

# **Business School**

# **CAER Annual Report 2015**

**Never Stand Still** 

**Business School** 

Centre for Applied Economic Research

# Centre for Applied Economic Research (CAER)

**Annual Report 2015** 



# **Table of Content**

1.	Centre f	or Applied Economic Research (CAER) – key facts  Presiding faculty	<b>03</b>
	1.2	Schools, centres, faculties and other organizations with which CAER interacts	03
	1.3	Governance and management of CAER	04
	1.4	CAER's research initiatives and their members in 2015	04
	1.5	CAER's administrative staff in 2015	05
	1.6	CAER's mission, objectives and history	06
2.	CAER's	performance in relation to its identified objectives	07
3.	CAER's	planning for the coming year 2016	14
4.		ent of financial performance certified by the UNSW Business School's Manager for the year ended 31 December 2015	16
5.	Details	of research grants and projects associated with CAER during 2015	19
6.		ent of in-kind contributions, cash contributions, infrastructure and other es provided to CAER during 2015	20
	6.1	In-kind contributions	20
	6.2	Cash contributions	21
	6.3	Infrastructure and other resources provided to CAER	21
7.		of publications, professional engagements and scholarly achievements ted with CAER during 2015	22
	7.1	CAER Journal Publication - The Economic and Labour Relations Review	22
	7.2	Research output of CAER members	22
	7.3	Professional engagements and scholarly achievements of CAER members	24
8.	Details	of CAER's engagement with the academia, government, industry	
	and bro	ader community	27
	8.1	Conferences, workshops and special events	27
	8.2	Visitors	28
	8.3	Academic, industry and government engagements	29
	8.4	Media engagement	31
9.		of research supervision and teaching activities carried out by nembers on behalf of academic units	35
	9.1	Research supervision	35
	9.2	Teaching activities	35
10.	Details	of significant managerial or personnel changes during 2015	37
11	A recer	d of dates and attendance at meetings of CAFR's Steering Committee	38

# 1. Centre for Applied Economic Research (CAER) - key facts

# 1.1 Presiding faculty

**UNSW Business School** 

# 1.2 Schools, centres, faculties and other organizations with which CAER interacts

CAER has significant linkages with the academia, industry and government. The following table summarizes the schools, centres, faculties and other organizations with which CAER interacted during 2015. The nature of the interactions is also indicated. Further descriptions of the interactions are provided in the sections to follow of this report.

Entity	Nature of interaction
Within UNSW	
School of Economics, UNSW Business School	On-going engagement; CAER's management, majority of CAER members, and part of the Steering Committee members are academics at the school; Collaboration and coordination of teaching and research supervision activities; Provision of in kind facilities.
School of Banking and Finance, UNSW Business School	On-going engagement with the Real Estate Initiative; Part of CAER members and the Steering Committee members are academics at the school; Collaboration and coordination of teaching activities.
School of Taxation and Business Law, UNSW Business School	Engagement with the Real Estate Initiative and coordination of teaching activities.
UNSW Law	On-going engagement with the Law and Economics Initiative; Part of CAER members and the Steering Committee members are located at the school; Coordination of research supervision activities.
UNSW Built Environment	Engagement with the Real Estate Initiative and coordination of teaching activities.
UNSW Real Estate Student Society	On-going engagement with the Real Estate Initiative.
Outside UNSW	
Australian Bureau of Statistics	On-going engagement with the Economic Measurement Initiative.
Department of Communications, Australia	On-going engagement with the Economic Measurement Initiative.
The Treasury (Canberra)	On-going engagement with the Economic Measurement Initiative and the Real Estate Initiative.
OECD	On-going engagement with the Economic Measurement Initiative.
Statistics Netherlands	On-going engagement with the Economic Measurement Initiative and the Real Estate Initiative.
RF Capital	On-going engagement with the Real Estate Initiative; Industry partner on joint Australian Research Council Linkage Grant.

Entity	Nature of interaction
Outside UNSW - Cont.	
CorVal Partners Limited	Industry partner on joint Australian Research Council Linkage Grant with the Real Estate Initiative.
Property Council of Australia	On-going engagement with the Real Estate Initiative.
The Urban Taskforce Australia	On-going engagement with the Real Estate Initiative.
Paul Milstein Center for Real Estate, Columbia Business School	On-going engagement with the Real Estate Initiative.
The Samuel Zell and Robert Lurie Real Estate Center, the Wharton School	On-going engagement with the Real Estate Initiative.
The NUS Institute of Real Estate Studies (Singapore)	On-going engagement with the Real Estate Initiative.
Herbert Smith Freehills law firm (Sydney)	On-going engagement with the Law and Economics Initiative; Key donor of the Law and Economics Initiative.
Academy of the Social Sciences in Australia (ASSA)	On-going engagement; Co-organization of the roundtable event on "Big Data in the Social Sciences" in September 2015 and Professor Holden's dinner event in August 2015.

# 1.3 Governance and management of CAER

#### Director

Professor Kevin Fox, School of Economics, UNSW

#### **Deputy Director**

Associate Professor Peter Kriesler, School of Economics, UNSW

## **Steering Committee**

Professor James Morley (Associate Dean Research, UNSW Business School) – Chair Professor Kevin Fox (Director, CAER)

Associate Professor Jerry Parwada (Head, School of Banking and Finance)

Mr Tim Harcourt (J.W. Nevile Fellow in Economics)

Ms Fei Wong (General Manager, UNSW Law)

#### 1.4 CAER's research initiatives and their members in 2015

As part of CAER's strategic planning activity in 2015, the Director and the Steering Committee have decided that CAER should move away from its Research Group model and that it should be restructured on an Initiative-based model. Consequently, and in coordination with the respective group members, the Economic History and History of Economic Thought Group and the Health Economics Group were disentangled from CAER; the Economic Measurement Group, the Real Estate Initiative Group and the Law and Economics Initiative Group were to stay within CAER and to be renamed as initiatives. CAER would like to acknowledge the excellent work of the Economic History and History of Economic Thought Group and the Health Economics Group and to thank them for the past collaboration.

From 2015 CAER's research activities are carried out through its research initiatives where each initiative focuses on a specialised research area. The following is a list of CAER's research initiatives and their members during 2015. The research agenda of each initiative is described in section 2 of this report.

#### **Economic Measurement Initiative 2015**

Professor Kevin Fox - School of Economics, UNSW

Professor Erwin Diewert - School of Economics, UNSW and Vancouver School of Economics, the University of British Columbia

Associate Professor Glenn Otto - School of Economics, UNSW

Zoran Peroski - PhD student, School of Economics, UNSW

#### **Real Estate Initiative 2015**

# Research team

Professor Kevin Fox - School of Economics, UNSW

Professor Erwin Diewert - School of Economics, UNSW and Vancouver School of Economics, the University of British Columbia

Associate Professor Glenn Otto - School of Economics, UNSW

Dr Mariano Kulish - School of Economics, UNSW

Dr Maggie Hu - School of Banking and Finance, UNSW

Dr Nigel Stapledon - Andrew Roberts Fellow in Real Estate, CAER

Dr Igbal Syed - Senior Research Associate, CAER

Dr Amani Elnasri - Postdoctoral Research Fellow, CAER

#### Research affiliates

Mr Andrew Roberts - UNSW alumnus and key founder of the Real Estate Initiative

Mr Luan Ferreira - Quantitative Researcher, RF Capital

Dr Christian Contino - Quantitative Analyst, RF Capital

Professor Richard Holden - School of Economics, UNSW

Dr Minxian Yang - School of Economics, UNSW

Dr Christopher Gibbs - School of Economics, UNSW

Dr Nalini Prasad - School of Economics, UNSW

Dr Xiangling Liu - Research Fellow, CEPAR

Dr Shanaka Herath - Research Associate, City Futures Research Centre, UNSW Built Environment

Professor Jan de Haan - Delft University of Technology and Statistics Netherlands

#### Herbert Smith Freehills Initiative on Law and Economics 2015

Professor Richard Holden, Initiative Director - School of Economics, UNSW

Professor Rosalind Dixon, Initiative Deputy Director - UNSW Law

#### 1.5 CAER's administrative staff in 2015

In 2015 Carmit Schwartz was working as a part-time Centre Coordinator of CAER and Oded Shrier was working as a part-time Research Officer. They were hired to assist CAER's Director in the administration of the Centre and in coordinating the research activities of CAER's initiatives. Both positions were funded by CAER.

Administrative support was also provided by the UNSW Business School, mainly consisting of HR, IT, finance and marketing support.

<sup>&</sup>lt;sup>1</sup> Hereafter: Law and Economics Initiative.

#### 1.6 CAER's mission, objectives and history

#### Mission

CAER's principal mission is to undertake, support and advance applied economic research in established or emerging areas of high research priority so as to deliver benefits to the academic and broader communities, both within Australia and world-wide. In achieving its mission CAER may also play a role, where appropriate, in developing and advancing educational activities. CAER's research activities are carried out through its research initiatives where each initiative focuses on a specialised research area. In selecting its research initiatives and agenda CAER gives great emphasis on interdisciplinary and multidisciplinary research, thus complementing and exceeding the research activities and outcomes that can be achieved by individual schools and faculties. It also ensures that its research activities align with the strategic goals and priorities of UNSW.

#### **Objectives**

In pursuing it mission CAER has the following strategic objectives:

- ➤ Carry out, encourage and enhance applied economic research with an interdisciplinary and multidisciplinary focus that addresses current policy issues both within Australia and globally.
- > Encourage and support collaborative research across schools and faculties both at the national and the international level.
- > Support and facilitate research training and career opportunities for outstanding Australian and international students and researchers.
- Build and enhance UNSW research capacity and outcomes through stimulating network opportunities and exposure to cutting-edge research.
- Raise the profile, around Australian and internationally, of applied economic research at UNSW.

#### **History**

Founded in 1976 CAER is one of the oldest centres in the University and the first centre to be established in the former Faculty of Commerce and Economics (now the UNSW Business School). CAER's primary emphasis is on applied economic research relevant to policy issues. For more than thirty years a significant body of such research has been carried out and the results published in academic journals, books and the Centre's own publications. CAER's work is valued by its internal and external stakeholders and its years of built up impact have contributed to its brand name achieving a high level of external recognition. CAER is proud of its contribution to UNSW and the broader community. It remains relevant, having changed with times, and continues to attract top class international visitors, research funding and research collaborations.

# 2. CAER's performance in relation to its identified objectives

The following is a summary of CAER's performance in relation to its identified objectives during 2015. A detailed description of CAER's operations in 2015 is provided in the following sections of this report.

Earry out, encourage and enhance applied economic research with an interdisciplinary and multidisciplinary focus that addresses current policy issues both within Australia and globally.

In 2015 CAER's research activities were carried out and advanced through the following research initiatives:

#### **Economic Measurement Initiative**

The appropriate measurement of economic variables is of high importance as data of economic variables is used by a wide range of researchers and policy decision makers, spanning the social sciences, humanities and the physical sciences. Therefore, the research undertaken by the Economic Measurement Initiative is dedicated to improving measurement techniques of economic variables to more accurately reveal empirical facts. To achieve its aim the initiative applies advanced and innovative tools from economic theory, econometrics, aggregation theory, experimental economics, mathematics, and statistics. The initiative research areas include: performance measurement, inflation measurement, index number theory, functional form specification and measurement issues in international comparisons.

#### **Real Estate Initiative**

With the encouragement and financial support of UNSW alumnus, Mr. Andrew Roberts, the Real Estate Initiative was established in 2012 under the umbrella of CAER within the UNSW Business School. It is a multi-disciplinary initiative, with collaboration between CAER, UNSW Business School and UNSW Built Environment. As the real estate sector represents a substantial share of the capital assets and savings of businesses and households in the economy and is a major influence on the performance of the economy, the Real Estate Initiative was established to develop a research program to explore real estate-related issues from multidisciplinary perspectives and also to develop education programs to boost skills in the sector. The research areas of the initiative include both the residential and the commercial property sectors. Within the residential property sector, the initiative's research topics include: measurement of market disequilibrium, housing affordability and government policy, housing supply and housing bubbles. Within the commercial property sector, the initiative's research topics include: market regulations, commercial property and credit creation, and the construction of price indexes for the commercial property sector while incorporating depreciation and quality change adjustments.

#### Law and Economics Initiative

The Herbert Smith Freehills Initiative on Law and Economics is a collaboration between CAER, UNSW Business School, UNSW Law and the Herbert Smith Freehills law firm (Sydney). Its main goals are to help establish law and economics in the Australian academia, begin a dialogue with practitioners about developments in the field and developments in practice, and to establish UNSW as a key leader in the field. The research of the initiative aims to analyse and understand law and legal institutions from economic perspectives rather than the legal realistic tradition. This is achieved by applying the latest developments in the field of economics, including the incorporation of tools from labour economics and the insights of information and behavioural economics on the limits of neo-classical economic models.

CAER's diverse research activities clearly indicate its role in leading research that crosses discipline boundaries, and as such it adds great value to UNSW research capabilities, supports UNSW's research strength "Law, Business and Economics", and significantly contributes to promoting the UNSW research brand.

Encourage and support collaborative research across schools and faculties both at the national and the international level.

CAER's collaborative research during 2015 is demonstrated by its following undertakings:

- In 2015 the Real Estate Initiative continued its work on the research project: "The Economic Measurement of Property Markets: Prices, Bubbles, Economic Growth and Productivity". This project is part of an Australian Research Council Linkage Grant which involves collaboration between the Real Estate Initiative and property investor RF Capital together with its associate property fund manager and investor CorVal Partners Limited. The research project builds on both firms' research capacity on property markets, including their data availability and industry expertise.
- In 2015 CAER supported domestic and international collaboration and stimulated its research activities by hosting thirteen distinguished visitors.
- As a research centre, CAER's collaborative activities are mainly concentrated on research. However, CAER also undertakes educational collaborative activities where they are deemed appropriate in achieving its mission. In 2015 Dr Nigel Stapledon and Dr Maggie Hu, both members of the Real Estate Initiative, delivered two of the courses offered as part of the UNSW Business School's Real Estate major. In addition, Professor Kevin Fox developed and delivered a short training course for the Australian Bureau of Statistics (ABS) staff in June 2015 as part of the Economic Measurement Initiative activities.
- > Support and facilitate research training and career opportunities for outstanding Australian and international students and researchers.

During 2015 CAER members have supervised two Honours students and five PhD students. CAER employed Dr Igbal Syed as a Senior Research Associate and Dr Amani Elnasri as a Postdoctoral Research Fellow. Five early career academics (Dr Maggie Hu, Dr Christopher Gibbs, Dr Nalini Prasad, Dr Xiangling Liu and Dr Shanaka Herath) participated in the research activities of CAER's Real Estate Initiative. CAER's support and mentoring of UNSW postgraduate students and early career researchers in 2015 was further enhanced by hosting international visitors and organizing workshops and events. CAER not only encouraged the involvement of UNSW postgraduate students and early career researchers in these visits and events, but it also ensured that they receive the opportunity to formally present their work and to be actively engaged. In particular, UNSW early career academics: Dr Maggie Hu, Dr Chris Gibbs and Dr Nalini Prasad, participated as a speaker, discussion leader and chair respectively, at CAER's inaugural annual Real Estate Symposium. Moreover, UNSW early career academic, Dr Amani Elnasri, and UNSW Honours student, Cameron Dark, presented their latest research work at CAER's EMG Workshop, Lastly, the Real Estate Initiative continued to support the UNSW Real Estate Student Society in its activities by encouraging engagements with outstanding academics in the field and by offering guidance in the organization of industry events.

> <u>Build and enhance UNSW research capacity and outcomes through stimulating network</u> opportunities and exposure to cutting-edge research.

CAER's commitment to building and enhancing UNSW research capacity and outcomes is shown by the following activities undertaken in 2015:

#### **Visitors**

In 2015 CAER supported domestic and international collaboration by hosting thirteen visitors. These visits of distinguished and internationally–recognized visitors assist stimulating CAER's research activities and provide staff and students the possibility of interactions with leading researchers in diverse areas of investigation. Among other activities, these visits usually involve a formal presentation given by the visitor.

# Conferences, workshops and special events

In 2015 CAER organized the EMG Workshop as part of its objective of helping academics and students become leading and internationally-recognised researchers. The workshop typically involves academics from overseas and around Australia, and representatives from the public and private sectors. The success of the workshop has led it to become a regular and well-attended event of international standing.

In addition, CAER hosted its inaugural annual Real Estate Symposium in September 2015. The Symposium aims to gather academics, industry researchers, and government policy makers to discuss real estate related issues and their implications on policy. The Symposium opened with a keynote address by Dr Luci Ellis, head of financial stability of the Reserve Bank of Australia, and featured a mixture of both academic and industry speakers, chairs and discussion leaders. The Symposium was a showcase of some of the latest research into Australian real estate and it attracted significant coverage in both national and international media. The success of this first Symposium will no doubt lead this to become a regular, well-attended event and it demonstrates CAER's on-going role in fostering new engagements relevant for a wide range of sectors.

Lastly, CAER, together with the Academy of the Social Sciences in Australia (ASSA), organized a policy roundtable event on "Big Data in the Social Sciences" in 2015. The event was a small by-invitation assembly of key policy makers, managers and thinkers including senior Big Data users, research users, and data providers. They gathered to discuss the challenges and opportunities of Big Data from a number of disciplinary perspectives, including law, health, sociology, ethics and economics. Event such as this provide a stimulus to research at UNSW and great exposure to recent developments in an area of high research priority.

#### Academic, industry and government engagements

In 2015 CAER continued to foster and expand its linkages with the broader academic community, industry and the public sector:

#### Academic engagements

- Professor Kevin Fox visited the Paul Milstein Real Estate Center (Columbia Business School, New York) in May 2015 and had extensive discussions with Columbia Business School academics and staff on data accessibility and research collaboration between the Real Estate Initiative and the Paul Milstein Real Estate Center. As a result of these discussions, Professor Kevin Fox was invited to become a Senior Research Fellow at the Paul Milstein Real Estate Center.
- Professor Kevin Fox visited the NUS Institute of Real Estate Studies (Singapore) in October 2015 and held discussions with its academics staff on possible future research collaboration and engagements.
- In July 2015 Professor Richard Holden gave a research seminar at the City Futures Research Centre, UNSW Built Environment on "Negative gearing and the Australian residential property market".

#### Industry engagements

- Following the first meeting with Mr. Ken Morrison, CEO of Property Council of Australia (PCA), in November 2014, Professor Kevin Fox and Mr. Andrew Roberts made a presentation on the Real Estate Initiative to the PCA Board at their meeting in Canberra in May 2015. Subsequently, Professor Kevin Fox and Dr Nigel Stapledon met with Kathy Mac Dermott (COO, PCA), John Nguyen (Research Manager, PCA) and Kelly Jones (Academy Manager, PCA) in July 2015 to discuss the PCA's research and academy work and how the PCA can collaborate with the Real Estate Initiative.
- To further engagement with the real estate industry, Professor Kevin Fox held meetings in 2015 with Mark Baillie (Deputy Chairman, Folkestone Limited), Andrew Boyarsky (CEO, Anka Property Group), David Tanevski (Urban Taskforce and KWC Partners), Andrew Cooper (National Head of Operations, Leighton Properties), Angus Raine (CEO, Raine & Horne), Andrew Roberts (Principal, RF Capital), Miriam George (Graduate Program Manager, Stockland) and David Rees (Regional Director & Head of Research Australasia, JLL). In these meetings Professor Fox provided information on the Real Estate Initiative's up-to-date progress and activities. The response from industry was very positive. Many showed interest in offering internships to students who undertake the UNSW real estate major, sponsoring PhD scholarships, and being involved with the Real Estate Initiative's activities (e.g., giving guest lectures and presenting at UNSW Real Estate Student Society's events).
- As part of the Real Estate Initiative's Australian Research Council Linkage project (2014-2017) on "The Economic Measurement of Property Markets: Prices, Bubbles, Economic Growth and Productivity", the Real Estate Initiative held monthly research meetings during 2015 with the active participation of the Real Estate Initiative research team, the industry partner (RF Capital) researchers and the Real Estate linitative research affiliates. In addition, the Real Estate Initiative made three research presentations at the offices of RF Capital and RF Capital researchers (Luan Ferreira and Christian Contino) presented their work at the first Real Estate Symposium hosted by the Real Estate Initiative in September 2015.
- In October 2015 a Memorandum of Understanding (MOU) was signed between the Urban Taskforce and the Real Estate initiative. The MOU formalised both sides' commitment to collaborate around research, education, and industry and policy engagement in the field of real estate. The MOU is a great achievement of CAER and it demonstrates both its success in developing linkages with industry and its capacity of increasing industry collaboration opportunities in the future.
- The Property Council of Australia has called for a new framework that tackles housing affordability through supply side reforms and that rewards the States for improved performance. The Property Council of Australia is leading this work with the assistance of Deloitte Access Economics. As the first step in this work, the Property Council of Australia and Deloitte Access Economics gathered the nation's leading economic thinkers and policy makers in a workshop to discuss what can be done to improve housing supply and the efficiency of urban land use. Professor Kevin Fox was invited to participate in this workshop which was held on 16th December, 2015 at Deloitte's offices in the CBD. The workshop featured prominent leaders in this area, such as Professor Fred Hilmer and Mr Ian Harper.
- As part of its teaching program the Real Estate initiative hosted Bryan Reid (MSCI) as a guest lecture in Professor Kevin Fox's ECON4309/6309 Economic Measurement course in the second semester 2015. In his lecture Bryan discussed the methodologies employed by MSCI in producing real estate related regional and global indexes, benchmarks, performance modelling, data metrics and risk analytics.

- Professor Richard Holden was commissioned by the McKell Institute to write a report on "Switching Gears: Reforming negative gearing to solve our housing affordability crisis" in June 2015. The report was subsequently adopted as a policy of the Australian Labour Party.
- The Real Estate Initiative held two Real Estate Forum events in 2015 at UNSW CBD Campus. The Real Estate Forum event is a small by-invitation assembly of leaders in the real estate industry. Through the Forum, the Real Estate Initiative aims to provide interactions with distinguished, thought-leading academics, as well as develop connections with experienced industry leaders who will support its activities with their deep expertise and knowledge:
  - Christopher Mayer, the Paul Milstein Professor of Real Estate of Columbia Business School, was invited to speak at the second forum of the series. Industry analysis on Professor Mayer's presentation was provided by Dr Frank Gelber, Director and Chief Economist of BIS Shrapnel. The two presentations were then followed by a roundtable discussion, and Mr Adrian Williams, Head of Property Finance for AMP Capital, provided the concluding remarks for the event.
  - Joe Gyourko, Martin Bucksbaum Professor of Real Estate and Director of the Zell-Lurie Real Estate Center of the Wharton School, was invited to speak at the third forum of the series. David Harrison, Joint Managing Director of Charter Hall Group, chaired the roundtable discussion that followed with Campbell Hanan, Chief Executive Officer of Investa Office, and Andrew Cooper, National Head of Operations of Leighton Properties, as discussion leaders. Concluding the Forum, Justin Jefferies, Chief Operating Officer of Knight Frank Australia, provided the closing remarks.

#### Government engagements

- In September 2015 Professor Kevin Fox was invited to visit The Treasury (Canberra) and to
  provide his advice and expertise on productivity drives and trends, housing affordability and
  innovation policy to its staff. He also made a presentation on "Prospects and Policies for
  Innovation and Productivity Growth".
- In 2015 Professor Kevin Fox provided contracted expert opinion on "IT use and Australia's productivity: Growth accounting" for the Bureau of Communications Research.
- During 2015 Professor Kevin Fox was a member of the Australian Bureau of Statistics Methodology Advisory Committee and of the Australian Bureau of Statistics Productivity Measurement Reference Group.
- Dr Nigel Stapledon made a submission to the House of Representative Economic Committee entitled "Inquiry into Home Ownership" in July 2015.
- > Raise the profile, around Australian and internationally, of applied economic research at UNSW.

In 2015 CAER continued to create impact through the following activities:

# **Publications**

To enhance the profile of UNSW's high-impact research and researchers CAER publishes and communicates its research achievements in journals and outlets of the highest standing internationally. In 2015 members of CAER published one book chapter, fourteen articles in highly regarded international refereed journals and four discussion papers. They also edited one book, made one submission to the House of Representative Economic Committee and wrote one commissioned report for the McKell Institute which was subsequently adopted as a policy of the Australian Labour Party.

#### Conferences, workshops and special events

In 2015 CAER organized the EMG Workshop, the ASSA-CAER Roundtable event on "Big Data in the Social Sciences", and the UNSW Business School inaugural annual Real Estate Symposium. Events such as these raise the profile of applied economic research at UNSW in the broader community and strengthen CAER's position as a leading research centre in the region.

To further develop UNSW reputation in the area of real estate, the Real Estate Initiative organized two Real Estate Forum events consisting of a small by-invitation assembly of leaders in the real estate industry. The Forum event in February featured Christopher Mayer, the Paul Milstein Professor of Real Estate of Columbia Business School, as the key academic speaker and Dr Frank Gelber, Director and Chief Economist of BIS Shrapnel, as the key industry speaker. The Forum event in June featured Joe Gyourko, Martin Bucksbaum Professor of Real Estate and Director of the Zell-Lurie Real Estate Center of the Wharton School, as a key speaker and three Forum discussion leaders: David Harrison (Joint Managing Director of Charter Hall Group) – chair, Campbell Hanan (Chief Executive Officer of Investa Office) and Andrew Cooper (National Head of Operations of Leighton Properties).

To celebrate the great achievement of Professor Richard Holden winning for the second time in succession the Academy of the Social Sciences in Australia (ASSA) Panel B award for Early Career Research, CAER in conjunction with the ASSA organized a dinner event in August 2015. At this gathering of ASSA Fellows, Professor Holden gave a brilliantly clear and concise summary of his work on network capital.

#### Professional engagements and scholarly achievements

The professional engagements and scholarly achievements attained by CAER members in 2015 further contributed to its community impact. In particular,

- Professor Kevin Fox was elected as a member of the Policy and Advocacy Committee and as a member of the Panel B Committee, both of the Academy of the Social Sciences in Australia.
- Professor Kevin Fox was an invited participant at the ASSA Roundtable on "A Trusted Access Model" hosted by the Australian Bureau of Statistics (ABS) and the Department of Social Services (DSS).
- Professor Kevin Fox was an invited participant at the 2015 UN-sponsored International Working Group on Price Indices ("Ottawa Group") Workshop. Professor Fox was also invited to chair the Property Price Indexes session and to write a summary of the session for reporting to the United Nations.
- Professor Kevin Fox was an invited speaker at the IARIW-OECD Conference on "W(h)ither the SNA?".
- Professor Kevin Fox was a member of the Organizing Steering Committee and an invited participant at the ASSA/AURIN Workshop on Researchers Access to Microdata.
- Professor Kevin Fox was an invited participant at the workshop on improvements of housing supply and the efficiency of urban land use, organized by the Property Council of Australia and Deloitte Access Economics.
- Dr Nigel Stapledon was an invited moderator at the Economics Panel on Decision-making in an Evolving Economy, Australia Finance Conference (AUSFIC).
- Dr Nigel Stapledon was an invited speaker at the 'Urban Conversation' on Housing Affordability, an event hosted by the Dean of UNSW Built Environment, Professor Alec Tzannes AM.

- Dr Maggie Hu was an invited speaker and discussant at the Australasian Finance and Banking Conference (AFBC), at the SIRCA Fifth Young Researcher's Workshop, at the Financial Management Association Conference (FMA), and at the Eastern Financial Association Conference.
- Professor Richard Holden was an invited speaker at the Nation Bureau of Economic Research (NBER) Organizational Economics meetings, Massachusetts Institute of Technology, University of Melbourne and Harvard University.
- Professor Rosalind Dixon was an invited speaker at Boston College, University of Melbourne and the University of Toronto.
- Professor Erwin Diewert was elected as a Fellow of the Academy of the Social Sciences in Australia.
- Professor Kevin Fox was elected as a member of the Australasian Standing Committee of the Econometric Society.
- Professor Kevin Fox has accepted the invitation to become an Associate of the New Zealand Productivity Research Centre (NZPRC) at the University of Waikato.
- Professor Kevin Fox has accepted the invitation to become a Fellow of the "Economics and Science Group", a group supported by Sir John Beddington and headed by Professor Tom Kompas (ANU) and Professor Quentin Grafton (ANU).
- Professor Richard Holden won for the second time in succession the Academy of the Social Sciences in Australia (ASSA) Panel B award for Early Career Research.
- Dr Maggie Hu received the Best Paper Award (Third Level) at the Annual Asian Real Estate Society Conference (Washington DC, US) on her co-authored (Adrian Lee) paper: "Cultural Distance and Housing Prices: Evidence from the Australian Housing Market".

It is evident that CAER's work is valued by external stakeholders and its brand name has achieved a significant level of recognition.

## Media engagement

To raise the profile of CAER at UNSW, members of CAER's research initiatives were actively engaged with the media and were extensively interviewed on various topical issues during 2015. In addition to Professor Holden's on-going media engagement on SkyNews Australia and with the Australian Financial Review, there were forty five media engagements during the year (double than the previous year!) with media engagements taking place every month. One media engagement was a contribution to 'Business Think', UNSW Business School's online business journal.

In summary, CAER delivers its stated mission and objectives in a financially sustainable manner and continues to add significant value to UNSW.

# 3. CAER's planning for the coming year 2016

In accordance with CAER's planning activity for 2015<sup>2</sup>, the Director in coordination with the Steering Committee implemented the following steps during 2015:

- As part of CAER's strategic planning, CAER aimed to clarify its relationship with the UNSW Business School and its associated Schools and Centres. The Director and the Steering Committee addressed this by re-structuring CAER's internal organization. In particular,
  - The Director and the Steering Committee decided that CAER should move away from its Research Group model and be restructured on an Initiative-based model. While the Research Group model worked well in the past it no longer suited CAER's current position; it is envisaged that the new Initiative-based model will assist to distinctly define CAER's role and activities within the UNSW Business School and separate them from its associated Schools and Centres. Consequently, and in coordination with the respective group members, the Economic History and History of Economic Thought Group and the Health Economics Group were disentangled from CAER in 2015; the Economic Measurement Group, the Real Estate Initiative Group and the Law and Economics Initiative Group were to stay within CAER and to be renamed as initiatives.
  - The Director and the Steering Committee have decided that CAER should cease its collaboration with the Industrial Relations Research Centre (IRRC) on the publication of the *Economic and Labour Relations Review* (ELRR) journal. Consequently, and in coordination with the journal's key executive editors, Associate Professor Peter Kriesler and Associate Professor Anne Junor, CAER's association with the journal has ceased in 2015 and the IRRC became the sole Centre responsible for its operation and management.
- As part of CAER's strategic planning, CAER aimed to develop a succession plan for the leadership of CAER. Consequently, and in consultation with CAER's current Deputy Director (Associate Professor Peter Kriesler), the Director and the Steering Committee agreed to appoint Dr Mariano Kulish as CAER's new Deputy Director, conditional on the agreement of his direct supervisor, the Head of the School of Economics.
- In 2015 CAER commenced steps for the revision of its website. In particular, meetings were held with the UNSW Business School's web team and initial steps were taken to restructure the website and to update its content.

The following steps were remained to be implemented in 2016:

#### I. Strategic planning for CAER, 2016-2020

Given the completion of the initial strategic planning steps in 2015, and with the release of UNSW's and the Business School's strategic plans for 2015-2025 and 2015-2020 respectively, CAER is now in the position to move forward. Once step i bellow is completed, the Director, together with the new Deputy Director and the Centre Coordinator, and in coordination with the Steering Committee, will implement step ii:

<sup>&</sup>lt;sup>2</sup> See section 3 of CAER's Annual Report 2014.

#### i. Succession plan for the Centre's management (risk management)

- The agreement of the Head of the School of Economics for the appointment of Dr Mariano Kulish as CAER's new Deputy Director should be sought so that the formal appointment is finalized.
- The appointment of Initiative Leaders to be finalized.

#### ii. CAER's Strategic Plan for 2016-2020

- A new strategic plan for 2016-2020 to be prepared in alignment with the broader UNSW's and the Business School's strategies and a target date to be set for the completion of CAER's strategic plan.
- CAER's objectives be tightened up and made more specific to the research areas of the Centre.
- Draw up KPIs for each initiative.

#### II. Website

Continue the revision of CAER's web site and updating its content while ensuring compliance with the Centres Procedure.

#### III. Initiatives Guidelines

Taking into account CAER's new structure, develop guidelines on:

- CAER acknowledgment on publications and accountable reporting of Centre publications.
- Initiative leaders reporting on progress in achieving KPIs for future annual reports.
- Establishment, management and operation of initiatives, including guidelines for the formation and operation of initiative specific advisory committee.

4. Statement of financial performance certified by the UNSW Business School's Finance Manager for the year ended 31 December 2015

tr for Applied Economic Research			Nate a search	A U S Y	RALI
tatement of Financial Performance		2015	2014	Differe	nce
or the Year Ended December 2015	Note	\$'000	\$'000	\$'000	%
EVENUE					
Research Revenue:	1	654	373	281	76%
Donations & Bequest - Draw downs		171	387	(216)	-56%
UNSW Contributions		-	-	-	-
Faculty Contributions	3	(0)	51	(52)	-101%
Other Restricted Revenue		1		1	-
Commercial Activity - Fees for Service		=	-	-	-
Sundry Other Revenue		-	1	(1)	-100%
Total Revenue		826	812	14	2%
(PENSE					
Salaries, Oncosts and other staff costs		529	618	(89)	-14%
Scholarship Stipends		1	16	(14)	-92%
Contract & Consulting Services		1		1	-
Repairs and Maintenance		-	1	(1)	-100%
Consumables		16	13	3	24%
Travel		189	126	63	50%
Equipment Non Capitalised		7	6	1	22%
Entertainment		5	6	(1)	-21%
Marketing		¥		-	-
Miscellaneous Expenses		(2)	23	(25)	-107%
Total Non-People Costs		217	191	26	14%
Total Expenses		746	809	(63)	-8%
TOTAL CONTRIBUTION - SURPLUS/(DEFICIT)		\$ 80	\$3	78	2811%
Depreciation				-	// <b>-</b>
SURPLUS / (DEFICIT) after Depreciation		\$ 80	\$3	78	2811%

Ctr for Applied Economic Research			Man a ware	UNSV
NOTES:				
1 Revenue in Advance will be noted in Creditors & Other Liabilities.				
Research Revenue generated (cash basis).		\$ 477	\$ 260	218
Category 1 Research Revenue therein		196	110	86
2 UNSW Budget model includes other revenue items				
Teaching Revenue			-	
Block Grants		-	-	-   -
Indirect Cost Recoveries		-	( <del>-</del>	-
3 Results generated by operating funds were reclassified as Faculty	contribu	tion for interr	al reporting p	urposes
4 Restricted Funds - Cash at year end		\$ 48	\$ 145	(97)
5 Funds available in Division of Advancement (PS25401 & PS25244)	)	\$ 381	\$ 544	(162)
ecommended by GMO.  Adjustments were made for project transactions which had been response to the same of the same				
ecommended by GMO. . Adjustments were made for project transactions which had been ro S30029) but under the dept ID of FBS121 (Economics)	ecorded a	ngainst the rel	evant projects	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been resolved.  S30029) but under the dept ID of FBS121 (Economics)  ertified by Faculty Finance Manager  Name: Joanne Herron	ecorded a	ngainst the rel	evant projects	
ecommended by GMO.  Adjustments were made for project transactions which had been residually but under the dept ID of FBS121 (Economics)  Pertified by Faculty Finance Manager  Name: Joanne Herron  Statement of Financial Position	ecorded a	Signature:	evant projects  I  ANY JI KEA	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been resourced by the same of the sam	ecorded a	Signature: 2015	evant projects  I  ANY JI HOAD  2014  5000	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been resourced by the same of the sam	ecorded a	Signature:	evant projects  I  ANY JI KEA	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been residually supported by Faculty Finance Manager  Name: Joanne Herron  Statement of Financial Position As at December 2015	Note	Signature: 2015	evant projects  I  ANY JI HOAD  2014  5000	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been residually supported by Faculty Finance Manager  Name: Joanne Herron  Statement of Financial Position As at December 2015  UNSW Australia Internal Cash Accounts Receivable	Note	Signature: 2015	evant projects  I  ANY JI HOAD  2014  5000	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been resources.  S30029) but under the dept ID of FBS121 (Economics)  ertified by Faculty Finance Manager  Name: Joanne Herron  Statement of Financial Position As at December 2015  UNSW Australia Internal Cash Accounts Receivable Sundry Assets	Note	Signature: 2015	evant projects  I  ANY JI HOAD  2014  5000	s (PS29139 &
ecommended by GMO.  Adjustments were made for project transactions which had been resolved in the second se	Note 8	Signature: 2015	evant projects  I  ANY JI HOAD  2014  5000	s (PS29139 &
Statement of Financial Position As at December 2015 UNSW Australia Internal Cash Accounts Receivable Sundry Assets Investments Property Plant & Equipment	Note 8	Signature: 0	2014 \$000 145	s (PS29139 &

#### Additional notes:

• The expenses of the Real Estate Initiative are administrated through an FC101 project on UNSW accounts. Every year funds from the UNSW Foundation accounts are transferred to the FC101 project to cover the expenses and appear as donation income in the FC101 project. On the 31<sup>st</sup> of December 2015 the remaining donation balance within the UNSW Foundation accounts of the Real Estate Initiative was \$22,802. Although the error in the Department ID of the FC101 project of the Real Estate Initiative (PS29139) was fixed in mid-2014, there were still some HR transactions which were recorded against the wrong

Department ID; hence, as indicated in the above statement, further adjustments were needed in preparing the financial statement.

- The expenses of the Law and Economics Initiative are administrated through an FC101 project on UNSW accounts. Every year funds from the UNSW Foundation accounts are transferred to the FC101 project to cover the expenses and appear as donation income in the FC101 project. On the 31<sup>st</sup> of December 2015 the remaining donation balance within the UNSW Foundation accounts of the Law and Economics Initiative was \$358,602. Although the error in the Department ID of the FC101 project of the Law and Economics Initiative (PS30029) was fixed in mid-2014, there were still some HR transactions which were recorded against the wrong Department ID; hence, as indicated in the above statement, further adjustments were needed in preparing the financial statement.
- CAER would like to acknowledge the generous support of \$5,000 from the UNSW Business School's Research Office for the EMG Workshop 2015. The support was transferred into CAER's operating project and was incorporated in the above annual financial statement.

# 5. Details of research grants and projects associated with CAER during 2015

The following is a list of research grants and projects held by CAER's research initiatives in 2015 as part of their activities<sup>3</sup>. CAER members are marked in bold.

- Australian Research Council Discovery Grant, 2015-2019, "Productivity Measurement, Drivers and Trends: A New Analytical Framework", \$551,400, investigators: K.J. Fox and W.E. Diewert. The project aims to advance new concepts and methods for productivity measurement that have the potential to improve policy and national welfare, with special attention to: productivity in the mining industry, the increased holding of precautionary cash balances by firms during financial crises, innovative examination of firm productivity dynamics, and a more realistic approach to capitalisation of research and development and other intangible investments. The project is part of the research agenda of the Economic Measurement Initiative. Funds of this project are administrated by CAER.
- Australian Research Council Linkage Grant, 2014-2017, "The Economic Measurement of Property Markets: Prices, Bubbles, Economic Growth and Productivity", \$625,000, investigators: K.J. Fox, G. Otto, N. Stapledon, M. Kulish, M. Hu, W.E. Diewert and I.A. Syed, industry partners: property investor RF Capital and its associate property fund manager and investor CorVal Partners Limited. The research project is a collaboration between the Real Estate Initiative and the two industry firms, building on both firms' research capacity on property markets, including their data availability and industry expertise. Funds of this project (both ARC and industry partners') are administrated by CAER.
- Australian Research Council Future Fellowship Grant, 2013-2017, R. Holden, \$910,034. The
  project aims to further the understanding of non-price institutions such as firms, voting rules,
  trading mechanisms, bargaining protocols, and publically owned assets. Fifteen percent of
  this project is devoted to research which is undertaken by the Law and Economics Initiative.
  Funds of this project are administrated by the School of Economics (UNSW).

CAER Annual Report 2015

<sup>&</sup>lt;sup>3</sup> Research grants and projects which CAER members obtained outside the activities of CAER's research initiatives are excluded from the list.

# 6. Statement of in-kind contributions, cash contributions, infrastructure and other resources provided to CAER during 2015

# 6.1 In-kind contributions

Estimated value of CAER members contribution to CAER's activities -by research initiatives<sup>4</sup>

CAER member	Type of Activity	Value of Contribution
Professor Kevin Fox	Economic Measurement	62,158
Professor Erwin Diewert	Initiative activities	
Associate Professor Glenn Otto		
Professor Richard Holden	Law and Economics	54,376
Professor Rosalind Dixon	Initiative activities	
Professor Kevin Fox	Real Estate	142,762
Professor Erwin Diewert	Initiative activities	
Associate Professor Glenn Otto		
Dr Mariano Kulish		
Dr Maggie Hu		
Mr Andrew Roberts, UNSW		
alumnus		
Mr Luan Ferreira, RF Capital		
Dr Christian Contino, RF Capital		
Professor Richard Holden		
Dr Minxian Yang		
Dr Christopher Gibbs		
Dr Nalini Prasad		
Dr Xiangling Liu		
Dr Shanaka Herath		
Professor Jan de Haan		
Total in-kind		259,296

<sup>&</sup>lt;sup>4</sup> CAER members whose salary was paid by funds held within CAER's department ID are excluded from the table.

# Estimated value of in-kind contribution to CAER's administration<sup>5</sup>

	Type of Activity	Value of Contribution
Professor Kevin Fox	Director	45,312
Associate Professor Peter Kriesler	Deputy Director	15,566
Professor James Morley (Associate Dean Research)	Steering Committee	7252
Associate Professor Jerry Parwada (Head, School of Banking and Finance)		
Mr Tim Harcourt (J.W. Nevile Fellow in Economics)		
Ms Fei Wong (General Manager, UNSW Law)		
UNSW Business School administrative support	HR, IT, finance and marketing support	12,731
Total in-kind		80,861

# 6.2 Cash contributions<sup>6</sup>

Entity	Purpose	Cash Contribution
School of Economics	Support for the EMG Workshop 2015	\$5,000
UNSW Business School's Development Unit	Support for the Real Estate Initiative activities	\$1,650
Total cash		\$6,650

# 6.3 Infrastructure and other resources provided to CAER

In 2015 CAER members provided their own office space (including computers) on or off campus. The School of Economics provided office space and printer/photocopier facilities for CAER administrative staff. The UNSW Business School provided meeting space.

<sup>&</sup>lt;sup>5</sup> Administrative support which was funded by CAER's funds is excluded from the table.

<sup>&</sup>lt;sup>6</sup> The following table reports only cash contributions which were made available to CAER and which were administrated by the contributing entity. Cash contributions which were transferred into CAER's financial projects are reported as part of CAER's annual financial statement in section 4 above.

# 7. Details of publications, professional engagements and scholarly achievements associated with CAER during 2015

#### 7.1 CAER Journal Publication - The Economic and Labour Relations Review

As part of CAER's strategic planning activity in 2015 and CAER's new structure of an Initiative-based model, the Director and the Steering Committee have decided that CAER should cease its collaboration with the Industrial Relations Research Centre (IRRC) on the publication of the *Economic and Labour Relations Review* (ELRR) journal. Consequently, and in coordination with the journal's key executive editors, Associate Professor Peter Kriesler and Associate Professor Anne Junor, CAER's association with the journal has ceased in 2015 and the IRRC became the sole Centre responsible for its operation and management. CAER would like to acknowledge the excellent work of the ELRR and the IRRC members and to thank them for the past collaboration.

#### 7.2 Research output of CAER members

The following is a list of research output attained by CAER members in 2015 as part of their initiative activities<sup>7</sup>. CAER members are marked in bold.

#### **Books - Edited**

**Dixon, R.** and G. Williams, 2015, *The High Court, the Constitution & Australian Politics*, Cambridge University Press, Melbourne, Australia.

#### **Book Chapters**

**Holden, R.T.**, 2015, "Incomplete Contracts and Mechanism Design", in *The Impact of Incomplete Contracts in Economics*, P. Aghion, M. Dewatripont, P. Legros and L. Zingales (eds.), Oxford University Press, New York, forthcoming.

#### **Refereed Journal Articles**

**Diewert, W.E.**, 2015, "Reconciling Gross Output TFP Growth with Value Added TFP Growth", *International Productivity Monitor*, Vol. 29, pp. 60–67.

**Diewert, W.E.**, 2015, "Decompositions of productivity growth into sectoral effects", *Journal of Productivity Analysis*, Vol. 43, pp. 367-387.

Elnasri, A. and **K.J. Fox**, 2015, "R&D, Innovation and Productivity: The Role of Public Support", *KDI Journal of Economic Policy*, Vol. 37, pp. 73-96.

**Diewert, W.E.**, **J. de Haan** and R. Hendricks, 2015, "Hedonic regressions and the Decomposition of a House Price Index into Land and Structure Components", *Econometric Reviews*, Vol. 34(1-2), pp. 106-126.

**Diewert, W.E.** and **K.J. Fox**, 2015, "Sunk Costs and the Measurement of Commercial Property Depreciation", *Canadian Journal of Economics*, forthcoming.

<sup>&</sup>lt;sup>7</sup> As of 2015, there was no clear policy relating to acknowledging CAER on publications. As noted in Section 3, CAER's planning for 2016 included development of guidelines to ensure "CAER acknowledgment on publications and accountable reporting of Centre publications". In compiling the following list all efforts have been made to ensure that research output of CAER members which was achieved outside the activities of CAER's research initiatives is excluded from the list.

**Diewert, W.E.**, **K.J. Fox** and C. Shimizu, 2015, "Commercial Property Price Indexes and the System of National Accounts", *Journal of Economic Surveys*, forthcoming.

Shimizu, C., **W.E. Diewert**, K.G. Nishimura and T. Watanabe, 2015, "Estimating quality adjusted commercial property price indexes using Japanese REIT data", *Journal of Property Research*, Vol. 32(3), pp. 217-239.

**Diewert, W.E.** and C. Shimizu, 2015, "A Conceptual Framework for Commercial Property Price Indexes", *Journal of Statistical Science and Application*, Vol. 3(9-10), pp. 131-152.

Hill, R.J. and **I.A. Syed**, 2015, "Hedonic Price-Rent Ratios, User Cost, and Departures from Equilibrium in the Housing Market", *Regional Science and Urban Economics*, forthcoming.

An, X., Y. Deng, J.D. Fisher and **M.R. Hu**, 2015, "Commercial Real Estate Rental Index: A Dynamic Panel Data Model Estimation", *Journal of Real Estate Economics*, forthcoming.

Deng, Y., **M.R. Hu** and A. Srinivasan, 2015, "Information Asymmetry and Organizational Structure: Evidence from Real Estate Investment Trusts", *Journal of Real Estate Finance and Economics*, forthcoming.

**Dixon, R.**, 2015, "Constitutional Drafting & Distrust", *International Journal of Constitutional Law*, Vol. 13, pp. 819-846.

**Dixon, R.** and D. Landau, 2015, "Transnational Constitutionalism and A Limited Doctrine of Unconstitutional Constitutional Amendment", *International Journal of Constitutional Law*, Vol. 13(3), pp. 606-638.

**Dixon, R.**, 2015, "Partial Bills of Rights", *American Journal of Comparative Law*, Vol. 63(2), pp. 403-437.

#### **Other Research Output**

**Diewert, W.E.** and **K.J. Fox**, 2015, "Output Growth and Inflation Across Space and Time", Discussion Paper 2015-04, School of Economics, UNSW. The paper was presented at the 11th Econometric Society World Congress Conference, August 2015, Montreal.

**Diewert, W.E.** and **K.J. Fox**, 2015, "Money and the Measurement of Total Factor Productivity", a paper presented at the IARIW-OECD Conference on "W(h)ither the SNA?", April 2015, Paris; and at the UNSW School of Economics seminar series, October 2015.

**Diewert, W.E.**, **K.J. Fox** and J. de Haan, 2015, "Weekly versus Monthly Unit Value Price Indexes", Discussion Paper 2015-15, School of Economics, UNSW.

**Diewert, W.E.** and **K.J. Fox**, 2015, "Decomposing Productivity Indexes into Explanatory Factors", unpublished manuscript, submitted.

**Diewert, W.E.** and **K.J. Fox**, 2015, "The User Cost of Non-renewable Resources and Green Accounting", a paper presented at the Society for Economic Measurement Conference, July 2015, Paris.

**Stapledon, N.D.**, 2015, "Inquiry into Home Ownership", a submission to the House of Representative Economic Committee, July 2015.

**de Haan, J.** and **I.A. Syed**, 2015, "Age, Time, Depreciation and House Prices: A Hedonic Imputation Approach", a paper presented at the Society for Economic Measurement Conference, July 2015, Paris.

**Hu, M.R.** and A. Lee, 2015, "Cultural Distance and Housing Prices: Evidence from the Australian Housing Market", a paper presented at the Annual Asian Real Estate Society Conference, July 2015, Washington DC, US, and received the Best Paper Award – Third Level. The paper was also presented at the UNSW Business School inaugural annual Real Estate Symposium, September 2015, Sydney.

**Hu, M.R.** and S. Aggarwal, 2015, "Liquidity Dynamics between Property Market and REIT Market", a paper presented at the Eastern Financial Association Conference April 2015, New Orleans, US.

**Kulish, M.** and D. Rees, 2015, "Unprecedented Changes in the Terms of Trade", Reserve Bank of Australia Research Discussion Paper, RDP 2015-11, a paper presented at the Reserve Bank of New Zealand, April 2015.

Ji, P.I. and **G. Otto**, 2015, "Explosive Behaviour in Australian Housing Markets: Rational Bubbles or Not?", UNSW Business School Research Paper No. 2015 ECON 27. The paper was presented at the UNSW Business School inaugural annual Real Estate Symposium, September 2015, Sydney.

**Holden, R.T.**, 2015, "Switching Gears: Reforming negative gearing to solve our housing affordability crisis", a report commissioned by the McKell Institute and was subsequently adopted as a policy of the Australian Labour Party, June 2015.

**Holden, R.T.**, 2015, "Gerrymandering", in *Encyclopaedia of Race, Ethnicity and Nationalism*, Wiley-Blackwell.

#### 7.3 <u>Professional engagements and scholarly achievements of CAER members</u>

The following is a list of professional engagements and scholarly achievements attained by CAER members in 2015 as part of their research initiative activities. CAER members are marked in bold.

## Editorial activities

- **Kevin Fox**, Associate Editor, Journal of Productivity Analysis.
- Richard Holden, Editor, Journal of Law and Economics.

#### Professional memberships

- **Kevin Fox**, elected as a member of the Policy and Advocacy Committee of the Academy of the Social Sciences in Australia, November 2015.
- **Kevin Fox**, elected as a member of the Panel B Committee of the Academy of the Social Sciences in Australia, November 2015.

#### Invited speaker/discussant

- Kevin Fox, Invited Participant, ASSA Roundtable on "A Trusted Access Model" hosted by the Australian Bureau of Statistics (ABS) and the Department of Social Services (DSS), November 2015, Canberra, Australia.
- Kevin Fox, Invited Participant, the 2015 UN-sponsored International Working Group on Price Indices ("Ottawa Group") Workshop, May 2015, Tokyo, Japan. Professor Fox was also invited to chair the Property Price Indexes session and to write a summary of the session for reporting to the United Nations.
- Kevin Fox, Invited Speaker, IARIW-OECD Conference on "W(h)ither the SNA?", April 2015, Paris, France.
- Kevin Fox, Member of the Organizing Steering Committee and Invited Participant, ASSA/AURIN Workshop on Researchers Access to Microdata, March 2015, Melbourne, Australia.
- **Kevin Fox**, Invited Participant, workshop on improvements of housing supply and the efficiency of urban land use, organized by the Property Council of Australia and Deloitte Access Economics, December 2015, Sydney's CBD.
- **Nigel Stapledon**, Invited Moderator, the Economics Panel on Decision-making in an Evolving Economy, Australia Finance Conference (AUSFIC), March 2015, Sydney, Australia.
- **Nigel Stapledon**, Invited Speaker, the 'Urban Conversation' on Housing Affordability, an event hosted by the Dean of UNSW Built Environment, Professor Alec Tzannes AM, June 2015, Sydney, Australia.
- Maggie Hu, Invited Speaker and Discussant, Australasian Finance and Banking Conference (AFBC), 2015, Sydney, Australia.
- Maggie Hu, Invited Speaker and Discussant, SIRCA Fifth Young Researcher's Workshop, 2015, Sydney, Australia.
- Maggie Hu, Invited Speaker and Discussant, Financial Management Association Conference (FMA), 2015, Orlando, USA.
- Maggie Hu, Invited Speaker and Discussant, Eastern Financial Association Conference, 2015, New Orleans, USA.
- Richard Holden, Invited Speaker at the Nation Bureau of Economic Research (NBER)
   Organizational Economics meetings, Massachusetts Institute of Technology, University of
   Melbourne and Harvard University.
- Rosalind Dixon, Invited Speaker at Boston College, University of Melbourne and the University of Toronto.

#### Scholarly achievements

- In September 2015 Professor Erwin Diewert was elected as a Fellow of the Academy of the Social Sciences in Australia.
- In 2015 **Professor Kevin Fox** was elected as a member of the Australasian Standing Committee of the Econometric Society.
- In November 2015 Professor Kevin Fox has accepted the invitation to become an Associate
  of the New Zealand Productivity Research Centre (NZPRC) at the University of Waikato. The
  NZPRC's research is focused on productivity and efficiency issues in New Zealand and it
  incorporates productivity-oriented researchers across tertiary education institutions and other
  institutions in New Zealand. This is in recognition of Professor Fox's extensive expertise and
  work in this area.
- In August 2015 **Professor Kevin Fox** has accepted the invitation to become a Fellow of the "Economics and Science Group", a group supported by Sir John Beddington and headed by Professor Tom Kompas (ANU) and Professor Quentin Grafton (ANU). The Group brings together the best available economic and scientific evidence, thinkers and doers from around the globe to deliver a clear, comprehensible picture of the risks, the actions needed, the trade-offs and the challenges facing the world in food, energy, soils, water and global security.
- In 2015 Professor Richard Holden won for the second time in succession the Academy of the Social Sciences in Australia (ASSA) Panel B award for Early Career Research. The award recognises Professor Holden's outstanding research contributions and exceptional leadership in the fields of law and economics, contract theory and political economy.
- In July 2015 Dr Maggie Hu received the Best Paper Award (Third Level) at the Annual Asian Real Estate Society Conference (Washington DC, US) on her co-authored (Adrian Lee) paper: "Cultural Distance and Housing Prices: Evidence from the Australian Housing Market".

# 8. Details of CAER's engagement with the academia, government, industry and broader community

The following sections provide details of CAER's activities undertaken in 2015 to accomplish its aims of providing a stimulus to the research undertaken at UNSW, supporting research students and early career academics, encouraging collaborative research and raising the profile of applied economic research at UNSW in the broader community.

#### 8.1 Conferences, workshops and special events

#### **EMG Workshop 2015**

The Economic Measurement Initiative of CAER hosted its fifteenth annual international workshop on the 4<sup>th</sup> of December 2015 at UNSW main campus. The aim of the workshop is to create a genuine engagement between academics, statistical agencies researchers, government policy makers and industry representatives from all around the world, leading to an improved understanding of economic measurement and the potential impact on policy. The workshop was supported by the Australian Research Council, UNSW Business School and the School of Economics. The workshop featured an outstanding program consisting of the following speakers: Erwin Diewert (UBC and UNSW), Carl Obst (University of Melbourne), Ulrich Kohli (University of Geneva), Michelle van der Merwe (Reserve Bank of Australia), Khanh Hoang (Australian Bureau of Statistics) and Owen Gabbitas (Productivity Commission). UNSW early career academic, Dr Amani Elnasri, and UNSW Honours student, Cameron Dark, also presented at the workshop. The workshop attracted thirty participants and included representatives from the Treasury, the Reserve Bank of Australia, the Australian Bureau of Statistics and the Department of Agriculture and Water Resources.

#### ASSA-CAER Roundtable event on "Big Data in the Social Sciences", September 2015

The Academy of the Social Sciences in Australia (ASSA) in conjunction with CAER organized a policy roundtable event on "Big Data in the Social Sciences" on the 17<sup>th</sup> of September 2015 at UNSW main campus. The event was a small by-invitation assembly of key policy makers, managers and thinkers including senior Big Data users, research users, and data providers who gathered to discuss the challenges and opportunities of Big Data from a number of disciplinary perspectives, including legal, ethical, analysis and policy implications, with special consideration to the impact Big Data is having on civil society and on social science research. The event was chaired by Professor Kevin Fox and it featured presentations by key Big Data users, such as the Australian Bureau of Statistics, and researchers from a wide range of disciplines on the importance of utilising Big Data to underpin sound policy.

# UNSW Business School second and third Real Estate Forums, 2015

The Real Estate Initiative held two Real Estate Forum events in 2015 at UNSW CBD Campus. The Real Estate Forum event is a small by-invitation assembly of leaders in the real estate industry. Through the Forum, the Real Estate Initiative aims to provide interactions with distinguished, thought-leading academics, as well as develop connections with experienced industry leaders who will support its activities with their deep expertise and knowledge:

• Christopher Mayer, the Paul Milstein Professor of Real Estate of Columbia Business School, was invited to speak at the second forum of the series which took place in February 2015. His presentation focussed both on the recent divergence in international property markets in the post-GFC period, and also on his research which highlighted significant trends in housing ownership and wealth, linked to aging populations, across the developed economies and conjectured on the implications for property markets. Industry analysis on Professor Mayer's theme of divergence in international markets was provided by Dr Frank Gelber, Director and Chief Economist of BIS Shrapnel. Dr Gelber addressed the questions of why the Australian real estate market had fared better in the second half of the 2000s and why some of Australia's capital cities, notably Sydney, were well placed to succeed in the near term while

the fundamentals were not as good in other cities. The two presentations were then followed by a roundtable discussion, and Mr Adrian Williams, Head of Property Finance for AMP Capital, provided the concluding remarks for the event.

• Joe Gyourko, Martin Bucksbaum Professor of Real Estate and Director of the Zell-Lurie Real Estate Center of the Wharton School, was invited to speak at the third forum of the series which took place in June 2015. His presentation focussed on his latest research of constructing transaction-based real estate price indexes, price-to-rent and price-to-income ratios series, unsold inventory ratios series and key valuation metrics for China's top 35 cities. In the presence of opaque government data, this is valuable information both for domestic decision makers in China and for foreign investors. David Harrison, Joint Managing Director of Charter Hall Group, chaired the roundtable discussion that followed with Campbell Hanan, Chief Executive Officer of Investa Office, and Andrew Cooper, National Head of Operations of Leighton Properties, as discussion leaders. Concluding the Forum, Justin Jefferies, Chief Operating Officer of Knight Frank Australia, provided the closing remarks.

# **UNSW Business School Real Estate Symposium 2015**

The Real Estate Initiative hosted its inaugural annual Real Estate Symposium on the 8th of September 2015 at UNSW main campus. The event was supported by the UNSW Business School, RF Capital and the Australian Research Council. The Symposium aims to gather academics, industry researchers, and government policy makers to discuss real estate related issues and their implications on policy. The Symposium opened with a keynote address by Dr Luci Ellis, head of financial stability of the Reserve Bank of Australia, and featured the following mixture of both academic and industry speakers, chairs and discussion leaders: James Morley (Associate Dean Research, UNSW Business School), Kevin Fox (UNSW), Sean Carmody (General Manager, Risk Analytics and Insights, Westpac), Chris Gibbs (UNSW), Nalini Prasad (UNSW), David Rees (Regional Director & Head of Research Australasia, JLL), Stephen McNabb (Head of Research, CBRE - Australia Research), Nigel Stapledon (UNSW), Mariano Kulish (UNSW), Harley Dale (Chief Economist, Housing Industry Association), Maggie Hu (UNSW), Christian Contino (RF Capital), Luan Ferreira (RF Capital), Bryan Reid (Senior Associate, Research, MSCI), Glenn Otto (UNSW) and Warwick Jones (Director, Bureau of Infrastructure Transport and Regional Economics). The Symposium was a showcase of some of the latest research into Australian real-estate and it attracted significant coverage in both national and international media. There were fifty participants attending the Symposium, many of whom provided enthusiastic feedback on the event.

# ASSA-CAER Dinner event in celebration of Professor Holden's Panel B award for Early Career Research, August 2015

In 2015 Professor Richard Holden won for the second time in succession the Academy of the Social Sciences in Australia (ASSA) Panel B award for Early Career Research. CAER in conjunction with the ASSA celebrated this great achievement on Thursday, 27th of August 2015, at a dinner event. At this gathering of ASSA Fellows, Professor Holden gave a brilliantly clear and concise summary of his work on network capital.

#### 8.2 Visitors

The following is a list of visitors hosted by CAER as part of its commitment to stimulate research activities and foster research students and early career academics:

# Visitors hosted by the Economic Measurement Initiative of CAER

Professor Chad Syverson, Booth School of Business, University of Chicago, visited UNSW in March 2015

Daniela Scur, Centre for Economic Performance, London School of Economics, visited UNSW in October 2015

Professor Ulrich Kohli, University of Geneva, visited UNSW in December 2015 Carl Obst, University of Melbourne, visited UNSW in December 2015

#### Visitors hosted by the Real Estate Initiative of CAER

Professor Chris Mayer, Columbia Business School, visited UNSW in February 2015

Professor Joe Gyourko, Real Estate Department, the Wharton School, University of Pennsylvania, visited UNSW in June 2015

Dr Jessie Handbury, Real Estate Department, the Wharton School, University of Pennsylvania, visited UNSW in August 2015

Professor Kiyohiko Nishimura, University of Tokyo, visited UNSW in December 2015

#### Visitors hosted by the Law and Economics Initiative of CAER

Professor Scott Baker, School of Law, Washington University in St. Louis, visited UNSW in March 2015

Associate Professor Mila Versteeg, School of Law, University of Virginia, visited UNSW in December 2015

Dr Robert Akerlof, Department of Economics, University of Warwick, visited UNSW in December 2015

Professor Jacob Gersen, Harvard Law School, visited UNSW in December 2015

Professor David Landau, College of Law, Florida State University, visited UNSW in December 2015

#### 8.3 Academic, industry and government engagements

#### Academic engagements

- Professor Kevin Fox visited the Paul Milstein Real Estate Center (Columbia Business School, New York) in May 2015 and had extensive discussions with Columbia Business School academics and staff on data accessibility and research collaboration between the Real Estate Initiative and the Paul Milstein Real Estate Center. As a result of these discussions, Professor Kevin Fox was invited to become a Senior Research Fellow at the Paul Milstein Real Estate Center.
- Professor Kevin Fox visited the NUS Institute of Real Estate Studies (Singapore) in October 2015 and held discussions with its academics staff on possible future research collaboration and engagements.
- In July 2015 Professor Richard Holden gave a research seminar at the City Futures Research Centre, UNSW Built Environment on "Negative gearing and the Australian residential property market".

# Industry engagements

- Following the first meeting with Mr. Ken Morrison, CEO of Property Council of Australia (PCA), in November 2014, Professor Kevin Fox and Mr. Andrew Roberts made a presentation on the Real Estate Initiative to the PCA Board at their meeting in Canberra in May 2015. Subsequently, Professor Kevin Fox and Dr Nigel Stapledon met with Kathy Mac Dermott (COO, PCA), John Nguyen (Research Manager, PCA) and Kelly Jones (Academy Manager, PCA) in July 2015 to discuss the PCA's research and academy work and how the PCA can collaborate with the Real Estate Initiative.
- To further engagement with the real estate industry, Professor Kevin Fox held meetings in 2015 with Mark Baillie (Deputy Chairman, Folkestone Limited), Andrew Boyarsky (CEO, Anka Property Group), David Tanevski (Urban Taskforce and KWC Partners), Andrew Cooper

(National Head of Operations, Leighton Properties), Angus Raine (CEO, Raine & Horne), Andrew Roberts (Principal, RF Capital), Miriam George (Graduate Program Manager, Stockland) and David Rees (Regional Director & Head of Research Australasia, JLL). In these meetings Professor Fox provided information on the Real Estate Initiative's up-to-date progress and activities. The response from industry was very positive. Many showed interest in offering internships to students who undertake the UNSW real estate major, sponsoring PhD scholarships, and being involved with the Real Estate Initiative's activities (e.g., giving guest lectures and presenting at UNSW Real Estate Student Society's events).

- As part of the Real Estate Initiative's Australian Research Council Linkage project (2014-2017) on "The Economic Measurement of Property Markets: Prices, Bubbles, Economic Growth and Productivity", the Real Estate Initiative held monthly research meetings during 2015 with the active participation of the Real Estate Initiative research team, the industry partner (RF Capital) researchers and the Real Estate Initiative research affiliates. In addition, the Real Estate Initiative made three research presentations at the offices of RF Capital and RF Capital researchers (Luan Ferreira and Christian Contino) presented their work at the first Real Estate Symposium hosted by the Real Estate Initiative in September 2015.
- In October 2015 a Memorandum of Understanding (MOU) was signed between the Urban Taskforce and the Real Estate initiative. The MOU formalised both sides' commitment to collaborate around research, education, and industry and policy engagement in the field of real estate.
- The Property Council of Australia has called for a new framework that tackles housing affordability through supply side reforms and that rewards the States for improved performance. The Property Council of Australia is leading this work with the assistance of Deloitte Access Economics. As the first step in this work, the Property Council of Australia and Deloitte Access Economics gathered the nation's leading economic thinkers and policy makers in a workshop to discuss what can be done to improve housing supply and the efficiency of urban land use. Professor Kevin Fox was invited to participate in this workshop which was held on 16th December, 2015 at Deloitte's offices in the CBD. The workshop featured prominent leaders in this area, such as Professor Fred Hilmer and Mr Ian Harper.
- As part of its teaching program the Real Estate initiative hosted Bryan Reid (MSCI) as a guest lecture in Professor Kevin Fox's ECON4309/6309 Economic Measurement course in the second semester 2015. In his lecture Bryan discussed the methodologies employed by MSCI in producing real estate related regional and global indexes, benchmarks, performance modelling, data metrics and risk analytics.
- Professor Richard Holden was commissioned by the McKell Institute to write a report on "Switching Gears: Reforming negative gearing to solve our housing affordability crisis" in June 2015. The report was subsequently adopted as a policy of the Australian Labour Party.

#### Government engagements

- In September 2015 Professor Kevin Fox was invited to visit The Treasury (Canberra) and to provide his advice and expertise on productivity drives and trends, housing affordability and innovation policy to its staff. He also made a presentation on "Prospects and Policies for Innovation and Productivity Growth".
- In 2015 Professor Kevin Fox provided contracted expert opinion on "IT use and Australia's productivity: Growth accounting" for the Bureau of Communications Research.

- During 2015 Professor Kevin Fox was a member of the Australian Bureau of Statistics Methodology Advisory Committee and of the Australian Bureau of Statistics Productivity Measurement Reference Group.
- Dr Nigel Stapledon made a submission to the House of Representative Economic Committee entitled "Inquiry into Home Ownership" in July 2015.

#### 8.4 Media engagement

The following is a list of media engagement undertaken by CAER members in order to raise the profile of CAER and UNSW in the broader community:

#### On-going:

- **Professor Richard Holden**, weekly commentator on Peter van Onselen's PVO NewsDay on SkyNews Australia since July 2015.
- Professor Richard Holden, monthly op-ed writer for the Australian Financial Review since August 2015.

#### January 2015

- Professor Richard Holden wrote an article on "Economy like a car in need of a tune-up", The Australian.
- **Professor Richard Holden** wrote an article on "Obsessed with the dollar? What to expect from the Aussie in 2015", The Conversation.

#### February 2015

- **Dr Nigel Stapledon** was quoted in the Sydney Morning Herald, the Age, the Canberra Times and other Fairfax newspapers in the opinion piece: Rich pensioners may be too much at home, on superannuation inequality due to rising property prices. This was reprinted in more than 80 media outlets.
- **Professor Richard Holden** wrote an article on "Time for a blunt lesson on HECS and price signals", The Conversation.
- **Professor Richard Holden** wrote an article on "Why the Liberal leadership is like a bank run", the Sydney Morning Herald.
- Professor Richard Holden wrote an article on "Is it time for Treasurer Malcolm Turnbull?", The Conversation.
- Professor Richard Holden wrote an article on "Abbott and Whitlam had the same fatal flaw", the Australian Financial Review.

#### March 2015

- Dr Nigel Stapledon was interviewed by ABC News on the government's plan to pay off stamp duty in instalments.
- **Professor Richard Holden** wrote an article on "Make childcare tax deductible", The Australian.

- Professor Richard Holden wrote an article on "What Government Should Own", the Australian Financial Review.
- **Professor Richard Holden** wrote an article on "Fraser's economics medicine was everything in moderation", The Conversation.

#### April 2015

 Professor Richard Holden wrote an article on "A field guide to the 2015 Federal Budget", The Conversation.

#### May 2015

- **Dr Nigel Stapledon** was interviewed by ABC News on whether a property bubble is building in Sydney's and Melbourne's markets.
- Professor Richard Holden wrote an article on "Tax deductions are not all bad", The Australian.
- **Professor Richard Holden** wrote an article on "The crossbench ideology that could bring reform unstuck", The Conversation.

# June 2015:

- **Dr Nigel Stapledon** was interviewed by ABC Drive, 2GB, 2UE, ABC Weekend Extra and ABC Rear-vision on various real estate topics.
- **Dr Nigel Stapledon** was quoted in Reuters and in other media outlets in South Africa, USA, UK, New Zealand, Singapore: Asia One (linked to Singapore Press holdings) and Borneo saying Sydney's crazy housing market no mere craze.
- **Dr Nigel Stapledon** was quoted in the Sydney Morning Herald on why he feels the Property boom could be over by Christmas.
- **Dr Nigel Stapledon** was quoted in the Australian Financial Review on how should a property bubble be measured? This article was republished in many Fairfax newspapers, including the Sydney Morning Herald, the Age, and the Canberra Times.
- Professor Richard Holden's report on negative gearing and housing affordability for the McKell Institute generated extensive media coverage in June 2015. Richard Holden also gave advice on how to change negative gearing and make it fair and practical in an article in the Sydney Morning Herald, co-authored by the McKell Institute's Sam Crosby, which generated media coverage in many other outlets.
- **Professor Richard Holden** wrote an article on "Business confidence got a post budget boost... or did it?", The Conversation.
- **Professor Richard Holden** wrote an article on "Economic theories that have changed us: asymmetric information", The Conversation.
- **Professor Richard Holden** wrote an article on "Economic theories that have changed us: efficient markets and behavioral finance", The Conversation.

#### July 2015

• **Dr Nigel Stapledon** was interviewed by BBC on why China's super-rich want to buy property in Sydney, offering insight into Sydney's soaring housing prices.

- **Dr Nigel Stapledon** was quoted in Bloomberg, the Australian Financial Review, the Age, the Sydney Morning Herald, the Canberra Times and several other media outlets in the opinion piece: Chinese stock market: Australian property brokers cash in on turmoil, warning against seeing Australian property as a safe have.
- Dr Nigel Stapledon participated in a panel forecast for next year's economic performance: BusinessDay Economic Survey: Real estate the only bright spot for the economy, which was published in the Guardian (UK), the Sydney Morning Herald, the Age, the Canberra Times and 144 media outlets across the country.
- **Dr Nigel Stapledon** was quoted in South China Morning Post on Sydney's 'crazy' home price growth set to continue, saying a lift in supply will help deflate the price hike momentum.
- Professor Richard Holden wrote an article on "Richard Holden says we should be worried about Greece", the Australian Financial Review.
- **Professor Richard Holden** and **Professor Rosalind Dixon** wrote an article on "Legal Aid vs private practice: do university fees dictate job choices?", The Conversation.
- Professor Richard Holden wrote an article on "Greek debt crisis: It's harder to help Greece as you think", the Australian Financial Review.
- **Professor Richard Holden** wrote an article on "Tsipras and Varoufakis to blame for this Greek tragedy", the Australian Financial Review.
- Professor Richard Holden and Professor Rosalind Dixon wrote an article on "Charging \$22,000 for a graduate position won't solve the problem of law graduate oversupply", The Conversation.

## August 2015

- **Dr Nigel Stapledon** was quoted in an online BBC article on wealthy Chinese buyers eyeing property in Australia. This article was later reposted in the Asian Pacific Post.
- **Professor Richard Holden** wrote an article on "Forget about a 'currency war'; we'll have bigger worries off a weaker yuan", The Conversation.
- Professor Richard Holden wrote an article on "Dramatic sharemarket gyrations may mask longer term dangers", The Conversation.

#### September 2015

- **Dr Nigel Stapledon** was quoted in the Australian Financial Review on minimal rent growth a sign supply is hitting the spot in housing.
- Dr Nigel Stapledon was interviewed by Bloomberg for a piece on why new home 'Tsunami' may snap Sydney romance with exuberant prices. This article was republished in the Australian Financial Review, the Sydney Morning Herald, MSN, Washington Post and all of Fairfax newspapers. ABC TV followed up Nigel's piece the next day on a piece about how tens of thousands of new homes are destined for Sydney's rural fringe. This in turn spurred more coverage with the Australian Financial Review return to the story with a report on "Sydney housing reaches turning point as auction sales slow", which was also covered in the Sydney Morning Herald's Domain and in 145 local newspapers.

- Associate Professor Glenn Otto looked at the "Sydney property market being in 'bubble territory' since December" for the Australian Financial Review ahead of the UNSW Business School inaugural annual Real Estate Symposium held in September 2015.
- The UNSW Business School inaugural annual Real Estate Symposium organized by CAER in September 2015 attracted significant media coverage in both national and international media, such as, the Australian (which was later repeated on Bloomberg) and AAP wires (which was reprinted in outlets like Yahoo). Presentations of the symposium were also covered by the Telegraph, the Australian Financial Review, the Sydney Morning Herald and other Fairfax publications. They were also covered in TV reports on SBS and ABC online, and ABC TV and radio.

#### October 2015

- **Dr Nigel Stapledon** was quoted in Financial Times in the opinion piece: why buyers are moving back to central Sydney, warning the potential of a 'tsunami of home supply' in the future.
- **Dr Maggie Hu** was interviewed on "Would you pay extra to live among people who share your background?", Business Think, October 2015 Issue.
- **Professor Richard Holden** wrote an article on "As treasurer Hockey proved to be an ordinary Joe", The Conversation.
- **Professor Richard Holden** wrote an article on "The RBA should cut rates, but not because the banks as upping them", The Conversation.

#### November 2015

• **Professor Kevin Fox** was quoted in a media release issued by the Economic Measurement Initiative ahead of the fifteenth annual EMG workshop. The media release also covered the topics that were going to be discussed at the event and its key speakers.

# December 2015

 Professor Richard Holden wrote an article on "Why it is time for a 'no BS' pledge when it comes to MYEFO forecasts", The Conversation.

# 9. Details of research supervision and teaching activities carried out by CAER members on behalf of academic units

#### 9.1 Research supervision

Postgraduate research supervision activities within CAER are coordinated with the relevant Schools/Faculties (mainly the School of Economics and UNSW Business School), in accordance with the relevant UNSW policies, procedures and delegations. The following is a list of research supervision carried out by CAER members in 2015 as part of their initiative activities. CAER members are marked in bold.

#### **PhD Supervision**

Supervisor: Kevin Fox

Zoran Peroski: A Retrospective Bertrand Model of the Competitive Impacts and Social Welfare of

Regulated Mobile Interconnection Rates for Australia

Submitted: 2015, conferred: 2016

Supervisor: Rosalind Dixon

Bhatara Ibnu Reza: The Development of the Militia as the Implementation of the Total People's

Defense and Security in Indonesia

In progress

Supervisor: Rosalind Dixon

Doron Goldbarsht: Counter-Terrorist Financing: A Study in Effectiveness and the Rule of Law in

Global Administrative Law

In progress

Supervisor: Richard Holden and Valentyn Panchenko (School of Economics, UNSW)

Johannes Hoelzemann: Essays on the Political Economy of Long-Run Economic Growth in

Africa: the Nature of Colonial Institutions and Colonial Legacies

In progress

Supervisor: Ben Greiner (School of Economics, UNSW) and Richard Holden

Muse Gadisa Demie: Behavioural and experimental economics

In progress

# **Honours Supervision**

Supervisors: **Richard Holden** and Catherine Greenhill Barton Lee: *The theory and application of graph limits* 

School of Mathematics and Statistics, UNSW

Supervisor: Richard Holden and Gabriele Gratton (School of Economics, UNSW)

Nicholas Young: "Decentralisation and Nimby Goods"

School of Economics, UNSW

# 9.2 Teaching activities

#### **Economic Measurement Initiative**

Professor Kevin Fox developed a short training course on: "An Introduction to the Theory of Economic Measurement" and delivered it to the Australian Bureau of Statistics (ABS) staff on the 24th-26th of June 2015, at the ABS House, Canberra.

#### **Real Estate Initiative**

In 2015 the real estate major saw an increase in students' enrolments. In particular, enrolments in each of the four offered undergraduate courses ranged from 40 to 100 and it is estimated that at least 20 students are going to choose the real estate major as their specialized major. Dr Nigel Stapledon and Dr Maggie Hu, both members of the Real Estate Initiative, delivered two of the courses offered as part of the major. Dr Maggie Hu taught the "Real Estate Finance" course which was delivered to both undergraduate and postgraduate students in the first semester of 2015; and Dr Nigel Stapledon taught the "Real Estate Economics and Public Policy" course which was delivered to both undergraduate and postgraduate students in the second semester 2015. The delivery of the two courses was coordinated with the UNSW Business School in accordance with the relevant UNSW policies and procedures.

With support from the Real Estate Initiative and the UNSW Business School, the UNSW Real Estate Student Society continued to be very active in 2015. In particular, the UNSW Real Estate Student Society organized an industry event: Dexus Market Update & Networking event, in October 2015, at UNSW main Campus (Business Lounge). Peter Studley, Head of Research at DEXUS Property Group, presented the market update. The UNSW Real Estate Student Society also conducted a video interview with Joe Gyourko, Martin Bucksbaum Professor of Real Estate and Director of the Zell-Lurie Real Estate Center of the Wharton School, whose visit to UNSW was supported and facilitated by the Real Estate Initiative.

10.	Details of significant managerial or personnel changes during 2015	
	No significant managerial or personnel change took place in 2015.	

# 11. A record of dates and attendance at meetings of CAER's Steering Committee

Date	Attendance	Apologies
01/04/2015	Prof James Morley (chair), Prof Kevin Fox, A/Prof Jerry Parwada, Tim Harcourt, Carmit Schwartz (minutes)	Fei Wong
18/12/2015	Prof James Morley (chair), Prof Kevin Fox, Fei Wong, Carmit Schwartz (minutes)	A/Prof Jerry Parwada and Tim Harcourt

Note: In the last meeting the Steering Committee decided that two Steering Committee meetings per year will suffice for CAER's needs and if the need arises an additional meeting can be scheduled.