ANNUAL RESEARCH REVIEW
2005-2006

OXFORD INSTITUTE FOR SUSTAINABLE DEVELOPMENT
INTERNATIONAL LAND MARKETS RESEARCH GROUP (OISD-ILM)

Department of
Real Estate and
Construction
ANNUAL RESEARCH REVIEW
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OXFORD BROOKES UNIVERSITY
INTRODUCTION

Welcome to the International Land Markets (ILM) annual review of research for the period 1st August 2005 to 31st July 2006. The ILM covers all research activity undertaken by staff at the Department of Real Estate and Construction (REC). This is set within the larger organisational framework of the Oxford Institute for Sustainable Development (OISD).

This report is being distributed to current students and past graduates of the Department of Real Estate and Construction (REC) and both professional and academic colleagues who support our work. The report contains a summary of activities and selected extracts of work published by staff active within the ILM research group.

If you have any enquiries or would like additional copies, please email the ILM/REC Research Coordinator Dr. Ramin Keivani at: rkeivani@brookes.ac.uk.

STRATEGIC RESEARCH GOALS

Research and scholarly excellence are central to the working ethos and academic tradition at the Department of Real Estate and Construction and the ILM research group. This is manifest in the following goals of our research strategy:

- To be international leaders in our fields of expertise
- To promote sustainable development in real estate and construction
- To deliver inputs (e.g., research funding successes) and outputs (e.g., publications) which will be assessed as of international standing for the majority of research active staff
- To link student learning, teaching and research
- To link applied research and consultancy with international, national, regional and local agents and markets – and to provide information to the widest range of professionals and users in real estate and construction

In the year ending July 2006 ILM research staff strived towards these goals by actively pursuing their research interests through innovative projects, developing new areas and consolidating their publication record and conference presentations. In addition we have expanded our research capabilities by strategic new appointments. Most notably Nick French was appointed as Professor in real estate. He will be taking charge of our Masters programmes in real estate. At the same time he is a prominent researcher in valuation with a highly regarded reputation for providing pragmatic solutions to problems facing the industry. He will play a major role in expanding our research links with developing new horizons in valuation research through collaborative work with internal and external partners.

AN OVERVIEW OF RESEARCH ACTIVITY 2005-2006

OXFORD INSTITUTE FOR SUSTAINABLE DEVELOPMENT (OISD)

During the past year the OISD has provided an important platform for expanding our research activities in collaboration with other research groups within the institute. The most prominent collaborative successes were:

- Funding from HEIF3 for work on products, processes and metrics in the built environment. This is designed to bring a co-ordinated approach to developing business linkages and knowledge transfer within OISD. The work is a collaboration between the International Land Markets; Architecture, Culture and Technology and Environmental Assessment and Spatial Planning Research Groups.
- Funding from European Investment Bank for a 3 year research project on Measuring Social Sustainability: Best Practice from Urban Renewal in the EU. This work is a collaboration between the International Land Markets and Environmental Assessment and Spatial Planning Research Groups.

In addition ILM staff have been pursuing several other intra-OISD collaborative initiatives involving among others regional development agencies (e.g., SEEDA) and research councils (e.g., EPSRC and ESRC) during the review period. These can lay the foundation for continuing high calibre research and consultancy activity for future years.
For further information on OISD activities please refer to www.brookes.ac.uk/schools/be/oisd

THE INTERNATIONAL LAND MARKETS GROUP

The ILM group has scored major successes in developing its main research themes and developing new horizons in the review period. This is manifest in our success in winning research and consultancy contracts, increasing our publication outputs and expanding our PhD programme. This is noted in the table below. Most notably we secured major funding from the European Investment Bank for measuring social sustainability, new RICS funding for an international comparative work on sustainability tools audit, continuing EPSRC funding for work on brownfield regeneration as part of the SUBR:IM programme and have continued collaboration with BRE for upgrading the Green Guides to Specification.

Main research themes

**Meta-themes**  
- Sustainable real estate
- International real estate and land policy
- Construction and project management

**Cross-cutting fields**
- Property markets (commercial and residential)
- Sustainable real estate and construction
- Real estate in national economies
- Construction: knowledge networks and communication

**Examples of research**
- Brownfield development
- Green Guide to Specification
- Heritage and sustainability
- IT/broadband in real estate
- Socially responsible real estate investment
- Alternative energy infrastructures

- Real estate markets in transition economies (China and Central and Eastern Europe)
- Globalisation and contested claims to urban land and urban governance
- Housing policy in developing and transition countries
- Structure of building industry in Korea

- Knowledge management
- Communication networks
- Risk and stakeholder analysis
- Management of complex projects
- Procurement
- Historic conservation
- Maintenance
- Pallet and scaffold behaviour

<table>
<thead>
<tr>
<th>ILM FUNDING AND PUBLICATION OUTPUT BETWEEN 2004-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year</td>
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<tr>
<td>---------------</td>
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<tr>
<td>2005-2006</td>
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<tr>
<td>2004-2005</td>
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</table>
In the 2005-2006 period the following research was undertaken by members of staff at the Department of Real Estate and Construction:

**Projects continued from previous year**

<table>
<thead>
<tr>
<th>Project title</th>
<th>Updating the Green Guides to Specification</th>
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<tbody>
<tr>
<td>Researcher</td>
<td>David Shiers in collaboration with the Building Research Establishment (BRE)</td>
</tr>
<tr>
<td>Summary</td>
<td>First designed by David Shiers in 1994 the Green Guides are an innovative and original, quantitative method of assessing the environmental impact of materials and components. The guides were last updated in 2001. Revisions to building regulations, other legislation and improvement in the performance of construction products have necessitated an update of the Guides. The project is a collaborative undertaking involving industrial partners including the NHBC, WRAP, The Department of Education and Science, Construction Products Association, HSBC Bank and Willmott Dixon construction.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research Fund, Industrial Partners and UK Government Agencies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project title</th>
<th>Socially responsible investment in real estate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Claire Roberts, Dan Rapson and David Shiers</td>
</tr>
<tr>
<td>Summary</td>
<td>This project was completed during the review period and provides a good foundation for continuing work on SRI in real estate. It investigated the nature of SRI decision-making and reporting as it relates to the property element of institutional investor’s portfolios. This included whether changes in current SRI practice are necessary (or desirable) to make property investment more sustainable. It also included issues such as definition of CSR and SRI, the focus of SRPI, potential methodologies and current thinking in the industry. The research also explored the transferability of concepts and ideas of SRI from equities to property.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research Fund</td>
</tr>
<tr>
<td>Project title</td>
<td>Development of the Chinese real estate investment market</td>
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<td>------------------------------------</td>
<td>----------------------------------------------------------</td>
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<tr>
<td>Researcher</td>
<td>Albert Cao and Ramin Keivani</td>
</tr>
<tr>
<td>Summary</td>
<td>At present, non-Chinese are well represented in the country as occupiers of primary offices, accounting for 50% of the top quality office space in Beijing and Shanghai. However, very few commercial buildings are owned by non-Chinese foreign investors from developed countries. Lack of foreign involvement has held back the real estate investment market. As a result knowledge and experience in developed economies on property investment cannot be effectively transferred into China. This research looks at ways that China can develop its property investment market, providing new outlets for domestic and overseas investors, adding new money and expertise to its real estate growth. It includes the following areas:</td>
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<tr>
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<td>• Wholesale assessment of the legal framework and market practices surrounding property investment</td>
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<td>• Comparison between UK and China in the development of property investment market</td>
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<td></td>
<td>• Reforming land tenure, the legal framework and market rules</td>
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<td></td>
<td>• Changing the role of local government in the property market</td>
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<tr>
<td>Funding Organisation</td>
<td>Royal Institution of Chartered Surveyors (RICS) and Shui On Ltd Hong Kong</td>
</tr>
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<table>
<thead>
<tr>
<th>Project title</th>
<th>Rural exception sites</th>
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</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Ann Boon and Sally Sims</td>
</tr>
<tr>
<td>Summary</td>
<td>This consultancy project investigates a perceived but as yet unproven inconsistency in the price being paid for rural exception sites in local authorities adjacent to South Oxfordshire. The main aim is to determine whether the selected District Councils are paying in excess of the industry’s assumption for exception site values and if so, to establish the rational behind adopting a different approach based on higher values. The specific objectives are:</td>
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<tr>
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<td>• To establish the rational for determining the valuation of rural exception sites in a number of district councils identified by the client.</td>
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<td>• To determine the valuation methods used in each case study</td>
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<td>• To identify the key issues involved in the valuation exercises.</td>
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<td></td>
<td>• To collect information on successfully completed exception site developments to see if it is possible to establish a pattern based on factors other that valuation</td>
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<td></td>
<td>• To prepare a final report based on the findings of the research making recommendations to the client on how they should proceed with their acquisition of rural exception sites in the future.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Cottsway Housing Association and Oxfordshire Rural Housing Partnership</td>
</tr>
<tr>
<td>Project title</td>
<td>The UK Housebuilding Industry: An Analysis Of post-Barker Structural Responses</td>
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<td>---------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Researcher</td>
<td>Youngha Cho</td>
</tr>
<tr>
<td>Summary</td>
<td>This research aims to explore the impact of the recent changes of housing policy after the Barker Review on UK house building companies’ strategic behaviour. It will be undertaken within the framework of sustainability. The research objectives are to understand the challenges that the building companies are facing; to investigate how they are responding to the challenges; and to examine the role of the private sector in developing sustainable communities which UK government aims to achieve. Four main themes are identified to define the scope of the study: 1. Micro analysis on the outcomes of the house building company • Business scale and scope based on product scope (within/between industries) • Targeted market (national vs. regional) 2. Changes of the strategic business plan • corporate social responsibility strategy • sustainable development/supply of affordable housing/mixed-use development • brownfield development • changes to process and innovation development 3. Changes of the governance structure focused on contracting relationship with subcontractors. • The extent and the structure of contracting (hierarchical/integrated or quasifirm type) based on transactions cost economics. 4. Dynamic relationship cross the three main themes. The research methodology involves questionnaire surveys (top 100 house building companies) and detailed case study analyses. The research will contribute to disseminating best practice in business strategy in the house building industry, which has been academically under-researched.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research Fund</td>
</tr>
</tbody>
</table>

<p>| Project title                                      | Value impacts of wind farm technology                                          |
| Researcher                                        | Sally Sims and Peter Dent                                                     |
| Summary                                           | This research compares the impact in land/property value terms of the development of wind farms as opposed to biomass production. This is particularly relevant both for surveyors and for land owners if not for the wider community as it will help all those concerned in planning applications/impact assessments to be able to make informed decisions. |
| Funding Organisation                              | RICS Education Trust                                                          |</p>
<table>
<thead>
<tr>
<th>Project title</th>
<th>Sustainable urban building maintenance strategy</th>
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</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Brian Wood</td>
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<tr>
<td>Summary</td>
<td>This research follows on from an invited paper for the symposium Urban Maintenance Strategy held in Naples in 2002. The work identifies the contribution that existing buildings and infrastructure make to urban development. These represent economic and social investment in ‘bricks-and-mortar’, place, heritage; matters of importance to communities and their cohesion, and are of value in supporting sustainability.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research fund</td>
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</tbody>
</table>

| Project title               | Analysis and design of scaffold structures       |
| Researcher                 | Rob Beale and Mike Godley                       |
| Summary                    | Rob Beale and Mike Godley have been involved in developing methods of advanced structural analysis to determine the forces and deflections occurring within scaffold structures. The analyses have lead to the development of new proprietary scaffold systems being marketed by Interserv UK Ltd and to improved procedures by the Health and Safety Executive (HSE) to check scaffold safety. Recently they have been employed by the National Access & Scaffolding Confederation (NASC) to develop new procedures in line with Eurocodes to design tube and fitting scaffold structures within the UK. These analyses have led to the proposal of smaller vertical tying intervals to improve scaffold safety. As a result the NASC has published a Guide to scaffolding design, written by Mike Godley, which replaced the British standard for scaffolding design (BS5973) when it was withdrawn by the HSE on publication of the new Euronorm. |
| Funding Organisation       | Interserv UK Ltd and National Access & Scaffolding Confederation. |

| Project title               | Pallet rack structures                           |
| Researcher                 | Rob Beale and Mike Godley                       |
| Summary                    | Over the last ten years the Federation Europeenne de la Manutention has, under the guidance of Dr. Mike Godley and others, drawn up a new code for the design of pallet rack structures within the EU. This code of practice is now being currently revised to become a draft European standard by Mike Godley and others and incorporates many procedures developed at Oxford Brookes University. The University is currently marketing a ‘state-of the- art’ program called Palletsoft using the analysis methods developed by Mike Godley and Rob Beale. This is a design program that permits manufacturers to quickly and efficiently determine the load carrying capacity of their storage systems in accordance with the provisions of existing structural codes of practice. Research is being conducted into the dynamic and seismic behaviour of storage racking structures and into for a better understanding of their shear behaviour. |
| Funding Organisation       | PSS Ltd and Hi-Lo Manufacturing Ltd             |
### New Projects

<table>
<thead>
<tr>
<th>Project title</th>
<th>Knowledge creation capability and absorptive capacity of integrated project teams in the construction industry</th>
</tr>
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<tbody>
<tr>
<td>Researcher</td>
<td>Esra Kurul, Andrea Colantonio and Noriko Otsuka (with industrial partnership)</td>
</tr>
</tbody>
</table>
| **Summary**   | This research project, which started in October 2005, is due for completion before the end of the year. Overall, in addition to novel research findings, it facilitated the development of close and strong links with industrial partners, which the team aims to sustain. It also yielded some opportunities for commercialisation of the Social Network Analysis based methodological approach. The team expects some of these opportunities to be explored through the HEIF 3 funding that the Department secured. A series of two workshops were held in September 2006 in order to disseminate findings to practitioners and academics in the field. These workshops were held at RICS, London and Manchester University and were both well received by the delegates. The methodological approach struck delegates as one that could help them understand how teams within their organisations were connected. The team is currently working on finalising the research reports, and aims to make these available through a web-site. The main findings are that:  
  • Project managers (PMs) have a unique advantage in accessing external source of knowledge;  
  • PMs’ are knowledge brokers within their teams with power to control knowledge flows in these networks;  
  • There may be excessive, non-value generating communication in closely-knit networks.  
For further information on the project please contact: |
| **Funding Organisation** | Engineering and Physical Sciences Research Council (EPSRC) |

<table>
<thead>
<tr>
<th>Project title</th>
<th>Role of the development industry in the UK – international comparisons</th>
</tr>
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<tbody>
<tr>
<td>Researcher</td>
<td>Tim Dixon</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>This is part of the continuing work on brownfield regeneration in the EPSRC SUBR:IM programme (Sustainable Urban Brownfield Regeneration: Integrated Management). Previous work, which highlighted structural deficiencies in infrastructure provision in Thames Gateway and Greater Manchester, received extensive coverage in the national press (Times, Sunday Telegraph, FT and Guardian). New work has now been undertaken to include international comparisons of best practice working with Peter Meyer and Kristen Yount at the University of Kentucky, USA. This work is examining how long term liability on contaminated land creates issues over stewardship and sustainability in both the UK and USA.</td>
</tr>
<tr>
<td><strong>Funding Organisation</strong></td>
<td>Engineering and Physical Sciences Research Council (EPSRC)</td>
</tr>
<tr>
<td>Project title</td>
<td>The Impact of climate change on brownfield land</td>
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<tr>
<td>Researcher</td>
<td>Tim Dixon</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>This is part of the continuing work on brownfield regeneration in the EPSRC SUBR:IM programme (Sustainable Urban Brownfield Regeneration: Integrated Management). This project is being jointly conducted with Universities of Cambridge and Reading, Kings College, BRE and Forest Research. The project combines social science and science disciplines and aims to investigate how climate change can affect remediation techniques in the long term, particularly containment and barrier methods. The ILM part of the research is examining developer attitudes towards climate change and brownfield development and is based on an extensive national survey of developers and case studies in the Thames Gateway.</td>
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<tr>
<td>Funding Organisation</td>
<td>Engineering and Physical Sciences Research Council (EPSRC)</td>
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<table>
<thead>
<tr>
<th>Project title</th>
<th>Sustainability tools audit</th>
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<tbody>
<tr>
<td>Researcher</td>
<td>Tim Dixon, David Shiers and Andrea Colantonio</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>This research will establish the extent to which RICS practising members adopt and apply sustainability tools in practice across the lifecycle of development, construction, occupation and management of buildings and land. Building on existing work, the project examines the availability and uptake of sustainability indicators (in both the built and natural environments) across the property development, construction and management/occupation lifecycle in exemplar countries (EU, USA and Oceania/rest of the world), and uses international survey work, case studies and interviews/focus groups to identify potential mismatches between the ‘supply’ and ‘demand’ for such indicators at a variety of spatial scales. The research is being led by ILM in partnership with Georgia State University in the USA, University of Melbourne in Australia, and King Sturge (international property consultants). Project website at: <a href="http://www.brookes.ac.uk/schools/be/oisd/sustainability_audit/">http://www.brookes.ac.uk/schools/be/oisd/sustainability_audit/</a></td>
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<tr>
<td>Funding Organisation</td>
<td>Royal Institution of Chartered Surveyors (RICS)</td>
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<tr>
<th>Project title</th>
<th>International arbitration</th>
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</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Andrew Fairbairn</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>Monitoring the current review of the United Nations Convention on International Trade and Law (UNCITRAL) Arbitration Rules, assessing the effectiveness, by case study, of the implementation of the UNCITRAL Model Law and extending the development and use of a website reporting on arbitration cases decided under the Model Law.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research Fund</td>
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<tr>
<td>Project title</td>
<td>Effective property tax administration</td>
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<td>---------------</td>
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</tr>
<tr>
<td>Researcher</td>
<td>Richard Grover</td>
</tr>
<tr>
<td>Summary</td>
<td>This consultancy work involves partners from Romania and Greece. The work aims at developing quality training approaches for property market valuation professionals for an effective property tax administration in the partner countries.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>EU Leonardo Programme</td>
</tr>
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<table>
<thead>
<tr>
<th>Project title</th>
<th>The benefits and risks of Low Cost Home Ownership in different housing markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Youngha Cho</td>
</tr>
</tbody>
</table>
| Summary       | The government has identified the need to concentrate investment, both public and private, on the provision of low-cost homeownership (LCHO). New initiatives are concerned with increasing the role of private finance through equity mortgages as well as providing a range of shared ownership schemes aimed at key workers and pressure areas. Private finance institutions have relatively little detailed knowledge of the risks involved in funding such schemes and have traditionally depended on government to underwrite them. In the evolving environment, it is of growing importance that they understand the nature of the client groups and how risks may vary across different housing markets. The research aims to identify key issues relating to the demand for existing low cost homeownership schemes concentrated on:

- whether the pattern of LCHO sales varies across different types of local housing markets measured by the extent of pressure in the market and the gap between social housing and market housing costs;
- the attributes of LCHO purchasers and how they differ between areas; and
- the extent to which these groups and the dwellings they purchase represent different financial risks.

The research will use large-scale secondary data sources including the Housing Corporation’s CORE new sales data, the Survey of English Housing and the British Household Panel Survey as well as local income and house price data. |
<p>| Funding Organisation | Promising Research Fellowship |</p>
<table>
<thead>
<tr>
<th>Project title</th>
<th>Definitive Frameworks to Evaluate Innovative Economic Property Performance at the Local Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Ann Boon</td>
</tr>
<tr>
<td>Summary</td>
<td>This project focuses on the development of a framework to illustrate the way in which property performance affects economic performance at the local level. This has important implications for regional economic policies in other areas where the focus is on capturing the knowledge economy as an economic driver. This study involves dissecting the Oxfordshire economy into its constituent parts and identifying the elements of social capital, including property provision, which contribute to the success of the biotechnology sector. As a contribution to the International Land Markets research, a contrast is made with the successful development of San Diego.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>Quality Research Fund</td>
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<table>
<thead>
<tr>
<th>Project title</th>
<th>Sustainable Rural Communities</th>
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</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Ann Boon</td>
</tr>
<tr>
<td>Summary</td>
<td>This project involves the application of current thinking on sustainable communities, as set out in the EU's Bristol Accord (November 2005), to the future development of a former MoD/RAF site in the Cotswolds AONB as a sustainable rural community. The site has the advantage of an established business park occupying the former RAF operational buildings and a residential area in the now largely privately owned former RAF housing. The challenge is to use future development to create a thriving sustainable rural community out of a disparate development. This study, which is part one of a two-part project, has focussed on developing an overall framework upon which a future development plan, specifically tailored to the needs of Upper Rissington, can be based.</td>
</tr>
<tr>
<td>Funding Organisation</td>
<td>CgMs (Cheltenham)/Reland</td>
</tr>
</tbody>
</table>
## Funded projects beginning in October 2006

<table>
<thead>
<tr>
<th>Project title</th>
<th>Measuring social sustainability: best practice from urban renewal in the EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Tim Dixon, John Glasson, David Shiers</td>
</tr>
</tbody>
</table>
| Summary       | This new 3 year programme of research (one of only four awards made by EIB during 2006) will focus on the following issues within an EU context, examining a range of urban renewal projects and related infrastructure covering commercial and residential development:  
  • Definitions and measures of 'social sustainability': a review and critique.  
  • Implementation - to what extent and in what ways is social sustainability incorporated within urban renewal projects within the EU? What is the optimum balance between commercial and residential development (or in residential projects, tenure and income mix) in order to provide the widest social benefits?  
  • Best practice techniques - how can we learn from the way in which social sustainability has been incorporated in projects? How do lenders and investors approach social sustainability for urban renewal projects?  
  • New tools - can improved tools be developed to assess social sustainability and also enhance its consideration in decision processes and project / programme outcomes? Can these tools also be used in projects based within transition (new member) states? How do the new tools fit the existing institutional and planning frameworks and what are the implications for investment lending? |
<p>| Funding Organisation | European Investment Bank |</p>
<table>
<thead>
<tr>
<th><strong>Project title</strong></th>
<th>Products, Processes and Metrics for the Built Environment (PPM&lt;sup&gt;BE&lt;/sup&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Researcher</strong></td>
<td>Tim Dixon, Esra Kurul and Noriko Otsuka</td>
</tr>
</tbody>
</table>
| **Summary**            | This new initiative is designed to bring a co-ordinated approach to developing business linkages and knowledge transfer within OISD. PPM<sup>BE</sup> is designed to bring together three key areas of expertise within OISD:  
  • **Products** – developing and using sustainable building design and construction (**Architecture**).  
  • **Processes** – assessing and analysing the impact of sustainable building and construction on the real estate investment, development and construction processes, in terms of decision-making, asset management, knowledge management and value management (**Real Estate and Construction**).  
  • **Metrics** – measuring the impact of sustainable design and construction at building, city and regional economy scales (**Planning and Energy Carbon Counting**).  
  Planned activities include a Newsletter; Major research conference; specialist workshops; CPD programmes, and Developing new research and consultancy partnerships in our core areas. |
| **Funding Organisation** | Higher Education Innovation Fund (HEIF3)                                      |

<table>
<thead>
<tr>
<th><strong>Project title</strong></th>
<th>Modelling the future take-up of low-cost homeownership products</th>
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<tbody>
<tr>
<td><strong>Researcher</strong></td>
<td>Youngha Cho</td>
</tr>
</tbody>
</table>
| **Summary**            | This research is part of a collaborative work with Prof. Christine Whitehead from Cambridge University and others.  
  The aims of the research are:  
  • to help DCLG understand better the drivers behind potential future take-up of LCHO assistance;  
  • to enable DCLG to better estimate the likely take-up of different LCHO products, including Right-to-Buy and HomeBuy and the factors that influence this take-up; and  
  • to do this through the production of a robust model which enables estimates of take-up to be provided and which can be easily adapted to examine different products/assess the impact of varying assumptions. |
| **Funding Organisation** | Department for Communities and Local Government (DCLG)                       |
In the 2005-2006 review period seventeen core and two associated members of staff contributed to our research activities. These are:

**Core staff**

**Dr. Ann Boon**

specialises in researching the property aspects of local economies. Research undertaken so far has included the contributions made by business parks to their local economies; the role of the conversion of redundant farm buildings to non land based use in rural economies; growing local knowledge based economies and the contribution made by networks and clusters to economic growth. She is a member of the RTPI and the Society of Property Researchers. Ann regularly presents her research findings at the annual ERES (European Real Estate Society) Conference held in different venues across Europe. She has recently been appointed by Defra to the newly created Cotswolds AONB Management Board (February 2005).

**Dr. J Albert Cao**

is a specialist in real estate valuation and investment with special interests in China’s urban land market, housing and commercial real estate. Other areas of his interest include the UK real estate investment market, housing market and real estate markets in transition economies.

Dr. Cao has been leading a link project with East China Normal University funded by the British Academy on comparison of housing market operations between China and the UK.
Dr. Youngha Cho

is a lecturer in the department of Real Estate and Construction. Her work in the ILM focuses on the housing market and housebuilding industry, building on her PhD project and previous work at the University of Cambridge. Her research interests include residential mobility, affordability issues in housing market, intermediate housing tenure, and micro analysis of housebuilding industry. She has published several research papers in leading academic journals including Journal of Housing Economics and Construction Management and Economics.

This year Youngha has successfully completed a Promising Research Fellowship project on the Costs and Benefits of the Low Cost Home Ownership. As an associate of the University of Cambridge, she has continuously worked with Professor Christine Whitehead. Recently Youngha and Christine won a DCLG project on Modelling Future Take-up of the Low Cost Home Ownership Products. She will be a co-leader of the project with the Cambridge Centre for Housing and Planning Research. She has been networking with several institutions in South Korea and Asian countries as a Visiting Fellow in the Research Institute for Human Settlement (KRIHS) since April 2005.

Dr. Andrea Colantonio

joined ILM as a post doctoral research associate on the EPSRC project: Knowledge creation capability and absorptive capacity of integrated project teams in the construction industry.

Dr. Colantonio is an economist who has subsequently developed research interests in the areas of comparative urban studies, tourism development and environment in less developed countries and continuing socialist states. Most specifically, he is interested in investigating the links between globalising economic forces, local responses and environmental and social change in the urban areas of less developed countries, with a special emphasis on the Caribbean and Latin America. In 2005, he completed a PhD research on the political economy of urban tourism development in Havana, Cuba, during the 1990s. The research encompassed the study of the allocation of tourism resources and its impacts, the generation of tourism policy, and the politics of tourism development in Cuba. Along similar lines, he have also undertaken research on participatory planning, urban governance and stakeholders analysis, endeavouring to study a possible ‘third way’ between market-based and centrally planned forms of economic and political governance.

In 2002, Dr. Colantonio also worked for the Environmental Industries Commission, London, participating in the Commission’s lobbying activities. In the future, he is planning to focus his research on the dominant urban environmental and economic challenges experienced by cities at different levels of development throughout the world, with special reference to Europe, the Americas and the Caribbean and South East Asia.
Peter Dent

is currently Head of the Department of Real Estate and Construction. He is a fellow of the Royal Institution of Chartered Surveyors and a member of the Society of Property Researchers. His research interests include real estate valuation methodologies for both market and non-market property assets, commercial office occupier needs and corporate real estate strategies. In addition to leading and teaching on modules in the Department and has been invited speaker on programmes run at the University of Reading and The Wilson Centre, Cambridge University where he contributed to the corporate real estate module on their postgraduate programme. He has helped to set up and run real estate programmes in Bulgaria, Singapore and Hong Kong. He has also been involved in research projects internationally. He was the UK delegate for Commission 7 of the International Federation of Surveyors, where he has been involved in international work on land markets. He has worked on a project sponsored jointly by the RICS and the Polish government on mass appraisal of real estate for taxation purposes. He has also been involved in sponsored work for AMEC Developments, the National Audit Office, the Guy Bigwood Trust and several major surveying firms.

Prof. Tim Dixon

was formerly Director of Research at The College of Estate Management, Reading, where he worked from 1986-2005. Prior to this, he was Research Fellow in IT Applications in Dept. of Land Management, University of Reading (1984-1986) and a surveyor in the Inland Revenue VO (1981-1986).

He is a chartered surveyor and member of the Editorial Board of the Journal of Property Investment and Finance, the Journal of Property Management, the Journal of Building Appraisal and Journal of Real Estate Portfolio Management, a member of the Advisory Board for Local Economy, and a member of the review panel of the RICS Research Paper Series. He is a member of the IPF, SPR, ILT and NACORE in the UK, and ARES and ULI in the USA. He is a member of the EPSRC Infrastructure and Environment Strategic Advisory Team and was a member of the RICS Research Policy Committee from 2004-2006. He is also a trained RICS APC Assessor and a member of the Institute for Learning and Teaching. He is also a member of the advisory Board for SEEDA’s South East Excellence Group.

He has written widely on the subject of IT applications in property and has acted as property adviser to the National Audit Office. He is interested in the impact of information technology on the built environment and he has recently completed work on major funded research projects concerned with the impact of new technology on real estate and property markets. He is a regular contributor to professional journals such as Estates Gazette and he is a regular columnist with Newzeye’s ‘Property Forecast’. He has recently co-authored a book in the Blackwell’s Real Estate Issues Series entitled ‘Technology, Real Estate and the New Economy’.

Continued over...
He has worked on collaborative research projects with UK and overseas academics and practitioners, and co-led the successful 2003 bid to EPSRC for a £1.8m, 4 year programme of research into brownfield issues (SUBR:IM (http://www.subrim.org.uk/)) in which Oxford Brookes is a key partner. He is Principal Investigator on two projects in this consortium: ‘The Role of the Development Industry in Brownfield Regeneration’ and ‘Climate Change and Pollutant Linkages’, and has given interviews on BBC local radio in connection with the research.

His research interests include:
- Sustainable urban development and brownfield issues
- The valuation/appraisal of contaminated land
- The role of private sector investment and development in urban regeneration
- The impact of new technologies on commercial property and real estate markets

In connection with this research agenda, he has carried out funded research for a variety of organisations, including Office of Deputy Prime Minister (and DTLR); Joseph Rowntree Foundation; British Property Federation; RICS; Foundation for Built Environment; British Council of Shopping Centres, British Council for Offices, as well as the private sector.

Andrew Fairbairn

is a Chartered Surveyor, a Senior Lecturer at Oxford Brookes University and the Research Director at FICA (Forum for International Commercial Arbitration). He is a real estate consultant in private practice, specialising in formulating advice within the context of his client's broader business objectives rather than merely focusing on the property issues. He has a range of clients including private investors, property companies, charities, businesses and a number of prominent firms within the motor racing industry. With FICA he is an invited observer on Working Group II (Arbitration) at the United Nations Convention on International Trade and Law (UNCITRAL). A member of the Investment Property Forum, he is currently sitting on a working group considering the regulatory role of the FSA as it relates to the property profession.

Richard Grover

is a Chartered Surveyor and economist. Before becoming Assistant Dean in the School of Built Environment at Oxford Brookes University, he was a lecturer in property economics and property valuations. He has undertaken a number of projects on the newly emerging private land markets in Eastern Europe, particularly in Bulgaria, Romania, and Russia. These have been undertaken for a variety of clients including the World Bank, Food and Agriculture Organisation of the United Nations, and the governments of the United Kingdom, Romania, and the Russian Federation. He has produced publications for a number of bodies including CIRIA, the RICS, and the United Nations Economic Commission for Europe.
Dr. Esra Kurul

Dr. Esra Kurul is an architect who specialises in the management of (complex) projects, conservation of the built environment and management of knowledge as a source of competitive advantage. Her research interests include project processes, regeneration and re-use of architectural heritage and sustainability in the built environment. She has spent over ten years researching different aspects of the built environment both in the UK and in Turkey.

Creating and sharing knowledge across social networks of integrated project teams and learning from practice is the focus of Esra’s EPSRC project. Her PhD was founded on the principle of achieving sustainability in the built environment through re-use and adaptation of existing (listed) buildings. Her interest in managing complex projects emanated from her PhD research. As part of her O’Regan Enterprise Fellowship, Esra is currently working on refining her ideas on the relationship between managing complexity and achieving sustainability with a view to providing consultancy services within the built environment. She is also co-supervising two PhD students.

Dr. Kurul is keen to develop opportunities for collaborative research with the industry both nationally and internationally. She is actively seeking funding from institutions such as the EU, EPSRC and the DTI. Presenting her work at high-profile international conferences is one of the means through which Esra expands her international network.

Dr. Kurul is a member of the Institute for Historic Building Conservation (IHBC).

Dr. Ramin Keivani

Dr. Ramin Keivani is currently the research coordinator for the ILM research group. He is an urban development specialist with a wide range of interests in comparative urban research particularly impact of globalisation on land markets and urban development in developing and transition economies. Other areas of his interest include urban competitiveness, urban regeneration, international land and housing policy and construction in developing countries. He is currently Director of studies for 2 PhD scholars.

Dr. Keivani has managed several research projects including ESRC and RICS funded work and provided research and consultancy services in a number of countries including Iran, United Arab Emirates, Singapore, Brazil, Hungary, the Czech Republic and Poland.

He is co-author of a book on housing policy in developing countries and has published a number of book chapters and papers on globalisation and urban development as well as land markets and housing policy in leading international journals including Urban Studies, Environment and Planning, Progress in Planning, Journal of Property Research, CITIES, Urban Technology, Habitat International and others. Ramin Keivani is a member of the review board of the RICS Research Series Papers.
Dr. Noriko Otsuka joined ILM as a post doctoral research associate on the EPSRC project: Knowledge creation capability and absorptive capacity of integrated project teams in the construction industry.

Dr. Otsuka has 10 years of work experience in the Japanese construction industry, working for Takenaka Corporation. She started as a quantity surveyor in the Estimation Department and became an assistant architect six years later. During her last two years with Takenaka, she was the project manager for a £20 million mixed-use project. Coupled with her practical experience, she has research experience in examining the relationships between stakeholders in town centre regeneration and their social networks. Her PhD focused on the current contributions and potential of Town Centre Management (TCM) in urban regeneration in the context of English town and city centres. Her area of research interest is the impact of management processes, urban policies and socio-economic constitutes of locations on design and sustainability of urban centres. She is a member of the Urban Design Group.

Dr. Claire Roberts is a part time lecturer in real estate investment. Her recently completed PhD explored the property investment decision-making processes of institutional investors across three European countries. Her areas of expertise are behavioural research and social constructionism, and socially responsible property investment.

David Shiers is the Director of Studies in the Department of Real Estate and Construction. His research interests include the property investment implications of sustainable development, occupier demand for ‘green’ buildings and the environmental impact of building materials.


David has co-edited a special Property and the Environment edition of the journal Construction Management & Economics (with Professor Anthony Lavers) and has contributed to many other publications including Property Management, Property Review and Facilities. He is co-author of the undergraduate text book ‘Sustainable Property Development’ (with Miles Keeping). He is also a reviewer and academic referee for Blackwell Science and CME. He was a visiting Research Scholar at Nuffield College, University of Oxford in 2002.

David is currently collaborating with BRE on the publication of a fourth edition of ‘Green Guide’, a version of which is planned to form part of the National Building Specification (NBS). He is a member of the International Working Commission on Sustainable Construction, CIB W-100: The Environmental Assessment of Buildings.
Vivienne Spurge joined Oxford Brookes University in November 1999, having worked in commercial private practice for 20 years, in both London and Oxford. She is a part-time Principal Lecturer in the Department of Real Estate & Construction, specialising in the fields of property management and professional practice.

Her current areas of research interest are focussed around the implications of broadband technology upon the commercial property market. She has published articles relating to various aspects of broadband technology in Property Management and the Pacific Rim Real Estate Journal. She was awarded the RICS ’Blue Skies’ prize for her paper presented to the Pacific Rim Real Estate Society Conference in 2001.

She is currently an External Examiner to the University of Portsmouth, an Assessor for the RICS APC and a member of the Royal Agricultural College Advisory Board.

Dr. Sally Sims

is a lecturer in Real Estate and Construction. Her PhD focused on the impact of HVOTLs on residential house values in the UK using a multimethod approach towards research. Dr Sims’ area of expertise is in the use of hedonic modelling and survey based techniques to establish the impact of environmental features on property and land values.

Recently completed projects include an RICS funded project into wind-farms, client based research on rural exception sites and an analysis of the real versus perceived impact on house values from the presence of overhead electricity lines. Her research continues to focus on quantifying the impact of detrimental environmental conditions on property values with particular interest in mobile phone base stations and wind turbines. She is a member of the Stakeholders Advisory Group on EMF (SAGE) who is looking at the possibility of introducing the precautionary principle with regard to building homes near high voltage overhead power lines.

Published works include journal articles in Urban Studies and The Australian Property Journal.
Nigel Walker

is a Fellow of the Royal Institution of Chartered Surveyors. He has over 30 years experience in real estate higher education and practice in the UK and internationally, including China, Hong Kong and the South Pacific islands. He has been involved in research in China, Southern Africa, Bulgaria and Fiji as well as well in the UK.

His primary current research interests are in real estate markets in developing countries and real estate professional training programmes in emerging economies. He has also undertaken consultancy for companies, universities and professional organisations, including leading landscape architecture practices in China, the British Landscape Institute and Cambridge International Land Institute. He has held a number of visiting real estate academic positions in several countries and is currently a Visiting Professor in Real Estate at Renmin University of China in Beijing.

Dr. Mike Stubbs

Dr. Stubbs’ research area has principally developed around the development control dimension of land use planning, including conservation area legislation, planning appeal methods, planning obligations and judicial fairness in decision making. His Ph.D work involved an examination of Alternative Dispute Resolution in the planning sphere and in particular the application of mediation. Subsequent publications have featured in Town Planning Review, Journal of Planning & Environment Law, Journal of Environmental Planning & Management, International Planning Studies and Planning Practise and Research. More recently he has pursued work on the consequences of car free urban development on urban design (published in Journal of Urban Design) and on the development of an appraisal system for sustainability in the historic environment (published in Planning Practise and Research). Dr. Stubbs has supervised one PhD to completion and examined two (at Brookes and University of Cambridge). Currently he is pursuing work on the value of open space in urban growth strategies. This work is being produced jointly with The National Trust. Since 2003 he has worked part time for the National Trust as a Land Use Adviser. Dr. Stubbs is a co-opted member of the Chilterns Area of Outstanding Natural Beauty (AONB) Planning Committee, a member of the London Historic Environment Forum (chaired by English Heritage) and research member of Heritage Link (a forum of environmental NGOs).
Brian Wood

is a Chartered Architect, Construction Manager, a Surveyor and a Fellow of the Chartered Institute of Building; he is also a member of the British Institute of Facilities Management. His interests are wide and include the whole life of buildings from inception and design through to use and reuse, with specialist interests in defects and maintenance and how these impact on sustainability.

Brian has won and managed many large consultancy projects both before joining Brookes and since. These have included the production and implementation of 5 and 10 year programmes of planned maintenance and improvement of building stocks for substantial public sector clients across the UK. He has also undertaken research work in relation to construction skills development regionally and nationally; he represents Higher Education on the South East Construction Skills Forum, is a member of Construction Skills Observatory, and is Chair of the Southern Construction Careers Group.

He is author of the book ‘Building Care’ which challenges the prevailing ‘Planned Preventive Maintenance’ paradigm, and has published papers on innovative approaches to maintenance and to construction education. He has delivered papers, including invited contributions, at a number of international conferences and symposia, in countries as diverse as Australia, Bulgaria, Canada, Finland, Hungary, Italy, New Zealand, Singapore and South Africa.
**Dr. Robert Beale**

is an associate member of the ILM group and based at the School of Technology. He has conducted research into pallet-rack and scaffold structures and published over 50 papers in refereed journals and conferences. He has published over 40 departmental and other reports with reference to consultancy undertaken in scaffolding and racking structures as well as Engineering Mathematics. He has supervised 7 PhD students to completion and is currently supervising an additional 5.

In 1983-4 Dr. Beale undertook a sabbatical year becoming a visiting associate professor in the department of Computer Science and Statistics at California Polytechnic State University.

In 2002, due to the closure of Civil Engineering within the University he transferred into the School of Technology where he is now the Regional Director with responsibility of overseeing all the School’s UK franchised courses. Dr. Beale is an associate research staff at the Department of Real Estate and Construction.

He has also been involved nationally with the development of syllabuses for Engineering Mathematics under the umbrella of the Institution of Civil Engineers.

**Dr. Mike Godley**

is an associate member of the ILM group and based at the Department of Architecture. Dr. Godley retired from full-time employment as Acting Head of the School of Construction and Earth Sciences in 1998 having taught for 20 years in the Department of Civil Engineering. During all this period he maintained close contact with industry generating funds to support research by providing consultancy services for Industry, mainly in the field of specialist structural testing.

His field of interest is the design and analysis of structures which are especially susceptible to structural instability, most notably scaffolding structures, both proprietary systems and tube and fitting scaffolds, and storage structures for warehouses fabricated from cold formed steel sections.

Since retirement he has run his own successful consultancy, Slender Structures Ltd. and maintains his involvement in research through the supervision, with Rob Beale, of three research students.

He is the joint author of a Code of Practice for the Design of Steel Storage Structures for Europe published by the Federation Europeenne de la Manutention (FEM) which is now in process of translation into a Euronorm, and the author of the Guide to good practice for scaffolding with Tubes and Fittings published by the National Access and Scaffolding Confederation (NASC) in the UK.
Prof. Nick French

joins the Department of Real Estate & Construction as Professor of Real Estate from 1 September 2006. He was course Director of MSc Real Estate at The University of Reading, where he worked from 1990-2006. Prior to this, he worked as a Senior Surveyor with Hampshire County Council (1988-1990 and 1984-1986) and as a Lecturer at City University in London (1986-1988).

In 2005, Nick was awarded the Donaldsons Fellowship in Commercial Property. In his role, Nick works closely with his colleagues at Donaldsons in writing papers, presenting conference papers and developing a research agenda for the property profession.

He is also Editor of the award winning Journal of Property Investment & Finance and is an editorial board member for the Journal of Property Research and the Journal of Real Estate Literature. He is a member of the CoreNet and ERES in the UK/Europe and AREUEA and ARES in the USA. Nick is a member of the Royal Institution of Chartered Surveyors (RICS) and serves on the Securitisation and Secured Lending group which is a subcommittee of the Appraisal and Valuation Standards Board (AVSB). Previously, he was a member of the joint RICS/Investment Property Forum on Calculation of Worth. He was also the principal coordinator (and author of the resulting information papers) to consider and address the issues highlighted by the Mallinson Report in 1994.

Nick is founder member of the European Real Estate Society and held the post of Executive Director until 1997. He is currently on the main committee with special responsibility for coordinating prizes and establishing an ERES journal.

He has written widely on the subject of valuation and has, in the past, advised the Bank of England, the Royal Bank of Scotland and the Office of the Deputy Prime Minister (ODPM) on a wide range of property related matters. His principal research interests are:

Local Authority Property Management: following a successful series of lectures around the country in 2005/2006 to Local Authority valuers and property managers, it is clear that the public sector is looking for more guidance on good practice. The 2002 RICS report “Whose Property is it anyway?” (co-authored by Nick French) has become a mini-bible for many LA valuers.

Pricing of Leases without Comparison: it has become clear that commercial renting is slow to take onboard the Government proposals concerning the Code for Commercial Leases, and in particular the suggestion to provide a menu of prices and options. Nick is developing a pricing model that looks at the use of a simple probability based model to price space.

International Accounting Standards and Global Valuation Standards: the business community is going through a significant period of change when considering the valuation of assets in company accounts. Questions relating to historic or current cost accounting are intermingled with the suggestion that IFRSs will become the principal basis of accounting practice within the next 5 years. This research is looking at the uncertainty pertaining to this process and suggests a best practice guide for the valuation of property under IFRSs.

Bank Lending: Through his involvement with the RICS, he have been instrumental in liaising with the banking community to identify the appropriate basis of valuation for commercial bank lending. Initially, this resulted in the removal of the definitions of ERP and ERRP from the RICS’ Appraisal & Valuation Standards (Red Book) and is now trying to counter the imposition of European Mortgage Lending Value (a German concept) in the UK. He is now working with a colleague in Austria to try to illustrate that EMLV is NOT a valuation but is a misplaced risk assessment.

Other research interests include:

- Valuation and Uncertainty
- Development Appraisals and Feasibility Analysis
- Corporate Real Estate Management
Dr. Franco Cheung

is a senior lecturer and a quantity surveyor by professional discipline. His research expertises are construction cost modelling and forecasting techniques. His works produced in the past have been published in the leading refereed journals such as the Construction Management and Economics and the Building and Environment and disseminated in the conferences around the world. Recently, he is extending his study to the areas of choice making and judgemental bias.

Franco is an editorial member of the Surveying and Built Environment Journal and was the editor of its June 2006 issue.

Xu Ye

is a Chartered Surveyor and recently became a lecturer in the department of Real Estate and Construction. She first joined the department as a research student in 2003 working on investors’ risk attitudes. She is now in the final stage of her doctoral studies. With over six years’ research and advisory experience in the property industry as well as the academic filed, Ye has gained a wide knowledge of quantitative modeling and property market research. Her main research interest is studying the linkages between different property investment vehicles and financial markets. She specialises in the areas of risk management, behavioural finance, decision making theory, as well as emerging property market research.
Professor Anthony Lavers read law at University College, London where he won the Joseph Heller Prize. After an M.Phil in Planning Law at the University of Southampton, he taught at Portsmouth Polytechnic and for three years at the National University of Singapore, where he obtained his Ph.D. Following a year’s advanced research as Visiting Scholar at Wolfson College, Cambridge, Anthony Lavers taught at Oxford Brookes University (Reader in Law 1990, Professor of Law 1995) until 2001, when he joined the London office of US law firm White & Case. A barrister (Lincoln’s Inn), he also holds a part-time appointment as Director of Research at Keating Chambers.

Anthony Lavers was Co-ordinator of the Commission on Post-Construction Liability of the International Council for Building Research and edited the Commission’s 19-country comparative study (E&FN, Spon, London 1999) which received a Commendation in the Chartered Institute of Building Literary Awards. He has also co-authored Construction Law in Singapore and Malaysia (Butterworths Asia), a Legal Guide to the Professional Liability of Architects, Expert Witness in the RICS Books Case in Point Series and has published over 80 articles in legal, construction and property journals. Professor Lavers has delivered conference papers, seminars and lectures in 25 countries worldwide.

External examiner on Master’s degrees at Reading, Portsmouth and the University of Central England, Anthony Lavers has examined nine doctorates (at Reading, Manchester, King’s College London, Loughborough, SOAS, Oxford Brookes and UCE) and supervised four completed Ph.Ds.

Professor Lavers was elected Chairman of the Society of Construction Law 2004-2006. He was awarded a D.Litt by the University of Portsmouth in 2006.

Professor Angus McIntosh joined King Sturge as Head of Research in 2000 having worked for several international property consultants, as well for the public sector and a private sector investment house.

As a specialist Land Economist and a Chartered Surveyor, Prof. McIntosh has been involved with a wide range of international consultancy assignments over the last 30 years and has produced a number of forward looking research publications.

Across Europe Angus McIntosh wrote the first definitive market reports for the RICS on Prague, Budapest and Warsaw in the early 1990s, was involved in the first in-depth analysis of the investment performance of French Shopping Centres, and wrote feasibility reports for projects in Spain, Portugal and Germany.

In recent years, he has produced reports such as Global Real Estate Scenarios, the European Industrial Property Report and Global Trends in Industrial Parks using Case Studies from around the world, including Asia-Pacific - the most in-depth reports ever produced on this market. He has also produced reports on the European Airports market.

Prof. McIntosh was appointed in 2004 to the Lyons Implementation Board of the Office of Government Commerce. His latest book, joint author with Dr. Sarah Sayce and Prof. Anthony Walker, is entitled “Building Sustainability in the Balance” published by Estates Gazette. His recent King Sturge reports include “Property Sustainability Matters – caveat emptor” and “European Real Estate Scenarios – Nirvana or Nemesis.”
Professor Paul McNamara has a first class honours degree from the University of St Andrews and a PhD from the University of Edinburgh – both in Geography. In 1992, he became an Associate of the (UK) Institute of Investment Management and Research – now incorporated in UK SIP.

Prof. McNamara is currently Director, Head of Property Research, PruPIM Ltd. He is also a Board Director and member of the Executive Management Team of PruPIM.

He is responsible for the overall direction of property research in PruPIM. This includes assessing the prospective returns to the constituent elements of UK and overseas property markets in which PruPIM invests, and advising on investment strategy for client property investment funds.

In recent years, Prof. McNamara has been centrally involved in the development of an index-based property derivatives market in the UK, which is beginning to gain momentum currently. His other area of interest is the promotion of sustainability and climate change issues to the property investment community.

Paul McNamara is Vice Chairman of the Investment Property Forum (IPF) - and a leading member of its Management Board and Research Committee. He assumes the Chairmanship of IPF in Summer 2005.

Prof. McNamara is the Honorary President (and a Fellow) of the UK Society of Property Researchers (SPR). He has recently become a non-executive director of Investment Property Databank Holdings Ltd and is the current Chairman of the Institutional Investors Group on Climate Change (IIGCC) – Property Workstream.

Finally, Paul McNamara was awarded the OBE for ‘services to the property industry’ in Summer 2003.

Professor Mikhail Soloviev graduated from the Moscow Aviation Institute in 1963 as engineer in automatic control. From the start of his career he has worked closely with the Russian Academy of Sciences Institutes in the areas of automatic control and management information systems. During 1960-70s he was credited with 13 registered inventions for control systems of nuclear power plants. He gained his PhD (1971) in automatic control in the Russian Academy of Sciences Institute for Control Sciences (RASICS). After 1972 he concentrated on the management of energy and building branches of the Soviet economy in institutes of the Ministry of Energy, USSR GosPlan, and International Institute for Management Sciences. He was awarded the Dr (Technology) Sciences degree in management information systems in the RASICS (1988).

Since the early 1990s he has collaborated with UK universities in areas of corporate and real estate management. During the last decade he was coordinator of a number of British-Russian projects in property valuation and investments, granted by RICS and UK Government bodies. The collaboration stimulated his academician activity. Between 1993-1996 he was a professor of the State Jewish Maimonid University and organized the 1st real estate graduates in Russia. Since 1997 he has been a professor of the Higher School of Economics and Privatisation & Business Academy (Moscow).

He is an author of more than hundred articles, monographs and reports, including the 1st Russian textbook for real estate management (2001, co-author - Richard Grover). Since 1996 he has been a visiting professor at Oxford Brookes University (Department of Real Estate Management) and takes part in joint researches and lecturing for the MSc Real Estate Management and Real Estate International.
In the review period ILM staff, visiting professors and visiting fellows have continued their prolific work in published output. This has included 30 refereed journal papers, books, chapters and reports as well as 32 conference papers. These are outlined in appendices A and B.

**LINKING RESEARCH AND TEACHING**

Linking research, learning and teaching has been a traditional strength of REC since the very beginning. The Department prides itself in its ability to maintain this tradition. This link is enhanced through the consolidation of its research activities under the OISD-ILM brand and the synergetic opportunities that it offers. This is again reflected in the teaching and practical relevance of much of our research efforts particularly in international market studies, sustainability and valuation related topics that continue to inform and update our teaching in both Batchelor and Masters programmes.

In this context the Department of and ILM look forward to working with the new Centre for Excellence in Teaching and Learning (CETL) in “Research as Learning: The Reinvention Centre for Undergraduate Research” which was launched in the School in September 2005.

**FOSTERING RESEARCH LINKS WITH THE INDUSTRY**

ILM research is closely linked to both real estate and construction industry as well as major international organisations such as the UN and World Bank. We have expanded our industry links through funded research work, development of joint proposals and direct involvement of industry partners in the research process. Prime examples of these have already been noted in:

- Funded research for the RICS and Shui On (major Hong Kong real estate development firm)
- Funded consultancy work for Cottsway Housing Association and Oxfordshire Rural Housing Partnership

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**VISITING FELLOWS**

Michael Mattingly has been engaged since 1977 in teaching, research and consultancy on urban land, urban planning, and urban management at the Development Planning Unit, University College London. This included capacity building assignments or research in more than a dozen countries of Africa, plus others in Asia, the Middle East, Latin America and Eastern Europe. For 13 years prior to taking up teaching and research, he practiced urban planning with governments and consultants in the USA, Uganda, Kenya, and the UK. Studies of rural-urban links and the peri-urban interface have been prominent in his recent activities, both as a researcher and as advisor to a DFID research fund. These have dealt with the potential of neo-customary urban land delivery systems to benefit low income households, as well as peri-urban production, livelihoods and poverty.
• Funded consultancy work for UNFAO and World Bank
• Involvement of Balfour Beatty and EC Harris in EPSRC funded research project on knowledge management in the construction industry
• Joint work being conducted with BRE on updating the Green Specifications

These activities put us in a strong position for consolidating our links with both national and international firms and professional institutions in the coming year.

DOCTORAL RESEARCH PROGRAMME

In the review period the ILM group expanded its Doctoral programme with addition of a new research student working on property led urban Development in China. In the review period we had 6 core and associated Mphil/PhD students. We also have offered new PhD places to a further 3 students who will commence their work in October 2006.

Here we renew our call to alumni and other interested parties to support our mission for fostering research through our PhD programme. The Department has been running an occasional Research Studentship since 1999. The studentship is for £8,000 per annum and covers the fees for the three-year PhD study period. Funding constraints, however, has limited our support to only one student per three-year study duration.

Please contact Peter Dent (prdent@brookes.ac.uk) or Ramin Keivani (rkeivani@brookes.ac.uk) to discuss your possible contribution and suggestions.

CURRENT PHD/MPHIL RESEARCH

Leyon Nanayakkara

Supervisors: Dr. Ramin Keivani,
Dr. Esra Kurul, Brian Wood
Research title: Impact of Site Plans on
Productivity in Public Sector
Construction Projects in Sri Lanka

Research title: Impact of site plans on productivity in public sector construction projects in Sri Lanka

The research aims, to investigate how productivity could be improved in the Sri Lankan public sector construction industry by using effective and efficient site plans.

The main objectives are:

• To review the theoretical basis of existing concepts relating to construction site productivity
• To ascertain, to what extent employers in the construction industry (CI) in Sri Lanka are aware of the supposed advantages of effective site plan (SP)
• To identify the perceived productivity benefits realised through the implementation of the above SP practices
• To ascertain if there are significant differences between site plans amongst developed countries and Sri Lanka
• To develop an empirically grounded framework for understanding the perceived relationship between site plan and site productivity of the Sri Lankan CI

This research contributes to a greater understanding of productivity, particularly in respect of SP, in the Sri Lankan CI. It develops a coherent framework for analysis that may be applied to similar studies in other developing countries, particularly in the Asian sub-region. In addition to the empirical evidence generated, this study will be of benefit to Sri Lankan policy makers in respect of facilitating a more effective and efficient CI, contractors and clients. Most previous studies looked at productivity by referring to factors such as employees’ motivation. However, in Sri Lanka no one has conducted productivity studies with special reference to effective SP within the CI. This study will thus fill a gap and also develop new research ideas in the area of construction management.

To achieve the above objectives the research propositions are as follows:

• The employers in Sri Lanka are aware of the supposed advantages of efficient SP in CI
• Construction SP in Sri Lanka is different to SP in developed countries
• Effective and efficient SP in Sri Lankan CI would contribute to improve their productivity
to one another by hooked joints. The members are very slender and are semi-rigidly connected. The erection of steel racks is very straight forward and easy. Thus, the main cost involved lies in the cost of the material itself.

The use of steel racking in the industry is growing. In order to make full use of the floor space, many types of racking have been introduced. Racking does not only vary in application but also in height. As of today, racking of as high as 26m has been built to fulfil the demand of such industry. Many researches have been carried out to study the static performance of these racking but few have been done to investigate collapse mechanisms. Although industry is reluctant to admit to collapses, a few major and minor collapses have been reported. These collapses have caused financial loss and even death. Thus it is important to study and find ways to rectify this problem.

This project will look into the mechanisms involved in the collapse of steel racking. Attention will be paid to the collapses initiated by the collision of forklift trucks. This usually happens at the bottom region of uprights ranging from around 0.4m to 1.0m from the ground. It is also believed that the damage is most likely done in system with wide aisles where conventional forklift trucks are expected to turn in order to access to the goods in the row. A model will be built by using the LUSAS software and the result will be calibrated by experiments. The model will be used to study collapse mechanisms. It is also the aim of this study to propose an alternative system, which could arrest the collapse. The solution should be one that is simple to apply and cost effective.

Xu Ye

Supervisors: Peter Dent, Prof. John Raftery, Prof. Paul McNamara
Research title: Risk Attitudes of Foreign Investors in Emerging Property Markets: A Case Study of Shanghai 1990 - 2005

Over the past decades, property has been widely accepted as an investment asset together with bond and shares. Investors have also noticed the diversification benefit of including property in their portfolios. Since risk lies at the very heart of capital investment decisions, there is a growing trend to measure the uncertainty of expected returns. Based on the portfolio theory introduced by Markowitz in the 1950s, researchers have developed several models, like CAPM and APT, to quantify risks related to investment in capital markets. These models are now treated as the cornerstones of modern finance and form the foundation for capital market theory.

Property markets have been influenced by the growth in the use of quantitative techniques in capital markets. Whilst the research in this area is still lagging behind work done in capital markets, even fewer studies have been carried out in emerging property markets. Therefore, the overall aim of the project is to examine how capital market theory performs in emerging property markets such as Shanghai. This involves an examination to identify to what extend it is relevant in such a market. The reasons for choosing Shanghai for investigation are not only because of the current rapid economy growth in the city, but also because a large amount of new capital is invested in the property sector every year. The study will critically review the development of capital market theory first, then its application to the Shanghai property market.

Adeline Ng Ling Ying

Supervisors: Dr. Rob Beale, Dr. Mike Godley
Research title: Dynamic Collapse of Steel Rack Structures

Steel racking has been widely used in the warehouse industry for storing goods. Unlike other conventional steel framing, this type of structure uses mainly cold-formed steel members which are attached

Lei Zhou

Supervisors: Dr. Ramin Keivani, Dr. Esra Kurul, Miles Keeping
Research title: Sustainable Private Finance Initiative

This research is going to investigate a modern public procurement system – the Private Finance Initiative, to identify how it could be an efficient tool for government to achieve sustainable development. PFI is a procurement mechanism by which the public sector contracts to purchase quality services on a long term basis so as to take advantage
of private sector management skills incentives by having private finance at risk. PFI is now an essential item of the government’s Public Private Partnership toolkit. At the UK level, 570 projects have been signed from 1997 to 2003, at a capital cost of £52 billion and expected to be worth about £25.5 billion within the next three years. In theory, PFI could offer a number of opportunities to deliver sustainability, for example, whole life costing as the core of Value for Money. The nature of long term contract provides clients a chance to set up the sustainable goals. Unitary payment mechanism and output performance stimulate contractors to innovate in more efficient design and management in the public estate. However, in practice, there is a lack of systematic framework to indicate the implementation of sustainability issues into PFI projects. Unawareness of the sustainability benefits and lack of decision making tools often cause avoiding sustainability in the PFI early stage.

This research aims to develop a sustainability framework for PFI procurement system and its practices. The aim will be achieved through the following objectives:

- To qualify the current sustainable performance level in PFI projects in the UK
- To identify the principles and issues in the sustainable PFI framework and evaluate its benefits and risks
- To design a sustainable PFI in order to assist the key stakeholders making decision in sustainability

The main research approaches employed are questionnaire survey and case study. Personal interview and Focus group study will be used as extra data collecting method for this research.

Austin Ngombe

Supervisors: Dr. Ramin Keivani,
Dr. Mike Stubbs

Research title: Privatisation of land rights and its implications on rural economies: the case of Zambia

The indisputable importance of land which is increasingly being realised the world over underpins the need for continued research in the complex and multidisciplinary field of land tenure administration. As noted in copious volumes of literature, land is the most important resource any nation can have. This is true especially for the rural economies whose livelihoods are anchored on (small scale) agriculture. To most rural communities, land is indeed everything; it is a source of wealth, a symbolic issue, a factor of production and as such, proper management of the resource is essential for a stable society, good governance, poverty alleviation, economic growth and, eventually, sustainable development. Gender inclusiveness in access to land is also evolving rapidly. Traditionally, women are disadvantaged in terms of access to land. Their access is mediated through relations with men and yet the women account for 80 – 90% of rural agricultural production.

In Zambia, 2/3 of the poor people live in rural areas. Of these, 88% live below the nationally-defined poverty line. For this reason, and in response to the global campaign for secure land tenure as championed for by, among others, the World Bank, DFID, UN Habitat, Agenda 21, the Zambian government in 1995 passed land policy that aimed at privatising customary land rights. The policy was enshrined in the Lands Act of 1995, which provided for conversion of customary into formal tenure. This was in line with the popular belief that customary tenure encumbers commercialisation and security of tenure, and is an obstacle to land market in that it does not promote mortgage finance. One of the anticipated benefits of the Act therefore, was an enhancement of the rural economy through increased private investment. Has the Zambia's rural economy improved following the enactment of the 1995 Lands Act? The research revolves around this thematic issue.

Aim

The aim of this research is to conduct a comprehensive analysis of the implications of government’s (land) policy interventions on rural economies of Zambia.

Objectives

- To analyse the structure of Zambia’s land tenure in general and indigenous/customary tenure in particular and identify key dimensions of rural economies
• To explore issues underpinning gender inclusiveness in land access
• To investigate the Zambian traditional institutions that promote gender exclusiveness in land access
• To assess the relationship (over time) between privatisation of customary land rights and levels of rural poverty/economy

Xu Yunqing

Supervisors: Dr. Ramin Keivani, Dr. Albert Cao
Research title: The property-led urban development in China’s transition to market economy

This research aims to study the current property-led urban development model in China in terms of sustainable growth objectives. It aims to propose appropriate reforms within the property industry for generating integral urban development based on efficiency, equity and sustainability. Urban (re)development has become an eye-catching issue in China and is shifting from being government-backed into privately funded and driven by property development fuelled by a prosperous property market since the mid 1990s. Moreover, under pressures of globalization and urban competition, the property-led urban development in Chinese cities has been increasingly extended to place promotion, image enhancement and function transformation through market-friendly policies in recent years. Property development could often alter the urban master plan and in some situations in fact precede urban plans. Resulting changes in urban governance, partnerships and urban development at such an unprecedented scale and speed are by all means profound but their impact has been scarcely explored. With rapid transformation of urban landscape and economic growth, problems in cities such as large scale loss of peripheral agricultural land, over building and chaotic development, negative impact on building conservation and environmental protection as well as social inequality and polarization has become increasingly severe and urgent.

The research goal is to be achieved through five objectives:
• To review academic literature on urban development and growth of real estate industry (property-led development model in particular) in UK and other countries
• To review Chinese urban growth and development of real estate industry under the mixed effects of legal, economic and social reform
• To discuss the recent problematic factors concerning the property-led urban development in Chinese cities and towns
• To illustrate these issues through case studies of 4 major cities
• To propose new models in the operation of the property industry and urban development, drawing from existing good practice inside and outside China

This study is expected to lead to a more sustainable development model for Chinese cities and a theoretical framework to evaluate development schemes and guide governmental policy-making at central and local levels.

PHD STUDIES COMMENCING OCTOBER 2006

Hassan Irtaza

Supervisors: Dr. Rob Beale, Dr. Mike Godley
Research title: Experimental and computational determination of wind loads on access scaffold.

Tubular steel scaffolding has been widely used in the building construction in UK. Scaffold structures are often slender and constructed of elements with semi-rigid connections. Many researches have been carried out to study the performance of scaffolds such as linear analysis, buckling analysis etc. However, scaffold failures regularly occur, often being attributed to wind action. The present study on the ‘Experimental and Computational Determination Wind Loads on Access Scaffold’ is being undertaken to quantify the effects of wind on scaffolds. It will require model scaffolds to be analysed computationally using CFD (computational fluid dynamics) followed by testing models in wind tunnels. The study will determine the pressure loads due to wind that real scaffolds are subjected to taking into account the influence of the building to which the scaffold is attached and the effects of different opening conditions. Limited research into wind loads
on scaffolds has been done in the past which lead to current codes being based upon the effects of wind loads on permanent structures. The objective of this research is to obtain revised wind load pressures for scaffolds for inclusion in new/revised design codes and to obtain an understanding of the influence of the attached structure on wind loads.

Mouaiad Al Omari

Supervisors: Mr. Peter Dent, Mr. Richard Grover
Research title: Land administration and land management in the Middle East Region: reliable and unreliable land valuation systems and their effects – the case of Jordan

The role of formal real estate markets in the process of economic development in developing countries not exactly understood. The researcher thinks that the lack of understanding is main result of the absence of reliable information on real estate values.

This research aims to investigate the advantages and disadvantages of implementing land valuation system (LVS) in situations in which values can be unreliable, and how they affect land administration and land management in developing countries especially in Jordan.

The main objectives of this research:
1. To find out the opportunities and constraints of reliable and unreliable land valuation systems in relation to land administration and land management.
2. To review the theoretical basis of the existing land valuation concepts.
3. To ascertain to what extent land valuers and decision makers in Jordan are aware of the supposed advantages of implementing reliable land valuation system.
4. To find out if there are significant similarities LVS in developed countries and Jordan.
5. To develop a basis framework for understanding the relationship between reliable LVS and economic development.

This research is intended to develop a coherent framework for analysis that may be applied to similar studies in other developing countries, particularly in the Middle East region. In addition to the hypothesised advantages of implementing a reliable land valuation system, this study will be of benefit to Jordanian policy makers in respect of understanding the importance of land administration and land management education and facilitating having real estate academic education as one of the main studies in the technical universities curriculum.

In Jordan, no one has raised the question of economic development studies with special reference to reliable land valuation systems. This study will fill a gap and open the door for new research ideas in the area of land administration and land management.

Alex Anane-Darko

Supervisors: Dr. Ramin Keivani, Dr. Esra Kurul
Research title: An intelligent 4D CAD simulation for best practice decomposed workspace arrangement of smaller unit construction activities

The development and application of new concepts and computer technology in construction industry is increasing rapidly. This development has enhanced the understanding and control of construction site activities. In the past these have been predominantly designed at the conception stage and accomplished based on intuitive guidance. A framework based on best practice, therefore, is essential for promoting standard practice of construction activities. The provision and practice of modelling construction activities in the 4D view is rarely applicable in all major projects because of the technical skill required, even though good planning of site and working space arrangement are important to successful project accomplishment. It is on this basis that best practice working space arrangement of construction project activities is urgently needed.

The main objectives of this research is to review previous and state-of-the art 4D CAD simulation and visualisation systems applied to construction site planning and activities and to develop general guidelines for best practise knowledge framework for smaller-unit working space arrangement utilisation. It will further develop, maintain, implement DBMS for analysing and simulating best practise and visualise in 4D CAD view.
This thesis is the result of four years' intensive study of office investment markets in South-East Asia. The research topic stemmed from the rapid progress in office markets in the region during the early 1990s, and the upheaval resulting from the institutional problems of 1997. Most of the past research on the determinants of office investment markets has concentrated on European and North America cities. South-East Asia and its cities have largely been ignored. The few studies that have been conducted rely mainly on econometric modelling. However, opportunities in the user and investor office markets are influenced by non-econometric factors such as the nature and evolution of the markets and their institutional environment, but these have largely been ignored in previous studies. This research examines office markets by combining a demand and supply econometric framework and institutional analysis.

The thesis begins with a presentation of the relevant literature and a critical examination of this branch of knowledge: including a review of forecasting and institutional studies. Subsequently the drivers of office investment markets are investigated using both quantitative and qualitative methods. Five South-East Asian prime office markets are used as case studies: Singapore, Hong Kong, Taipei, Kuala Lumpur and Bangkok. This research initially assesses the maturity of office markets in each city. A time-series multiple regression analysis is then carried out, using office rental data and macroeconomic data to identify the relationship between office rental values and macroeconomic variables in the five cities. The results of a questionnaire survey and face-to-face interviews are then presented, which were conducted with property researchers in the region, and from these, the institutional factors which have an impact on office investment market performance are identified.

The study concludes that the performance of office investment markets (office rental values) can be modelled using macroeconomic factors in the cases of mature cities, such as Singapore and Hong Kong. However, office investment market performance can only partly be explained by macroeconomic factors in emergent markets (Kuala Lumpur, Taipei and Bangkok).

The results of the econometric analysis show that demand side variables are the main drivers for office investment market performance in South-East Asian cities. Institutional factors also have an impact on office investment market performance. This research shows that legal and economic institutional factors and political stability are considered to have the most influence on office investment market performance in South-East Asian cities, especially in Kuala Lumpur, Taipei, and Bangkok (emergent markets), though the effects cannot be quantified in modelling studies. As regards Singapore and Hong Kong (both mature markets), econometric modelling results perform reasonably well, and institutional factors have little influence on office investment market performance in those cities.

Wei received the 2004 ARES prize for International Real Estate Investment/Portfolio Management for his PhD based paper “The Determinants of the Office Investment Market in Southeast Asian Cities: The cases of Hong Kong, Singapore, Taipei, Kuala Lumpur and Bangkok.”

Sally Sims

Supervisors: Mr. Peter Dent, Dr. Mike Stubbs, Prof. Anthony Lavers

Research title: The Impact of High Voltage Overhead Transmission Lines (HVOTLs) on the Value of Residential Property in the UK

This thesis investigates the impact of electricity distribution equipment on the value of residential units in the UK and adopts a multimethod approach towards data gathering, using both qualitative
and quantitative research paradigms. Buyers’ and valuers’ perceptions of the impact of a HVOTL on value are obtained using postal surveys and interviews. Additional information is gathered from the electricity utilities, residential developers and government planning departments.

Using a case study a hedonic pricing methodology (to enable the relationship between a HVOTL and house price to be explored), selling price data and asking price data from three locations were gathered and analysed. Regression analysis established that a HVOTL near a residential unit does have an impact on house price, although this impact is not always negative.

The results from three case studies, the opinion surveys and the interviews are compared, indicating that opinion surveys may result in an underestimation of the impact of a HVOTL on selling price and, by contrast, appraisers may overestimate the negative impact of HVOTLs on asking price when marketing a house. The results suggest reliance on one method may prove misleading and therefore the use of a multimethod approach towards data collection may improve the reliability of findings.

CONCLUDING REMARKS

The ILM research group has had major successes during the year ending July 2006. We have secured major funding from European Investment Bank, RICS and the industry and supported our staff to undertake high quality and innovative research in important areas of work to both the industry and academic community. We are pioneers and recognised authorities in sustainability research in real estate covering a wide range of topical issues of increasing concern to the industry. In addition the international dimension of our work has put us at the forefront of research and consultancy services in the urban development and real estate markets in transition and developing economies.

We are proactive in maintaining this momentum. We rely on the dedication of our existing staff and are recruiting prominent and high quality new staff to consolidate and widen our range of expertise and develop new research horizons. We look forward to challenges ahead with a track record of cutting edge research and high quality consultancy services.

APPENDICES

A. Review Period New Publications


B. Review Period Conference presentations


