current exposure, investment intentions and barriers to investment in UK residential property by over 50 institutional and large scale investors.

Scheduled for publication Q4 2017

The 2016 survey report may be downloaded from the IPF website:

<http://www.ipf.org.uk/resourceLibrary/uk-residential-property--institutional-attitudes-and-investment-survey-2016--october-2016-.html>

### Pipeline

#### The Size & Structure of the UK Property Market End-2017

A comprehensive review of methodologies and identification of data sources to be employed will form part of the 2018 research.

### Other

Other themes under consideration include a number of proposals related to residential investment, the impact of leverage on specialist fund performance, a comparison between the investment characteristics of infrastructure and real estate and the role of benchmarks in real estate investment management.



## Research Proposals

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We are pleased to consider unsolicited research proposals from academics and practitioners alike and, in terms of themes, specific areas of interest for the 2015-2018 Programme comprise:

- asset allocation;
- portfolio selection; and
- asset management.

Additionally, we seek to support a number of key industry issues identified by the IPF membership. Research proposals will be welcomed that seek to enhance the understanding of:

- how property is financed and funded;
- the impact of legislation and regulation;
- sustainability;
- internationalisation of real estate; and
- alternative property investment.

Proposals that clearly specify how the findings of such research are to be disseminated and, where applicable, how researchers will engage with industry practitioners to encourage the adoption of new approaches may be given greater consideration than those that do not include such information.

Guidance notes and an application form maybe downloaded from the IPF website. If you would like to discuss a potential research proposal prior to submission, please contact Pam Craddock, IPF Research Director, at [pcraddock@ipf.org.uk](mailto:pcraddock@ipf.org.uk).

If you are in a position to provide data, contacts or any other type of support for new research projects, likewise, please contact Pam Craddock.

## IPF Back Catalogue

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The following projects have been funded and published through the IPF Research Programme 2015-2018. Full reports are available for download from the Resource Library of the IPF website for IPF members only in the first three months following publication, unless otherwise indicated.

- An Investigation of Hurdle Rates in the Real Estate Investment Process (May 2017)
- Changing Sources of Real Estate Debt Capital Flows: Facts & Implications (May 2017)
- Solvency II Update (March 2017)\*
- Real Estate Crowdfunding: Gimmick or Game Changer? (November 2016)

Projects funded and published through the IPF Research Programme 2011-2015:

- Unravelling Liquidity in International Commercial Real Estate Markets (March 2016)
- Individual Property Risk (July 2015)
- Liquidity Pricing of Illiquid Assets (February 2015)
- Estimating Liquidity in Real Estate Markets - Literature Review (February 2015)
- Prospects for Institutional Investment in Social Housing (February 2015)
- Time to Transact: Measurement and Drivers (September 2014)
- The Size and Structure of the UK Property Market 2013: A Decade of Change (March 2014)
- Returning to the Core: Rediscovering a Role for Real Estate in Defined Contribution Pension Schemes (October 2013)\*\*
- Modelling Causes of Rental Depreciation for UK Office and Industrial Properties (June 2013)
- The Role of Commercial Property in the UK Economy (March 2013)
- The Future of Property Forecasting (November 2012)
- Reassessing the Accuracy of UK Commercial Property Forecasts (November 2012)
- Costing Energy Efficiency Improvements in Existing Commercial Buildings (October 2012)

Projects funded and published through the IPF Research Programme 2006-2009:

- Real Estate's Role in the Mixed Asset Portfolio: A Re-examination:
  - Real Estate Returns and Financial Assets in Extreme Markets (May 2012)
  - Time Varying Influences on Real Estate Returns (April 2012)
  - Private Commercial Real Estate Returns and the Valuation Process (April 2012)
  - Real Estate Returns and Other Asset Classes: A Review of Literature (April 2012)
  - A Re-examination Summary Report (March 2012)
- Depreciation of Commercial Investment Property in the UK (November 2011)
- Property and Inflation (April 2011)
- Risk Web 2.0 An Investigation into the Causes of Portfolio Risk (March 2011)
- UK Institutional Investors: Property Allocations, Influences and Strategies (July 2010)
- Depreciation of Office Investment Property in Europe (March 2010)

\*Funded jointly with AREF, BPF, BVI, INREV and ZIA.

\*\* Funded jointly with AREF, EPRA and the IFoA.

## IPF Back Catalogue

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- ISPI (UK): Creating a Sustainable Property Investment Index (October 2009)
- The Treatment of Covenant Strength by the UK Property Industry (August 2009)
- Urban Regeneration: Opportunities for Property Investment (August 2009)
- Greening Leases – The Landlord and Tenant Relationship as a Driver for Sustainability (August 2009)
- Demand for Sustainable Office Buildings in the UK (May 2009)
- Real Estate Investment Trusts: The US Experience and Lessons for the UK (May 2009)
- Costing Energy Efficiency Improvements in Existing Commercial Buildings (January 2009)
- Implication for the Strategic Development of UK REITs from the Experience of LPTs in Australia (April 2008)
- Retail Investor Attitudes to Commercial Property Investment (May 2008)
- Alpha and Persistence in UK Property Fund Management (April 2008)
- Risk Management in UK Property Portfolios: A Survey of Current Practice (December 2007)
- Large-scale Investor Opportunities in Residential Property: An Overview (November 2007)
- The Energy Performance of Buildings Directive and Commercial Property Investment: A Situation Review (September 2007)
- The Use of Periodic Valuations in Indirect Property Investment (June 2007)

Short Paper Series – all reports are available to download free of charge from the IPF website:

- Real Estate Crowdfunding: Gimmick or Game Changer? (November 2016)
- Defining Investment Quality (January 2016)
- Emerging International Real Estate Markets (December 2015)
- UK Development Finance Review 2015 (September 2015)
- Pricing Retail Space (June 2015)
- Implications of a UK Withdrawal from the EU: A Discussion Paper (April 2015)
- What is Fair Value? (April 2015)
- What Constitutes Property for Investment Purposes? A Review of Alternative Assets (February 2015)
- A Review of Interest Rate Hedging Strategies (January 2015)
- Residential Investment in International Markets (November 2014)
- Zombies and Beyond: A Further Update on UK Real Estate Debt (September 2014)
- Implications for Property Yields of Rising Bond Yields (June 2014)
- Constructing an Effective Rental Value Index (January 2013)
- A Decade of Fund Returns (July 2012)
- Implications of the Eurozone Crisis for the UK Real Estate Market and UK Investors (June 2012)
- Institutional Attitudes to Investment in UK Residential Property (June 2012)
- Property Banking Forum: Outlook for Development Finance (November 2011)
- The Outlook for UK CMBS (November 2011)
- Property Banking Forum: Lending Intentions Survey 2011 (March 2011)

## IPF Back Catalogue

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- A Review of the Current State of the UK CMBS Market (February 2011)
- Rent Reviews – Revolution or Evolution? (November 2010)
- Break Clauses – Who Holds the Risk in your Rental Income? (November 2010)
- Prepack Administrations and Company Voluntary Arrangements (February 2011)
- Real Estate Debt - an update (January 2010)
- The Evolution of the Market for Indirect Investments in Commercial Property (Feb. 2010)
- The Robustness of Property Income (November 2009)
- Repricing Property Risk (November 2009)
- Issues in Property Investment Valuation (October 2009)
- The IPF UK Consensus Forecast and the Returns Implied by Property Derivative Pricing: Evolution, Record & Influence (August 2009)
- UK Real Estate Debt: Problem for the Borrowers and the Banks (July 2009)

In addition to the projects listed, the following research projects were funded through the IPF and IPF Educational Trust Joint Research Programme, some with additional partnership funding:

- Planning Policy and Retail Property Market Performance in English Towns and Cities (October 2008)
- Asset Allocation in the Modern World (July 2007)
- Index Smoothing and the Volatility of UK Commercial Property (March 2007)
- Risk Reduction and Diversification in Property Portfolios (February 2007)
- Property Stock Selection: Organisation, Incentives and Information (November 2006)
- The Sustainable Property Appraisal Project\* (November 2006)
- Pricing Property Derivatives: An Initial Review (September 2006)
- The Investment Performance of Listed Office Buildings\*\* (May 2006)
- Institutional Investment in Regeneration: Necessary Conditions for Effective Funding† (May 2006)
- Disagreement and Uncertainty in UK Property Market Forecasts (January 2006)
- Depreciation in Commercial Property Markets (July 2005)
- Investment Performance and Lease Structure Change in the UK (July 2005)
- The Size and Structure of the UK Property Market (July 2005)
- Opening the Door to Property: Assessing the Needs of Small Investors in Property (September 2004)
- Liquidity in Commercial Property Markets (April 2004)

PDF copies of all these reports are available to download free of charge from the IPF website:

<http://www.ipf.org.uk/resourcelibrary.html>

If you have any questions about the IPF Research Programme or regarding any of the reports listed above, please contact Pam Craddock ([pcraddock@ipf.org.uk](mailto:pcraddock@ipf.org.uk)).

\* With funding from the DTI through the Partners in Innovation scheme, PruPIM, IPF ET and Boots Properties Plc.

\*\* English Heritage, IPF ET and Royal Institution of Chartered Surveyors

## Recent BCO Research

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### Brexit: Skills Workshop (February 2017)

Topic: Construction

Research by: BCO/alinea Consulting

Partners: REVO/RICS/alinea Consulting

Workshop held 7 February, in association with RICS and Revo, to examine the impact of Brexit and restriction on migrant labour on the construction sector, particularly in light of existing skill shortages.

### The Future of Corporate Headquarters: Is London's Dominance Waning? (March 2017)

Topic: Market

Research by: Cushman & Wakefield

Partners: Burges Salmon/Cushman & Wakefield

The report looks at the evolution of office headquarters and some of the driving factors that will impact on the role of HQ buildings, its functions and future design. Among factors considered are changes in technology, flexible working and co-working, and health & wellbeing. The report also considers the push factors that could see companies relocating their HQs to locations outside of London including congestion and connectivity challenges, rising occupational costs, rising staff costs, devolution and Brexit.

### Office and Corporate Culture (May 2017)

Topic: Workplace Design

Research by: KKS Strategy

Partners: KKS Strategy

The objective of this study is to combine expertise from academia and up-to-the minute best practice in workplace design to examine how a physical move can change or establish corporate culture.

### The evolution of office receptions and hospitality services and what it means for the office Industry (May 2017)

Topic: Technical

Research by: Hawkins Brown

Partners: Hawkins Brown

The report looks at the evolution of reception design; how modern office occupiers use the reception of their buildings and how this differs between different sectors; how should emerging trends be incorporated into speculative office vs pre-let; how flexible working practices impact on design; the practicalities of welcoming cyclists; challenges for the industry in terms of security, access and service charge.

### Virtual Realty & 3-D Printing: Reducing Waste through New Technologies (June 2017)

Topic: Technical

Research by: Arup

Partners: Arup

Office construction has a reputation for material wastage with associated financial and environmental consequences. The emergence of new technologies such as virtual reality and 3-D printing has the potential to address this.

## Recent BCO Research

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### **Brexit: Impact on space demand (July 2017)**

Topic: Market

Research by: Ramidus Consulting

Partners: Ramidus

A briefing document for BCO members, setting out how the Brexit vote may impact on space demand in the office sector in the medium term. The report's aim is to leave the reader with a clear understanding of shape and structure of the UK office market and how Brexit-specific risks may influence this over the five years to 2022.

### **The rise of cycling to work and the implications for office specification and investment (July 2017)**

Topic: Development/ Investment

Research by: Remit Consulting

Partners: Remit Consulting

The objective of the new study is examine the implication cycling has had and will have on the office to cover occupier demand, specification and value. Some of the issues that will be considered include: occupier demand for cycling provision (how has it changed and what the future holds); implications for marketing of office buildings and the health & wellness agenda; Regional/city differentials; guidance on cycling provision and implication for space provision and design.

### **Permitted Development Rights (PDR): One year after permanence (September 2017)**

Topic: Market

Research by: CBRE

Partners: CBRE

This is an update of the 2015 report aiming to refine previous methodology. There has been sufficient change since our last report to justify an update.

### **Mitigating Office Obsolescence (September 2017)**

Topic: Investment

Research by: Built Environment Dept, Northumbria University

Partners: Northumbria University

A practical report to avoiding obsolescence and reducing its impact on investment performance. What are the strategies investors can adopt to achieve this.

## BCO Research in Progress

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### Enabling Digital Workspace

Topic: Workspace

Research by: Arcadis

Partners: Arcadis

The report is to focus on digital workspace technologies, their impact and potential benefits, implications for building specification, refurbishment and fit-out.

Publication and launch date January 2018.

### Office Service Standards & Customer Experience

Topic: Occupier

Research by: Real Service

Partners: Real Service

The aim of the study is to build on the findings of BCO research report Building Performance – Rethinking the relationship between owners, managers and occupiers, which was undertaken in 2015. The research will seek to provide a best practice Guide to services and management standards in multi-occupied office buildings. It will also aim to establish a Building Scorecard, and therefore a benchmark, which will measure how well an office building is performing, viewed from the perspective of the owner, property manager and occupier.

Publication and launch due October 2017.

### Whole life performance plus

Topic: Sustainability

Research by: LCMB/Innovate UK

Partners: LCMB, Oxford Brookes University, Deloitte & Constructing Excellence

Project WLP+ will develop a software model and commercial service for optimising internal building conditions to improve occupant productivity by at least 10% in commercial office buildings.

Interim results due in November 2017; completion October 2018.

### Defining & Measuring Productivity

Topic: Occupier

Research by: Currie & Brown

Partners: Currie & Brown

The objective of the study is to provide a credible definition of productivity that can be flexible enough to apply across a wide industry/business spectrum; to develop a practical toolkit that enables users to measure productivity and interpret findings; to provide guidance on design that designers and developers can adopt and work practices that occupiers can apply.

Publication and launch due November 2017

## BCO Research in Progress

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### Occupier Density Study

Topic: Occupier

Research by: Ramidus Consulting

Partners: Ramidus Consulting

The aim is to capture the on-going changes to workstyles and the impact that these will have on the density and utilisation of space both at design and fit out stages.

Publication and launch due February 2018

### Future Transport: Implications for Office Demand and Design

Topic: Investor/ Technical

Research by: tbc

Partners: tbc

The aim of the study is to identify changing transport methods for delivering workers, visitors and goods to office buildings and articulate the impact such future innovation may have on both the nature of office demand and the design of offices

Publication and launch due March 2018

### Wellness Matters: Health & wellbeing in offices and what to do about it

Topic: Technical

Research by: Consortium

Partners: Consortium of Will+Perkins, Elementa Consulting, Sentinel RPI, Imperial College, Queen Mary University

A year-long study into health & wellbeing. The study will examine the medical evidence; critique certification various standards; deliver a practical guide to achieving a healthy environment across the different stages of a building's life cycle, from design, construction and leasing to occupation and asset management.

Publication and launch in May 2018

### Office Space Rationalisation

Topic: Occupier

Research by: Currie & Brown

A multi-year project to monitor and evaluate the GP's transformational programme.

A four year project, completing in 2020.

All research can be downloaded via the BCO website:

<http://www.bco.org.uk/Research/Publications/Research-Publications.aspx>.



## Recent BPF Research

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### Annual Planning Survey 2016 (October 2016)

The 2016 Annual Planning Survey was developed by the BPF and GL Hearn, and reviews key statistics on major planning applications in the UK during 2015-16, and compares the results with previous years.

<http://www.bpf.org.uk/sites/default/files/resources/BPF-GL-Hearn-Annual-Planning-Survey-2016-final.pdf>

### Unlocking Growth Through Partnership (January 2017)

This joint report from the BPF and the Local Government Association updates a 2012 publication on the theme of public/private sector collaboration, and sets out best practice for how local authorities, the real estate sector, and central Government can come together to deliver growth and successful developments.

<http://www.bpf.org.uk/sites/default/files/resources/BPF-LGA-unlocking-growth-through-partnership.PDF>

### Unlocking the Benefits and Potential of Build to Rent (February 2017)

This research, commissioned by the BPF from Savills, academically reviewed by LSE, and sponsored by Barclays, provides the most comprehensive analysis to date of the build to rent sector's progress and projected growth.

<http://www.bpf.org.uk/sites/default/files/resources/BPF-unlocking-benefits-potential-build-to-rent-Feb17-FINAL-web.pdf>

### Heritage Works: A Toolkit for Best Practice in Heritage Regeneration (May 2017)

This updated second edition of our toolkit for heritage regeneration has been produced in partnership with Historic England and RICS.

<http://www.bpf.org.uk/sites/default/files/resources/Heritage-Works-14July2017-for-web.pdf>

## Recent INREV Research

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### Secondary Trading and Liquidity Study (December 2016)

New INREV research underlines the benefits of secondary trading in non-listed real estate funds. Benefits include easier portfolio rebalancing, shorter queues when buying or selling shares in open end funds and the potential to trade at a discount to NAV.

<https://www.inrev.org/library/publications/4748-secondary-trading-and-liquidity-study-2016>

### Investment Intentions Survey (January 2017)

The Investment Intentions survey explores global real estate allocations, providing insight into investment trends across Europe, Asia Pacific and North America. Since 2012 the survey has been global in scope, thanks to inputs from ANREV and PREA.

<https://www.inrev.org/library/publications/210-investment-intentions>

### The Impact of Currency Risk on European Non-Listed Real Estate Funds (January 2017)

The research explores currency risk and whether it has a significant impact on non-listed European real estate fund performance. Different hedging strategies are tested on a variety of portfolios to assess efficiency in risk/return terms.

<https://www.inrev.org/library/publications/4855-the-impact-of-currency-on-the-performance-of-european-non-listed-real-estate-funds>

### Cost Transparency in European Listed and Non-Listed Real Estate (February 2017)

AREF and INREV commissioned a paper on the important topic of cost transparency, with the aim of moving towards a better industry-wide understanding of the composition and calculation of selected fee and expense metrics. The paper was written by independent consultant John Forbes.

<https://www.inrev.org/library/publications/4743-cost-transparency-in-european-listed-and-non-listed-real-estate>

### Capital Raising Survey (March 2017)

Since 2015, the survey has been conducted in conjunction with ANREV and NCREIF. It examines the total equity raised for the non-listed real estate industry across Asia Pacific, Europe and North America. The survey looks at different strategies for raising capital and fund managers' expectations of how capital raising activities will develop over the next few years.

<https://www.inrev.org/library/publications/209-capital-raising>

## Recent INREV Research

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### Fund Manager Survey (May 2017)

The Fund Manager Survey looks at total real estate assets under management (AUM) of fund managers active in the non-listed real estate fund industry globally. Since 2015 the survey has been conducted in conjunction with ANREV and NCREIF. For the first time the survey was launched at a dedicated event, held in Amsterdam.

<https://www.inrev.org/library/publications/208-inrev-anrev-fund-manager-survey>

### Impact of A Hard Brexit (June 2017)

This note examines the impact of a hard Brexit on non-listed indirect real estate investment, from both a manager's and an investor's perspective.

<https://www.inrev.org/library/publications/5264-the-impact-of-a-hard-brexit-on-non-listed-indirect-real-estate-investment>

### DC Investment Strategies and the Role of Non-Listed Real Estate (July 2017)

This study examines the fast growing market for DC pensions. The case for non-listed real estate in DC is clear, though obstacles exist. Product innovations in Europe, the US and Australia are examined.

<https://www.inrev.org/library/publications/5334-defined-contribution-investment-strategies-and-the-role-of-non-listed-real-estate>

### Fund Terminations Study (August 2017)

This study examines the options that fund managers consider as the termination date of their closed end funds approach. This study has been conducted annually since 2007.

<https://www.inrev.org/library/publications/228-fund-terminations-study>

## Recent INREV Research

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### Published Indices

#### INREV Quarterly Index – Q4 2016 (February 2017)

The INREV Quarterly Index measures net asset value (NAV) based quarterly performance for non-listed real estate funds investing 90% or more in Europe.

<https://www.inrev.org/market-information#inrev-index>

#### Global Real Estate Fund Index (GREFI) – Q4 2016 (March 2017)

The Global Real Estate Fund Index (GREFI) is jointly produced by INREV, ANREV and NCREIF and measures the performance of non-listed real estate vehicles on a global scale.

<https://www.inrev.org/library/publications/4316-global-real-estate-fund-index-grefi>

#### INREV Annual Index – 2016 (April 2017)

The INREV Annual Index is a performance index for the European non-listed real estate funds investing 90% of GAV or more in Europe.

<https://www.inrev.org/library/publications/193-inrev-annual-index>

#### INREV Quarterly Index – Q1 2017 (May 2017)

The INREV Quarterly Index measures net asset value (NAV) based quarterly performance for non-listed real estate funds investing 90% or more in Europe.

<https://www.inrev.org/market-information#inrev-index>

#### German Vehicles Index, Annual and Quarterly (May 2017)

INREV launched a new German Vehicles Index covering the performance of non-listed German real estate vehicles. This is the first time that INREV has produced an Index that is based on a single criterion – the vehicles must be domiciled in Germany. The German Vehicles Quarterly Index is published 10 weeks after quarter end and the German Vehicles Annual Index is published in May each year.

<https://www.inrev.org/library/publications/4252-german-vehicles-annual-index>

#### Global Investor Index - 2016 (June 2017)

The Global Investor Real Estate Performance Index allows investors across the world to track and benchmark their performance with their peers. The index covers activity in all major real estate sectors, regions and four main routes to real estate investment – listed, non-listed, direct and commercial real estate debt.

<https://www.inrev.org/library/publications/4247-global-investor-real-estate-performance-index>

#### INREV Quarterly Index – Q2 2017 (August 2017)

The INREV Quarterly Index measures net asset value (NAV) based quarterly performance for non-listed real estate funds investing 90% or more in Europe.

<https://www.inrev.org/market-information#inrev-index>

#### German Vehicles Index – Q2 2017 (September 2017)

This Index, launched in 2016, is based on a single criterion – the vehicles must be domiciled in Germany.

<https://www.inrev.org/library/publications/4253-german-vehicles-quarterly-index>

## **Forthcoming INREV Research Publications**

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### **Understanding Illiquidity Premiums Better**

The research examines the topic of illiquidity premiums (that is, the extra return that investors demand when an asset such as a building or shares in a non-listed real estate fund cannot be easily converted into cash at fair value). The research has been outsourced to Professor Marc Francke of the University of Amsterdam. Due for publication October 2017

### **Investment Intentions Survey**

The Investment Intentions survey explores global real estate allocations, providing insight into investment trends across Europe, Asia Pacific and North America. Since 2012 the survey has been global in scope, thanks to inputs from ANREV and PREA. Due for publication January 2018

## Recent Revo Research

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### Outlook for Retail 2017 (March 2017)

In partnership with Retail Economics, Revo has published Outlook for Retail 2017 as part of its analytics research programme. In the context of political and economic uncertainty, this report provides insight and outlook for the key market indicators within the consumer and retailer environment.

To access the report: <https://www.retaileconomics.co.uk/outlook-for-the-UK-retail-industry-in-2017>

### Investing in the UK retail market: a Global Opportunity (January 2017)

This report explores the barriers to entry for international retailers, including F&B and leisure operators, investing in the UK. Revo seeks to understand the nature and breadth of these barriers – whether financial, regulatory, landlord related or other – to form a credible evidence base in understanding what is deterring international retailers from investing in the UK. The evidence is used to encourage industry and / or government to address these issues to secure more inward investment.

To access the report: <https://www.revocommunity.org/>

### Guidance notes

- A suite of guidance notes has been prepared by the Technical Affairs and Security and Safer Shopping Committees:
- The recruitment and training of security officers in retail property (November 2016)
- Managing security in retail car parks (November 2016)
- Minimum Energy Efficiency Standards (May 2017)
- Existing asset evaluation for change (August 2017)
- Soft landings in retail (August 2017)
- Structural design flexibility considerations (October 2017)

To access the guidance notes: <https://www.revocommunity.org/>

## Revo Research in Progress

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### The new role of the store in the omnichannel world

Revo, supported by a group of landlords, have commissioned a research project, which purpose is to understand how changing shopping behaviour is linked to increased integration between stores and online. It will review historical models to value physical retail and recommend ways how retailers and landlords could collaborate to drive change in leasing and valuation practices. We would like the findings to align landlords and retailers around understanding the new role of the store in the omnichannel world, indicate how true store performance and value could be accounted for, and the subsequent translation of this understanding into mutually agreeable leasing and valuation models.

### Retail Real Estate: Evolving the Experience

Building on the previous research, carried out in 2014 (Food and beverage: A solution for shopping centres?), which aim was to understand the role of F&B post-recession, we want to expand this research and look at the issue particularly from a leasing stance. Given the special relationship between F&B and leisure in creating that overall shopper experience, a key aim of this project is to widen the remit and explore leisure and its subsequent influence on lease structures.

### Upcoming guidance notes

The following guidance notes will be published in the coming months:

- Integration of market facilities within town centre developments
- Checklist for creating good public realm
- Considerations to shop front design in historic environments
- Waste management guidance

## Recent RICS Research

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### RICS Global Perspectives

#### Perspectives on Global Real Estate Investment

**Research partners: RICS Real Estate Investment Risk Forum**

This report offers the perspectives of global real estate investors on the theme of risk management. It is based on the insights of the RICS Real Estate Investment Risk Forum (IRF), a network of more than 40 senior investors from many of the world's largest real estate investment businesses.

**Available from:**

[http://www.rics.org/Global/irf\\_perspectives\\_global\\_real\\_estate\\_investment\\_insights\\_061017\\_rt.pdf](http://www.rics.org/Global/irf_perspectives_global_real_estate_investment_insights_061017_rt.pdf)

### RICS Insights

#### Artificial Intelligence: What it Means for the Built Environment

**Research authors: AllinFM**

Supported by IFMA

This paper examines the current thinking, state-of-the-art applications and predictions surrounding AI to uncover many examples of how it will transform the way we work and how we can exploit it to improve the quality of the built environment.

**Available from:** [http://www.rics.org/Global/RICS\\_Insight\\_AI\\_in\\_the\\_built\\_environment\\_2017.pdf](http://www.rics.org/Global/RICS_Insight_AI_in_the_built_environment_2017.pdf)

#### The Impact of Emerging Technologies on the Surveying Profession

**Research authors: Remit Consulting LLP**

This paper identifies the most recent and important advances in technology and shows how they are relevant to the surveying profession.

**Available from:** [http://www.rics.org/Global/impact\\_of\\_emerging\\_tech\\_insightpaper\\_040717\\_tr.pdf](http://www.rics.org/Global/impact_of_emerging_tech_insightpaper_040717_tr.pdf)

#### BIM for Project Managers

**Research authors: Anil Sawhney, Atul R Khanzode, Saurabh Tiwari**

Provides market insight into organisational strategic issues and the role and functions of project managers in BIM implementation.

**Available from:** <http://www.rics.org/Global/RICS%20BIM%20for%20Project%20Managers.pdf>

#### Value of Natural Capital - The Need for Chartered Surveyors

**Research author: Charles Cowap MBA MRICS FAAV**

This insight paper reviews the broad topic of environmental valuation from the perspective of a practising valuer, land manager or estate manager. This paper approaches the field of economic valuation of the environment from a professional valuation perspective.

**Available from:** [http://www.rics.org/Global/Value%20natural%20capital\\_insight%20paper\\_April2017.pdf](http://www.rics.org/Global/Value%20natural%20capital_insight%20paper_April2017.pdf)



## Recent RICS Research

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### Infrastructure Management: Current Practices and Future Trends

**Research authors: The Building People LLC**

Infrastructure Management: Current Practices and Future Trends is a call to action that delivers insights from industry leaders on the current environment, while offering guidance on how to influence and restore this central pillar of economic growth.

**Available from:** [http://www.rics.org/Global/infrastructure\\_management\\_insight\\_rics\\_191017\\_rt.pdf](http://www.rics.org/Global/infrastructure_management_insight_rics_191017_rt.pdf)

### RICS Research/Research Trust

#### Smart Cities, Big Data and the Built Environment: What's Required?

**Research authors: Professor Tim Dixon, Dr Jorn van de Wetering, Professor Martin Sexton, Dr Shu-Ling Lu, Dr Dan Williams, Dilek Ulatas Duman, Xueying Chen, University of Reading.**

The interconnected agendas of smart cities, big data and open data, on the face of it, provide bold and exciting opportunities for built environment professionals. With a focus at the city level, this research examines the development of data platforms in the UK and internationally, and determines how professionals in the built environment can benefit from these data platforms.

**Available from:** <http://www.rics.org/Global/RICS-Smart-Cities-Big-Data-REPORT-2017.pdf>

#### Raising the Bar: From Operation Excellence to Strategic Impact in FM

**Research authors: Occupier's Journal**

Research supported by IFMA

The third instalment in RICS' ground-breaking 'Raising the Bar' research series makes a powerful case for how, as an industry, FM makes significant contributions to business success and organisational effectiveness. This report reviews the current state of the FM industry and is published in collaboration with IFMA.

**Available from:** [http://www.rics.org/Documents/Raising\\_the\\_Bar\\_3\\_Full\\_Report\\_240317\\_IC.pdf](http://www.rics.org/Documents/Raising_the_Bar_3_Full_Report_240317_IC.pdf)

#### Flood Risk Mitigation and Commercial Property Advice: An International Comparison

**Research authors: Jessica Lamond, Namrata Bhattacharya, Faith Chan, Heidi Kreibich, Burrell Montz, David Proverbs, Sara Wilkinson.**

Provides a unique global perspective on the issues affecting the built environment professions and RICS professionals in providing professional advice on properties at risk of flooding.

**Available from:** [http://www.rics.org/Global/Flood\\_Risk\\_Commercial\\_Property\\_Research\\_March\\_17.pdf](http://www.rics.org/Global/Flood_Risk_Commercial_Property_Research_March_17.pdf)

## Recent RICS Research

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### RICS Economics

#### UK Residential Market Survey series (monthly).

The UK Residential Market Survey is used by the Government, the Bank of England and other key institutions, including the IMF, as an indicator of current and future conditions in UK residential sales and lettings. It is covered extensively in the media and is the leading source of market intelligence, highly regarded both by investors and across the industry.

**Latest survey available from:**

<https://www.rics.org/uk/knowledge/market-analysis/rics-residential-market-survey/>

#### UK Construction and Infrastructure Survey (quarterly)

The leading sentiment indicator of the UK construction and infrastructure markets.

**Latest survey available from:**

<https://www.rics.org/uk/knowledge/market-analysis/rics-uk-construction-market-survey/>

#### UK Commercial Market Survey (quarterly)

A leading indicator of developments in the UK commercial property occupier and investor markets.

**Latest survey available from:**

<https://www.rics.org/uk/knowledge/market-analysis/rics-uk-commercial-market-survey/>

#### Euro area - Economy and Property Market Update - June 2017

Part of RICS in-depth insights on specific markets, sectors and developments.

**Available from:**

<https://www.rics.org/Global/Euro%20area%20economy%20and%20property%20market%20update.pdf>

#### Upping the Ante on Skills - July 2017

Part of RICS in-depth insights on specific markets, sectors and developments.

**Available from:**

<https://www.rics.org/Global/22367-RICS-ECONOMIC%20SKILLS%20REPORT-6PP-A4-WEB.pdf>

#### Global Commercial Property Monitor (quarterly)

Our global commercial property monitors are leading indicators of conditions in commercial property occupier and investor markets around the world.

**Latest survey available from:**

<https://www.rics.org/uk/knowledge/market-analysis/rics-global-commercial-property-monitor/>

## Recent ULI Research

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### Mass Migration and Real Estate in European Cities (April 2017)

This research explores the implications of mass migration for cities in Europe. A key focus of the research was to understand how cities can best accommodate migrants and how the real estate industry can respond effectively. The research was funded by ULI Europe Charitable Trust and carried out by the Institute for Research into Superdiversity (IRIS) at the University of Birmingham. A steering group of ULI members from eight European National Councils: ULI UK, Germany, Austria, Turkey, the Netherlands, Sweden, Italy and Greece were instrumental in supporting the research.

<https://europe.uli.org/mass-migration-real-estate-european-cities/>

### Ingredients for Success: How food, drink, and leisure keep shopping centres competitive (November 2016)

As the leisure and food and beverage (F&B) sectors continue to play a role in the success of shopping centres coping with the rise of e-commerce, this report examines the initial impact from a quantitative and qualitative perspective.

This publication was supported by the ULI Retail and Entertainment Product Council, which wanted to build on this qualitative work with an initial examination into some of the quantitative arguments for increasing leisure and F&B.

<https://europe.uli.org/ingredients-success-food-drink-leisure-keep-shopping-centres-competitive/>

### Building the Innovation Economy: City-Level Strategies for Planning, Placemaking and Promotion (October 2016)

Rotterdam is a city for whom the innovation economy is essential to the creation of additional jobs, to enhance its international visibility, and to encourage innovation in city management. Like many other cities around the world, Rotterdam is trying to raise its profile by focusing investment and promotion on new 'innovation districts', locations within the city where the innovation economy might develop and expand. A one-day workshop brought together an international group of practitioners to explore the longer-term strategy to establish the city as a centre for innovation.

The workshop looked at issues such as:

- the ingredients of a long-term strategy for a city to build its innovation capacity,
- the roles of government and market factors,
- the links between innovation districts, placemaking and land use and
- how cities can build an innovation identity and visibility.

This report further explores these topics inspired by the experience and examples of Munich, San Diego and Tel Aviv, as well as offering a number of recommendations to support Rotterdam's strategy for its innovation ecosystem and its key districts. Munich is a city in a third cycle as a city of innovation, San Diego is into a second cycle, and Tel Aviv is enjoying a first full cycle. This allows different kinds of lessons to be learned from their experience.

<https://europe.uli.org/building-innovation-economy-city-level-strategies-planning-placemaking-promotion/>

## Recent ULI Research

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### Climate Change Implications for Real Estate Portfolio Allocation: Industry Perspectives (October 2016)

This research report examines risk assessment and management strategies aimed at addressing climate change within real estate portfolios. The report draws on a survey – conducted between August 2014 and early 2015 – of 50 senior executives at leading real estate investment and management firms, mainly based in Europe. The survey investigated whether and how respondents recognise the threat of climate change, what impact they expect climate change to have on their sector, and what their current and anticipated business practices are in response.

<https://europe.uli.org/climate-change-implications-real-estate-portfolio-allocation-industry-perspectives/>

### L'Accord de Paris: A Potential Game Changer for the Global Real Estate Industry (September 2016)

A Summary for Decision Makers

This summary paper from ULI provides an overview of the key issues and implications for real estate that arise from the Paris Agreement and the steps that the industry can take in response. The paper:

- Highlights the key elements of the Paris Agreement and the policy, market, and climate drivers of change in the post-COP-21 world;
- Outlines the nature of the opportunities that exist for the real estate industry, how leaders within the sector can set out to capture them, and the risks for those who choose not to; and
- Sets out the high-level steps that real estate organizations should consider taking to keep themselves relevant and competitive in the post-COP-21 era.

<https://europe.uli.org/laccord-de-paris-potential-game-changer-global-real-estate-industry/>

### Emerging Trends in Real Estate Europe 2018 (November 2017)

This annual study provides an outlook on European real estate investment and development, real estate finance and capital markets, as well as trends by property sector and geographical area. It is based on the opinions of more than 500 internationally renowned real estate professionals, including investors, developers, lenders, agents and consultants.

<https://uk.uli.org/news/ulipwc-emerging-trends-in-real-estate-europe-2018/>

## Upcoming ULI Research

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### ULI Europe density #3 report

#### Supporting smart urban growth: successful investing in density

The real estate industry is a key participant in addressing the complex forces connected to rapid urbanisation. Our success depends on how we contend with these forces, including globalisation, rapidly developing technology, cultural changes and climate change.

To further explore these issues, ULI Europe is embarking on an initiative to explore density to learn from the past and extract best practices from existing examples, aiming to increase knowledge of density in the real estate industry and beyond, addressing the potential social, economic, and environmental benefits of investing in density, and devising strategies to make density a priority for the public sector.

Research has been completed on this latest initiative and the report is being prepared with its launch projected to take place in Winter 2017/18.

### Trading Up: Dining, leisure, amenities and the new shopping centre

With e-commerce continuing to hit retail sales, shopping centres increasingly focus on building identity and social purpose through dining, leisure and services in order to stay relevant. ULI's new research report includes quantitative analysis of the impact of including these new uses on retaining and creating value, as well as interviews with leaders in the field and case studies of innovative projects.

Report to be launched in November 2017.

### Attractiveness of world class business districts

ULI and EY examines what makes international business districts attractive in the context of global economic, demographic and lifestyle changes, and how districts adapt to remain competitive. The report measures the comparative attractiveness of 17 leading business districts around the world. It is based upon objective and quantifiable indicators, a global online survey and in-depth interviews with experts in the 17 selected business districts.

Report to be launched in November 2017.



Research

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