

ECONOMICS

WHAT DO AUSTRALIAN ECONOMICS PhDs DO? THE UWA EXPERIENCE

by

Kenneth Clements and Jiawei Si

Business School The University of Western Australia

DISCUSSION PAPER 17.16

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Abstract

We use a survey of recent economics PhD graduates from The University of Western Australia to report how long the degree took, what they publish from theses, what they do subsequently to graduation and how they evaluate their substantial investment in the PhD. The average student takes four years to complete, two publications emerge from the average thesis, more than half the graduates go into academic positions, and the unemployment rate is zero.

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^{*} We are grateful to a number of UWA economics PhDs who responded to our requests for information on their activities; UWA Economics colleagues for advice; and the UWA Library, especially Special Collections Librarian Kael Driscoll, and Robyn Oliver from the UWA Graduate Research School for providing data. We thank Long Vo for research assistance. Clements also acknowledges useful discussions with and feedback from PhDs students, past and present, from UWA and elsewhere, as well as helpful comments from participants at the 2017 PhD Conference in Economics and Business, held at The University of Melbourne, at which he spoke on some of the matters covered in this paper. This research was financed in part by BHP.

1. Introduction

The number of economics PhD graduates from Australian universities grew from about 70 in 2001 to 100 in 2015. The question arises, what do these PhDs subsequently do? Do they obtain jobs that match their qualifications? What is their publication record? How do they evaluate their PhD studies – was it time well spent? More broadly, is the production of PhDs a good activity for society to engage in – do the private and public benefits exceed the costs, which also have private and public elements (the opportunity cost of students' time, and subsidies to universities). We are unable to provide comprehensive answers to these questions, but we can report on the experience of UWA graduates – their jobs and career trajectories in a number of cases; information on publications from theses; time to completion of degrees; and who did the supervision. This provides an interesting historical record, may serve as a guide to those contemplating undertaking a PhD and it might even help with the setting of benchmarks.²

First, some background information on the nature of the PhD degree at UWA. To obtain admission, students must have some previous research experience and/or training, which usually means the equivalent of a four-year economics honours degree at least the 2A level. There is no formal coursework and students work on a thesis under the supervision of two experienced staff members. The thesis, which has a maximum of 100,000 words (and less than 80,000 is encouraged), is examined by three examiners external to the University (and two from outside the state of WA), who provide critical comments and make a recommendation. The usual recommendation is that the thesis be revised to the satisfaction of the Economics Discipline/supervisors.

The first economics PhD graduate from UWA was Alex Kerr, who finished in 1955, 42 years after the University was established in 1913. See Box 1 for some biographical information on Kerr. For the period 2001-2015, there were 42 economics PhDs produced by UWA. It is these PhDs that we deal with in this paper.

Before proceeding with the information on the UWA graduates, it is useful to present some background information regarding the national production of PhDs. Figure 1 shows for each year the number of economics PhDs produced by all Australian universities over the last decade and a half. As noted above, in 2015 about 100 were produced. There is a reasonable

¹ "Economics" PhDs include those in econometrics, but excludes agricultural economics, accounting and finance. Data sources are discussed subsequently.

² For earlier information on Australian economics PhDs, see Chenhall and Clements (1995), Clements and Ye Qiang (1999), Clements and Wang (2003) and Lodewijks (2002). Stock and Siegfried (2014) provide a summary of research on US PhDs; see also McFall et al. (2015).

degree of volatility here, possibly due to the small numbers involved, as well as the substantial gestation period of PhDs. On average, production has grown at about 3.5% p. a., and almost all of this growth has come from full-timers.

The annual production of about 100 economics PhDs in Australia compares with about 1,000 in the US (Stock and Siegfried, 2014, Figure 1). The US figure refers to several years before 2015, but it is sufficiently close for our purposes. In 2016, Australia's population was about 7.4 percent that of the US, while its GDP was about 6.5 percent using the market exchange rate, or 6.1 percent at the World Bank's PPP rate.³ Roughly speaking, the production of Australian economics PhDs is about 10 percent that of the US, so it could be said that Australia produces more than what might be expected on the basis of simple demographic or economic considerations.

Figure 2 reveals that the market shares of ANU, Monash and UNSW have been increasing over the period, as the expense of Sydney, Melbourne and the others in the Group of Eight (Go8). For more detailed information at the start and end of the period, see Figure 3. Over the whole period, the Go8 universities account for about 70% of all Economics PhDs; this share has remained fairly constant over the past 15 years.

2. The UWA Graduates

Data on economics PhD graduates are from the <u>Annual Reports</u> of the UWA Economics Discipline (http://www.business.uwa.edu.au/school/economics/papers). For the period 2002 – 2015, there were a total of 42 of these graduates, or 3 a year on average. Among the 42, 32 were full-time and 10 part-time. To obtain information about these graduates, we made direct contact with as many as possible, searched the internet (especially LinkedIn) and sort advise from UWA Economics staff, many of whom were supervisors. This approach yielded most of the data we require and Table A2 contains the details. In what follows, we summarise these data in various ways.

Full-time students take about four years, on average, to complete, while part-timers take twice as long, as indicated in Figure 4. After completing, the PhDs go into all kinds of jobs, ranging from academic to working for government to business. All 42 graduates appear to be employed in jobs appropriate to their training. Figure 5 shows that more than one-half have academic jobs. This could point to the value of obtaining some teaching experience while completing the PhD.

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³ Source: https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD?end=2016&locations=US-AU&start=1960).

On average, two publications come out of a thesis, as can be seen from Figure 6. However, if those who publish nothing are excluded, about 3.5 publications emerge from the average thesis. Using the Australian Business Deans Council ranking, roughly 30% of these publications are in highly ranked journals, that is, A or A* (Figure 7).

Finally, Figures 8 and 9 contain some information on supervision. Figure 8 reveals that over the 15-year period, Kenneth Clements, Yanrui Wu, Nicolaas Groenewold and Michael McAleer were active supervisors of PhD students who completed. In addition to assistance from the supervisor, there are many drivers of publications from a thesis, including the originality of the student, writing capability, tenacity, opportunity to intensely concentrate on the topic and luck. Thus, while it is not possible to completely ascribe publications from a thesis to effective supervision, there is still likely to be some connection. Figure 9 classifies the publications by students according to supervisor of the thesis. In addition to the active supervisors listed above, students supervised by Juerg Weber and Michael McLure did well on the basis of publications.

3. What the Graduates Say

We attempted to make contact with as many graduates as possible via email and invited them to reflect on their PhD studies, how they value their training and its impact on their careers. We received responses from 17 of the 42 graduates. The letters we received are reproduced in Appendix A2 and below gives some brief extracts. Given at the end of each extract is the name of the graduate and the year of completion.

Benefits of the PhD

My time in the UWA PhD program has helped developed key research skills through effective supervision and an enabling environment. Through regular intellectual, subject matter seminars, and local and international conferences I've quickly developed necessary skills required in the field. *Adham Al Said [2011]*.

The PhD programme provided me with the "taste" for teaching and research and ultimately drove me to a career in academia. *Elisa Birch* [2005].

The Business School of UWA is a great place for studying postgraduate degrees. The academic staff provided professional assistance to me and they helped me a lot in my research. It was a wonderful experience for me as I could work with other eminent scholars at the same office. *Tsun Se (James) Cheong [2015]*.

My subject area, the intersection of economics and evolutionary biology, is a growing sub-field that is greatly benefiting from rapid advances in genetics... I greatly appreciated the openness of the Business School in accepting me as a PhD student despite my unorthodox proposal. *Jason Collins* [2015].

I completed a number of consultancy projects for resource companies in Western Australia such as BHP Billiton and Rio Tinto. My PhD training gave me the confidence and breadth of knowledge in the field of commodity markets that is required to successfully complete such projects. *Paul Crompton* [2002].

My time as a PhD student was an opportunity to immerse myself in research in a way that I have not again experienced. I was able to study the issues related to alcohol demand in general, and the wine market in particular, exhaustively, and without interruption. As I prepare to head to the 11th Annual American Association of Wine Economists Conference in Padova, Italy, I am reminded of how well this research topic has served me over the past decade. *James Fogarty* [2006].

In addition to the first-rate supervision I had received, the information resources and general support for PhD students were excellent at UWA. The library facilities provided access to all resources needed. The administrative support was great. PhD students were motivated to attend conferences and apply for research grants from both the university and the Business School. *Xing (Grace) Gao (2012)*.

The PhD process was a steep learning curve for me. I had to update my econometrics knowledge and learn two statistical software packages. I had to learn to write with authority. Now, when I re-read parts of my thesis to see how I reported the data analyses or how I modelled the Heckman technique which is still one of my go-to methods for analysing data compiled from a non-random samples, I am still surprised at the quality of the writing. *Margaret Giles* [2003].

A wide range of experience, both in teaching and research, has extended my knowledge and insight in these areas. With these experiences, I became more confident to become a teacher and researcher at my institution in Indonesia. I manage to get several prestigious research grants from the government and private sectors. Even today I am trusted to organize a doctoral program at my school. *Abdul Hakim* [2009].

The experience was memorable and challenging for me but it has thoroughly opened a new door for me and changed the way I think about the world. Every day, I make use of the knowledge learned from my PhD

program to understand how the economy works and how it impacts our life. *Liang Li* [2015].

Even though I spent many hours, days, weeks and years on this single idea, it never actually felt like 'work' to me at all. Motivation, therefore, was never an issue, but it certainly can be if you've chosen an area of research that you lack a deep and abiding interest in. So think long and hard about what you are doing, as much as why you are doing it. *Andrew Williams* [2007].

I love[d] the seminars where I can learn from each scholar's research. Compare[d] to the life in China, I have to say the research in UWA is much [more] relaxed and people enjoy the process of research [more]. *Fei Yu* [2013].

What Did the PhD Lead To?

Today I lead a team of data scientists and analysts in the Australian Securities and Investments Commission, playing a central role in driving ASIC's data science agenda and using data science and analytics to detect risks and misconduct in financial services and markets. *Jason Collins* [2015].

...the general training in microeconomics and econometrics I received during my time as a PhD student has meant that I have had the opportunity to work as an economic consultant for a wide variety of government and private sector clients... *James Fogarty* [2006].

Thanks to the training during my PhD program, I joined Industrial and Commercial Bank of China (ICBC) after graduation as a Relationship Manager covering the resources sector. As I worked with my colleagues and clients, I gradually found that what I learned from my PhD study...give me a lot advantage and confidence to analyse and forecast the business world... *Liang Li* [2015].

Today, I no longer generate GARCH distributions – although a good appreciation of distributional properties has helped me establish my role as a subject matter expert in the area of Risk and Uncertainty where I work. Today, I still rely on the research skills developed as a result of my experience at UWA. *Elaine Loh* [2005].

My time at UWA allowed me to move easily into the world of economic consulting, first at Access Economics and now at KPMG, with a period in between at the Centre of Policy Studies at Monash University and Victoria University. I am always grateful for my time at UWA. *George Verikios* [2007].

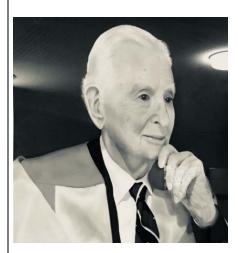
Completing a PhD study from UWA has a pivotal role in developing my career within the Ministry of Finance Indonesia. It gives me an improved analytical and economic framework as well as confidence in discussing, analyzing, evaluating, and formulating fiscal policy. *Heru Wibowo* [2012].

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Box 1

THE FIRST ECONOMICS PhD AT UWA



Emeritus Professor Alexander McBride Kerr, AM, CertSocSci (Oxon), BScEcon (London), BA, MA, PhD, HonDEc (UWA)

Born 23 April 1921, Professor Kerr was an applied economist at UWA for 25 years. His vision and efforts in forging strong links between the university, government and the community have been recognised with an Honorary Doctorate in Economics. The UWA Business School today stands as an embodiment of Professor Kerr's vision.

At the start of WWII, Professor Kerr joined the RAAF and trained as a pilot. He was shot down and badly wounded in 1941 and taken prisoner in Germany. During his time as a prisoner of war, he studied and passed economics externally with the Universities of London and Oxford through the Red Cross. He successfully escaped on his third attempt from the Long March in 1945.

After the war, he joined the UWA Economics Department and gained the first PhD in the Faculty of Arts in 1955. Professor Kerr was a pioneer in urban and regional economics and founded the Australian and New Zealand Section of the Regional Science Association. He founded the journal Economic *Activity in Western Australia* in 1957.

Professor Kerr served on Commonwealth and State review committees and worked on matters of industry, finance and regional development at home and in twenty countries across the globe for governments, business, the UN, ILO, OECD and Colombo Plan, with a major interest in Asia. His many involvements in industry also included being a board member of the Perth Chamber of Commerce, the Perth Chamber of Manufacturers and serving as Deputy Chairman of Challenge Bank.

In 1975 Professor Kerr took up the Foundation Chair in Economics at Murdoch University, subsequently retiring as its Deputy Vice-Chancellor in 1983. He continues to serve in community organisations and in 2001 was WA's Senior Achiever of the Year. He was also was made a Member of the Order of Australia in 2004.

Source: This is an extract of the biographical notes attached to Professor Kerr's portrait that hangs near the entrance to the Economics Discipline at UWA.

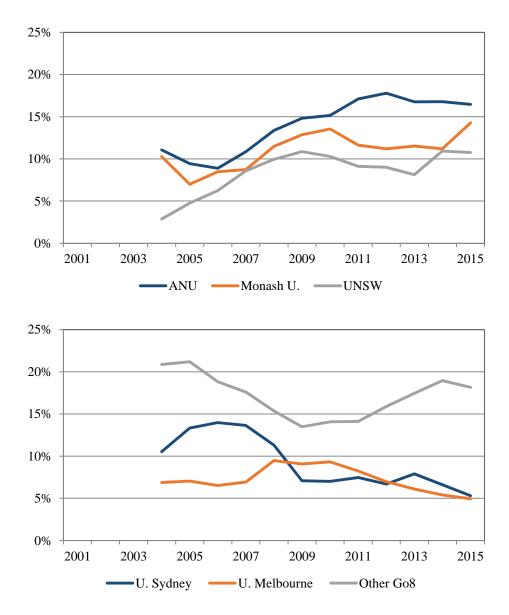
Number

Figure 1 Number of Economics PhD Completions, Australia

Note: This records the number of economics PhD graduates from 29 Australian universities. "Economics" includes econometrics, but excludes agricultural economics, accounting and finance.

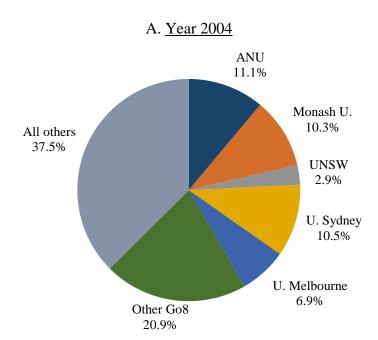
■ Full time ■ Part time

Figure 2 PhD Completions, Market Shares

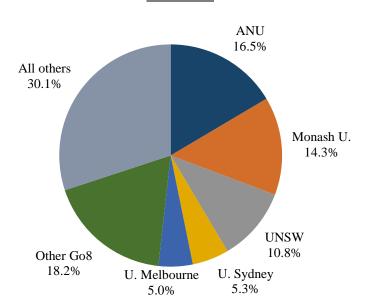


Note: In order to smooth the data, market shares are 4-year moving averages. For more detailed data, see Table A1.

Figure 3 Snapshots of PhD Completions, Market Shares

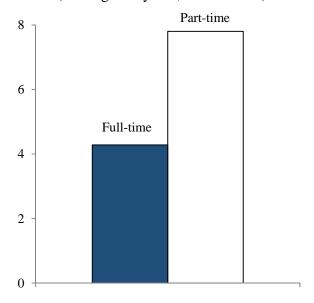


B. Year 2015



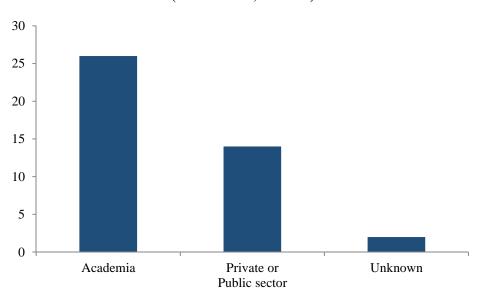
Note: In order to smooth the data, market shares are 4-year moving averages. For more detailed data, see Table A1.

Figure 4 Time to Completion (Averages in years, UWA PhDs)



Note: There are 32 full-time and 10 part-time students.

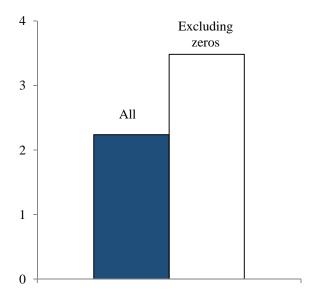
Figure 5 Where do they go? (UWA PhDs, number)



Note: Employment is based on the first position held after graduation for a period of more than 12 months.

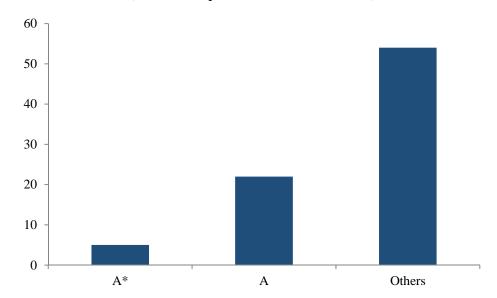
Figure 6 Publications

(Average number of publications per thesis, UWA PhDs)



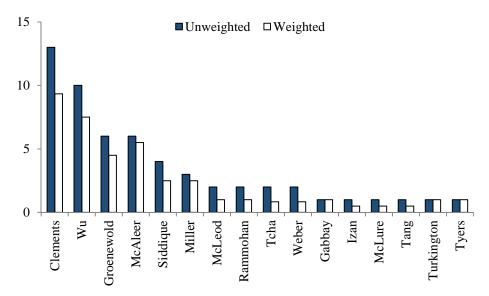
Note: In order to account for publications that occur during PhD studies of those finishing near the commencement of the period used elsewhere in the paper (2002-2015), the starting point of the data for the publication counts underlying this figure is 1997. For an analogous reason, the ending point is 2017. This also applies for the subsequent three figures.

Figure 7 Quality of Publications, 1997-2017 (Number of publications, UWA PhDs)



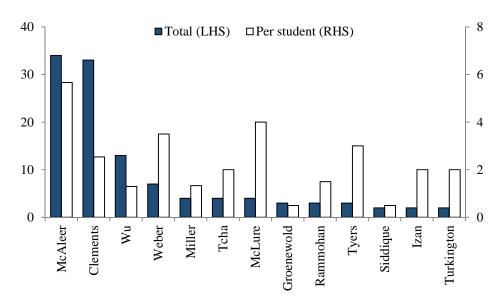
Note: Journal rankings are from the Australian Business Deans Council (ABDC, http://www.abdc.edu.au/master-journal-list.php). "Others" consists of all publications below rank A, those not ranked by the ABDC and chapters in books.

Figure 8 Supervision of Students (Number of students, UWA PhDs)



Note: Weighted numbers account for joint supervision. A sole supervisor receives the weight of one, whilst two joint supervisors each receive 0.5. Non-Business School supervisors have been omitted (the Economics Discipline is part of the UWA Business School)

Figure 9 Student Publications by Supervisor (Number of publications, UWA PhDs)



Note: Total publications are divided by the weighted number of students (from Figure 8) to obtain the number of publications per student.

Appendix

This appendix contains the basic data used in the paper. Table A1 contains the detailed information on the production of PhDs by Australian universities. Table A2 contains information regarding theses and employment history of the graduates. A list of thesis publications is given in Table A3. Table A4 is an index of the letters sent to us by the graduates.

A-2 **Table A1** Economics PhD Graduates in Australia, 2001-2015

Vaan	Count				S	Share of total (%	6)			
Year	Full-time	Part-time	Total	ANU	Monash U.	UNSW	U. Sydney	U. Melb.	Other Go8	All others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2001	31	40	71	16.9	18.3	2.8	5.6	8.5	16.9	31.0
2002	24	36	60	16.7	3.3	3.3	6.7	10.0	20.0	40.0
2003	38	42	80	5.0	13.8	2.5	11.3	6.3	23.8	37.5
2004	46	24	70	5.7	5.7	2.9	18.6	2.9	22.9	41.4
2005	56	21	77	10.4	5.2	10.4	16.9	9.1	18.2	29.9
2006	43	33	76	14.5	9.2	9.2	9.2	7.9	10.5	39.5
2007	62	39	101	12.9	14.9	11.9	9.9	7.9	18.8	23.8
2008	58	50	108	15.7	16.7	8.3	9.3	13.0	13.9	23.1
2009	58	35	93	16.1	10.8	14.0	0.0	7.5	10.8	40.9
2010	70	31	101	15.8	11.9	6.9	8.9	8.9	12.9	34.7
2011	63	48	111	20.7	7.2	7.2	11.7	3.6	18.9	30.6
2012	85	29	114	18.4	14.9	7.9	6.1	7.9	21.1	23.7
2013	97	27	124	12.1	12.1	10.5	4.8	4.0	16.9	39.5
2014	100	32	132	15.9	10.6	18.2	3.8	6.1	18.9	26.5
2015	76	32	108	19.4	19.4	6.5	6.5	1.9	15.7	30.6
Total	907	519	1,426	-	-	-	-	-	-	-
Mean	-	-	_	14.4	11.6	8.2	8.6	7.0	17.3	32.8

Note: DET suppresses small non-zero readings with "<5". This does not affect the counts in columns 2-4 as these totals were provided to us by DET. However, in calculating the shares in columns 5-11 with university level data, readings of "<5" have been assumed to take the value of 2.

A-3

 Table A2 PhD Graduates

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
1.	Ali, Nasrul	Abu Siddique, Yanrui Wu	Corruption and Its Impact on Economic Growth: Is East Asia special?	2008	Unknown
2.	Al-Said, Adham	Ken Clements, Abu Siddique	Essays on the Economic Integration of the Cooperation Council of the Arab States of the Gulf	2011	Partner, The Firm for Business and Economic Consulting LLC, Oman; Sep 2012 – Present Shari'a Supervisory Board Member, Muzn Islamic Banking, Oman; Dec 2015 – Present Chairman of Board of Trustees, Scientific College of Design, Oman; Jan 2014 – Present Lecturer Assistant Professor, Sultan Qaboos University, Oman; 2002 – Present Co-Founder of Whispers of Serenity Clinic, Oman; Nov 2011 – Present Academic Focal Point, Indian Ocean Rim Assosication, Oman; Sep 2012 - Present
3.	Anugrah, Donni Fajar	Anu Rammohan, Sam Tang	Economic Growth, Inflation and Monetary Policy: Indonesian Regions as a Case Study	2014	Economist, Bank of Indonesia 2015 - Current
4.	Arsana, Wayan Widya	Yanrui Wu	Regional Productivity Growth in Indonesia: A DEA Malmquist Productivity Index Analysis	2014	Statistics Indonesia, Bali Office; period unknown
5.	Birch, Elisa	Paul Miller	The Determinants of Labour Supply and Fertility Behaviour: A study of Australian Women	2005	Associate Professor, UWA; Jan 2004 - Present
6.	Chan, Felix	Michael McAleer	An Econometric Analysis of Multivariate Volatility: Applications to Finance and Intellectual Property	2004	Associate Professor, (Economics and Finance), Curtin University; 2009 – Present Senior Lecturer (Economics and Finance), Curtin University; Jan 2006 - Dec 2008 Australian Post-Doctoral Fellow Industry; 2005 – 2006 Statistical Analyst, WA Police Service; 2004

A-4

 Table A2 PhD Graduates (continued)

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
7.	Chandra, Mahendra	Nic Groenewold, H. Y. Izan	Modelling Volatility Transmission and Correlation Structure Across International Equity Markets	2006	COO, Westminster International College / London School of Commerce, Malaysia; Mar 2015 – Present Campus Director and Adjunct Professor, Curtin University Sydney/Navitas; Sep 2010 - Mar 2015 Associate Dean (International), ECU; 2004 – 2009 Associate Professor, ECU; 1991 - 2009
8.	Chen, Mei-Hsiu	Ken Clements	The Economics of World Metal Markets	2012	Domestic duties, Taiwan; 2013 – Present Lecturer, UWA Business School; 2012 - 2013
9.	Cheong, Tsun Se (James)	Yanrui Wu	Regional Inequality in China: Trends, Determinants and Consequences	2012	Assistant Professor, Department of Economics and Finance, School of Business, Hang Seng Management College; Present Post-doctoral Fellow, UWA Business School
10.	Collins, Jason	Juerg Weber, Boris Baer	Essays on Human Evolution and Economic Growth	2015	Senior Manager, Strategic Intelligence, ASIC, Sydney, Australia; Feb 2016 – Present Visiting Fellow, Evolution and Ecology Research Centre, Faculty of Science, University of New South Wales; Mar 2013 – Feb 2016 Senior Manager, Economics and Public Policy, PWC Australia; Nov 2009 – Feb 2016
11.	Crompton, Paul	Ken Clements, MoonJoong Tcha, Juerg Weber	The Economics of the East Asian Steel Industry	2002	Lecturer/Senior Lecturer, UWA; 2002 - Present
12.	da Veiga, Bernardo	Michael McAleer, Alex Szimayer	Modelling Dynamic Value-at-Risk Thresholds	2006	CEO, South American Ferro Metals Limited, Brazil; Jun 2015 – Present Director, Sumbawa Dream Properties, Indonesia; Jan 2010 - Present Director, Navitas Business Modelling, Perth, Australia; Jan 2009 – Present VP Corporate Development, Brazil Tungsten Holdings Limited, Brazil; Jun 2011 - Dec 2014 Managing Director, Ares Resources Limited, Australia; Jan 2010 - Dec 2013 Executive Director (Corporate), Attila Resources Limited, Australia; Mar 2010 - Oct 2011 Senior Lecturer (Finance), Curtin University; 2008 – 2011 Associate, UBS; May 2006 - Oct 2009

A-5

 Table A2 PhD Graduates (continued)

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
13.	Ezzati, Parinaz	Nic Groenewold	Analysis of Financial Integration and Volatility Spillover Effects: Monetary Policy Implications for Iran	2015	Lecturer, University of Sydney; Mar 2015 – Present Lecturer, University of NSW; Mar 2015 - Dec 2015 Teaching Associate, Macquarie University; Mar 2015 - Jun 2015
14.	Fogarty, James	Ken Clements	Wine Investment, Pricing and Substitutes	2006	Lecturer/Senior Lecturer, UWA; 2006 - Present
15.	Fouda, Reefat	Rony Gabbay	The Impact of Anis Mansur's Writings on the Political and Socio- Economic Discourse in Egypt during Nasser and Sadat Era (1952- 1982)	2003	Head of Department, Australian Islamic College, Perth, Australia; Present Journalist, Cairo, Egypt; period unknown
16.	Fu, Dahai	Yanrui Wu	Understanding Chinese Exporting Firms: Microeconometric Evidence	2012	Deputy Dean, School of International Trade and Economics, Central University of Finance and Economics Beijing; Jul 2016 – Present Vice President, Chinese Economics Society Australia; Jul 2016 – Present Assistant Professor, Central University of Finance and Economics, Beijing 2013 - Sep 2015 Research Consultant, UNCTAD, Switzerland; May 2013 - Oct 2013 Visiting Assistant Professor, UWA; Jul 2013 - Aug 2013
17.	Gao, Xing (Grace)	Ken Clements	The Economic Behaviour of Seven Billion Consumers: Food, Functional Form and Quality	2012	Victorian Treasury; 2017- Present Post-doctoral Fellow, Bankwest Curtin Economics Centre, Curtin University, 2013 – Present Casual Lecturer and Research Associate, Business School, University of Western Australia, 2012 - 2013
18.	Giles, Margaret	Ken Clements, Paul Miller	Correcting for Selectivity Bias in the Estimation of the Property Damage Cost of Road Crashes in Western Australia	2003	Senior Lecturer, ECU; Jan 2010 – Present Faculty Research Scholar, ECU; Jan 2009 - Dec 2010 Senior Lecturer, ECU; Jan 2008 - Dec 2009 Project Coordinator, Silver Chain Group, Western Australia; Oct 2006 - Jun 2008 Lecturer/Tutor/Postdoctoral Fellow, UWA; 2003 - Sep 2006
19.	Hakim, Abdul	Darrel Turkington	Modelling the Interactions across International Stock, Bond and Foreign Exchange Markets	2009	Editor-in-Chief, Economic Journal of Emerging Markets (EJEM), Islamic University of Indonesia, Indonesia; Aug 2009 – Present Lecturer, Islamic University of Indonesia, Indonesia; 1996 - Present

A-6

 Table A2 PhD Graduates (continued)

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
20.	Hendrie, Delia	Paul McLeod, Matthew Knuiman	Economic Analysis of Health Sponsorship in Australia	2014	Senior Lecturer, School of Public Health, Curtin University; Present
21.	Ho, Owen C. H.	Yanrui Wu, Nic Groenewold	Foreign Direct Investment (FDI) in China: Determinants, effects and efficiency	2007	Director, Corporate Investment/ Private-Equity firm, Taiwan; Feb 2014 – Present Associate Professor (International Finance and Economics), I-Shou University, Taiwan; Feb 2012 - Feb 2014 Manager (Finance and Commercial), NameShin-Yu Stainless Steel, Taiwan; Sep 2010 - Feb 2014
22.	Hoti, Suhejla	Ken Clements, Les Oxley	Modelling the Riskiness in Country Risk Ratings	2003	Assistant Director, Department of Treasury (WA), Perth, Australia; Aug 2011 – Present Senior economist, Department of Treasury (WA), Perth, Australia; May 2007 - Aug 2011 Lecturer, Curtin University; Feb 2008 - Dec 2011 Postdoctoral Fellow, UWA; May 2006 - May 2007 Lecturer/Tutor, UWA and Curtin University; Feb 2000 - May 2007 Research Fellow, UWA; Jan 2005 - Apr 2006
23.	Hu, Baiding	Michael McAleer	Modelling Economic Growth in China: Productivity, Industry Structure and Final Demand	2003	Senior Lecturer; Lincoln University, New Zealand; Jun 2006 – Present Teaching position at Macquarie University; Aug 2003 - Jun 2006 Economist, National Institute of Economics and Industry Research; Sep 1995 - Aug 1999
24.	Johnson, Peter	Ken Clements, Paul McLeod	Aspects of Regional Economic Modelling	2003	Senior Associate Consultant, ACIL Tasman; 2004 -unknown
25.	Lan, Yihui	Ken Clements	The Long-Term Behaviour of Exchange Rates	2003	Lecturer/Senior Lecturer, UWA; 2003 - Present
26.	Li, Liang	Ken Clements	Understanding Resources Investment	2014	Relationship Manager in Institutional and Corporate Banking, ICBC; Sep 2016 – Present Relationship Manager in Metals and Mining, ICBC; Jan 2015 - Sep 2016 Assistant Relationship Manager in Metals and Mining, ICBC; Apr 2014 - Jan 2015

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 Table A2 PhD Graduates (continued)

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
27.	Loh, Elaine	Nic Groenewold	A Comparative Study of Technical Trading Rules, Time-Series Trading Rules and Time-Series Trading Strategies in the Australian Stock Exchange	2005	Senior Economist, Shell, Perth, Australia; May 2014 – Present Commercial Analyst, ConocoPhillips, Perth, Australia; Jan 2011 - May 2014 Senior Analyst, Atlantic Ltd, Perth, Australia; Jan 2010 - Jan 2011 Senior Analyst, Somerley Australia, Perth, Australia; Jan 2010 - Jan
			Lachange		2011
					Fuel Analyst, Verve Energy, Perth, Australia; Aug 2009 - Jan 2010 Lecturer (Finance), Curtin University; Jul 2009 - Dec 2009
					Senior Analyst, Akamai Management Group, Perth, Australia; Feb 2008 - Jul 2009
					Associate Lecturer in Finance, University of Adelaide; Jun 2005 - Nov 2007
28.	Pershin, Vitaly	Ken Clements, MoonJoong Tcha	Essays in the Economics of Foreign Direct Investment	2004	Economics Instructor, American Intercultural Education; Aug 2016 – Present
		, and the second			Business Instructor, Delter-Telfort Business Institute, Nantong, Jiangsu, China; Apr 2014 – Dec 2016
					Associate Professor, Tambov State University of Technology, Russia; Sep 2006 – Feb 2008
					Senior Lecturer, Tambov State University of Technology, Russia; Sep 2005 – May 2006
					Teaching and Research Assistant, UWA; Feb 2000 – Feb 2004
29.	Ren, Weiwei	Anu Rammohan, Yanrui Wu	Four Essays on Labour Economics: Gender, Education and Health in	2013	Visitor, Institute for Advanced Study in Toulouse, University of Toulouse, France; Jan 2017 – Present
			China		Associate Professor, School of Economics and Management, Yunnan Normal University; Aug 2008 – Present
					Lecturer, School of Economics and Management, Yunnan Normal University; Oct 2013 - Jul 2016
30.	Shareef, Riaz	Michael McAleer	Modelling Economic Growth in Small Island Tourism Economies	2005	Senior Economist, Department of Treasury (WA), Perth, Australia; Jun 2009 – Present
			Sman Island Tourish Leonollies		Senior Policy Analyst, Public Utilities Office (former Office of
					Energy), Perth, Australia; Feb 2008 - Jun 2009
					Postdoctoral Fellow, ECU; Sep 2005 - Feb 2008
					Tutor, Curtin University; Jan 2002 - Nov 2007
					Research Fellow, UWA; Mar 2005 - Sep 2005

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
31.	Syaifullah	Nic Groenewold, Yanrui Wu	Predicting Indonesian Currency Crises Using Early Warning System Models	2012	Ministry of Finance, Government of Indonesia; period unknown
32.	Tan, Fiona Ai Lin	Paul Miller	Inter-Sectoral Labour Mobility in Korea: Its Origins and Relationship with Unemployment	2009	Unknown
33.	Verhoeven, Peter	Michael McAleer	Outliers, Extreme Observations and Volatility Modelling	2004	Associate Professor, Queensland University of Technology; Aug 2008 - Present Senior Lecturer, University of Auckland; Nov 2003 – Jul 2008
34.	Verikios, George	Ken Clements	Understanding the Wool Market: Trade, Productivity and Grower Incomes	2007	Associate Director, KPMG; Feb 2015 – Present Senior Research Fellow, Monash University; Oct 2008 - Jan 2015
35.	Vo, Duc Hong	Michael McLure, Ken Clements	The Economics of Measuring Fiscal Decentralisation	2008	Head of Research and Modelling Branch, Economic Regulation Authority, Perth, Australia; Sep 2008 – Present Head of Business and Economics Research Centre, Ho Chi Minh City Open University, Vietnam; Oct 2016 – Present Advisor, Advisory Committee, Markets and Services Research Centre, ECU; Sep 2014 – Present Visiting Professor/Lecturer, Economic University Ho Chi Minh City; Jan 2010 – Present Lecturer, UWA; Jun 2004 - Dec 2009 Lecturer, Curtin University; Jan 2005 - Dec 2008
36.	Watkins, Clinton	Michael McAleer	Modelling Futures Prices, Returns and Volatility in Markets for Industrial Metals	2003	Associate Professor, Kobe University, Japan; Oct 2015 – Present Visiting Professor, Akita International University, Japan; Apr 2014 - Sep 2015 Associate Professor, Akita International University, Japan; Apr 2014 - Sep 2015 Director, Global Market and Multi-Asset Class Strategies, BlackRock Japan; Dec 2009 - May 2012 Associate, Global Active Strategies, Barclays Global Investors Japan; Jan 2008 - Dec 2009 Adviser, Market Analysis and Research, Reserve Bank of New Zealand; Jul 2003 - Dec 2007

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 Table A2 PhD Graduates and Theses (continued)

No.	Student	Supervisors	Thesis title	Completion	Where are they now?
(1)	(2)	(3)	(4)	(5)	(6)
37.	Wibowo, Heru	Abu Siddique, Yanrui Wu	Inequality and Fiscal Decentralisation in Indonesia: Evidence from the Households Expenditure Data	2012	Deputy Director, Directorate General of Budget, Ministry of Finance, Government of Indonesia; Jan 2014 – Current Head of Fiscal Balance and Special Autonomy, Fiscal Policy Office, Ministry of Finance, Government of Indonesia; Aug 2012 - Jan 2014
38.	Williams, Andrew	Abu Siddique	The Link Between Institutional Quality and Economic Growth: Evidence from Panel of Countries	2007	Associate Professor, UWA; Jul 2007 - Present
39.	Wong, Chee Kong	Yanrui Wu	Information and Communications Technology, Productivity and Economic Growth in China	2007	Phoenix College Perth; period unknown
40.	Yeo, Jasslyn	Nic Groenewold	Forecasting Returns Using Time- Varying Risk Measures	2005	Global Market Strategist (Vice President), J.P. Morgan Asset Management, Singapore; Sep 2015 – Present Senior Investment Strategist (Director, CIO Office), Bank of Singapore, Singapore; Aug 2012 - Sep 2015 Strategist/ Portfolio Manager (AVP, Strategy and Currency and Fixed Income), Fullerton Fund Management, Singapore; Jan 2008 - Aug 2012 Assistant Portfolio Manager (Associate, Absolute Return Strategies), Lion Global Investors, Singapore; Feb 2006 - Dec 2007
41.	Yu, Fei	Yanrui Wu	The Economics of Patents: Examination, Discrimination and Knowledge Transfer	2013	Research Fellow, Tsinghua University, Beijing, China; 2015 – Present Editor, Social Sciences Academic Press (SSAP), Beijing, China; Sep 2013 - Dec 2015
42.	Zhang, Ying	Rod Tyers	Economic Transitions in China and Japan: The Role of Real Exchange Rate Realignment	2015	Assistant Professor, Institute of Economics, Chinese Academy of Social Sciences; 2015 - Present

Notes: Data is taken from the UWA Business School Economics <u>Annual Reports</u> from 2002 to 2015. The occupation of graduates have been collected from their supervisors and/or their LinkedIn profiles online and, where possible, verified via correspondence with the graduates.

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Table A3 Publications

No.	Student	Publications	Journal Ranking	Citations
(1)	(2)	(3)	(4)	(5)
1.	Birch, Elisa	Birch, E. (2005). "Studies of the Labour Supply of Australian Women: What have We Learned?" <u>Economic Record</u> , 81(252): 65-84.	A	59
2.	Chandra, Mahendra	Chandra, M. (2006). "The Day-of-the-Week Effect in Conditional Correlation." Review of Quantitative Finance and Accounting, 27(3): 297-310.	Others	1
3.	Chandra, Mahendra	Chandra, M. (2005). "Estimating and Explaining Extreme Comovements in Asia-Pacific Equity Markets." Review of Pacific Basin Financial Markets and Policies, 8(1): 53-79.	Others	5
4.	Chen, Mei-Hsiu	Chen, M-H. (2010). "Understanding World Metals Prices: Returns, Volatility and Diversification." <u>Resources Policy</u> , 35(3): 127-140.	Others	59
5.	Cheong, Tsun Se (James)	Cheong, T., and Wu, Y. (2015). "Crime Rates and Inequality: A Study of Crime in Contemporary China." <u>Journal of the Asia Pacific Economy</u> , 20(2): 202-223.	Others	7
6.	Cheong, Tsun Se (James)	Cheong, T., and Wu, Y. (2013). "Regional Disparity, Transitional Dynamics and Convergence in China." <u>Journal of</u> Asian Economics, 29: 1-14.	Others	16
7.	Cheong, Tsun Se (James)	Cheong, T. (2012). "New Evidence of Regional Inequality." In: Wu, Y. (Eds.) <i>Regional Development and Economic Growth in China</i> . World Scientific Publishing, Singapore.	Others	4
8.	Collins, Jason	Collins, J., Baer, B., and Weber, E. (2016). "Evolutionary Biology in Economics: A Review." <u>Economic Record</u> , 92(297): 291-312.	A	1
9.	Collins, Jason	Collins, J., Baer, B., and Weber, E. (2015). "Sexual Selection, Conspicuous Consumption and Economic Growth." Journal of Bioeconomics, 17(2): 189-206.	Others	4
10.	Collins, Jason	Collins, J., Baer, B., and Weber, E. (2014). "Economic Growth and Evolution: Parental Preferences for Quality and Quantity of Offspring." <u>Macroeconomic Dynamics</u> , 18(8): 1773-1796.	A	8
11.	Crompton, Paul	Crompton, P. (2001). "The Diffusion of New Steelmaking Technology." Resources Policy, 27: 87-95.	Others	31
12.	Crompton, Paul	Crompton, P. (2000). "Extending the Stochastic Approach to Index Numbers." <u>Applied Economics Letters</u> , 7: 367-71.	Others	25
13.	Crompton, Paul	Crompton, P. (2000). "Future Trends in Japanese Steel Consumption." Resources Policy, 26: 103-14.	Others	58
14.	Crompton, Paul	Crompton, P. (1999). "Forecasting Steel Consumption in South East Asia." Resources Policy, 25: 111-24.	Others	34
15.	da Veiga, Bernardo	Da Veiga, B., Chan, F., and McAleer, M. (2012). "It Pays to Violate: How Effective are the Basel Accord Penalties in Encouraging Risk Management?" <u>Accounting and Finance</u> , 52(1): 95-116.	A	14
16.	da Veiga, Bernardo	Mcaleer, M., Da Veiga, B., and Hoti, S. (2011). "Value-at-Risk for Country Risk Ratings." <u>Mathematics and Computers in Simulation</u> , 81(7): 1454-1463.	Others	16
17.	da Veiga, Bernardo	Da Veiga, B., Chan, F., and McAleer, M. (2008). "Evaluating the impact of market reforms on Value-at-Risk forecasts of Chinese A and B shares." <u>Pacific-Basin Finance Journal</u> , 16(4): 453-475.	A	15

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 Table A3 Publications (continued)

No.	Student	Publications	Journal Ranking	Citations
(1)	(2)	(3)	(4)	(5)
18.	da Veiga, Bernardo	Da Veiga, B., Chan, F., and Mcaleer, M. (2008). "Modelling the Volatility Transmission and Conditional Correlations between A and B Shares in Forecasting Value-at-Risk." <u>Mathematics and Computers in Simulation</u> , 78(2-3): 155-171.	Others	15
19.	da Veiga, Bernardo	Mcaleer, M., and Da Veiga, B. (2008). "Forecasting Value-at-Risk with a Parsimonious Portfolio Spillover GARCH (PS-GARCH) Model." <u>Journal of Forecasting</u> , 27(1): 1-19.	A	74
20.	da Veiga, Bernardo	Mcaleer, M., and Da Veiga, B. (2008). "Single-Index and Portfolio Models for Forecasting Value-at-Risk Thresholds." <u>Journal of Forecasting</u> , 27(3): 217-235.	A	72
21.	Ezzati, Parinaz	Ezzati, P. (2013). "Analysis of Financial Integration of Iran within the Middle East and with the Rest of the World." <u>American Journal of Applied Sciences</u> , 10(12): 1492-1508.	Others	0
22.	Fogarty, James	Fogarty, J. (2010). "The Demand for Beer, Wine and Spirits: A Survey of the Literature." <u>Journal of Economic Surveys</u> , 24: 428-478.	Others	68
23.	Fogarty, James	Fogarty, J. (2006). "The Nature of the Demand for Alcohol: Understanding Elasticity." <u>British Food Journal</u> , 108: 316-332.	Others	71
24.	Fogarty, James	Fogarty, J. (2006). "The Return to Australian Fine Wine." <u>European Review of Agricultural Economics</u> , 33 (2006):542-561.	A	62
25.	Fogarty, James	Fogarty, J. (2003). "Australian Premium Wine Prices: Do Quality Ratings Matter?" <u>Western Australian Quarterly</u> <u>Bulletin of Economic Trends</u> , 4.03: 41-64.	Others	7
26.	Fu, Dahai	Fu, D. and Wu, Y. (2014). "Export Survival Pattern and its Determinants: An Empirical Study of Chinese Manufacturing Firms." <u>Asian-Pacific Economic Literature</u> , 28(1): 161-177.	Others	12
27.	Fu, Dahai	Fu, D., and Wu, Y. (2013). "Export Wage Premium in China's Manufacturing Sector: A Firm Level Analysis." <u>China Economic Review</u> , 26: 182-196.	A	3
28.	Fu, Dahai	Fu, D. (2013), "Agglomeration and Export Performance of Manufacturing Firms (in China)." In Y. Wu (Eds.) <i>Regional Development and Economic Growth in China, Chapter 9</i> . World Scientific Publishing, Singapore.	Others	0
29.	Fu, Dahai	Fu, D., Wu, Y., and Tang, Y. (2012). "Does Innovation Matter for Chinese High-Tech Exports? A Firm-Level Analysis." Frontiers of Economics in China, 7(2): 218-245.	Others	3
30.	Gao, Xing (Grace)	Clements, K. W. and Gao, G. (2012). "Quality, Quantity and Spending." European Economic Review, 56(7): 1376-91.	A*	3
31.	Gao, Xing (Grace)	Gao, G. (2012) "World Food Demand." American Journal of Agricultural Economics, 94(1): 25-51.	A*	23
32.	Giles, Margaret	Giles, M. (2003). "Correcting for Selectivity Bias in the Estimation of Road Crash Costs." <u>Applied Economics</u> , 35(11): 1291-1301.	A	11
33.	Giles, Margaret	Giles, M. (2003). "The Cost of Road Crashes: A Comparison of Methods and Recent Australian Estimates." <u>Journal of Transport Economics and Policy</u> , 37(1): 95-110.	A	10
34.	Giles, Margaret	Giles, M. (2001). "Data for the Study of Road Crashes in Australia." <u>The Australian Economic Review</u> , 34(2): 222-230.	Others	13

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 Table A3 Publications (continued)

No.	Student (2)	Publications (2)	Journal Ranking	Citations
35.	Hakim, Abdul	Hakim, A., and Mcaleer, M. (2010). "Modelling the Interactions Across International Stock, Bond and Foreign	(4) A	(5) 29
36.	Hakim, Abdul	Exchange Markets." <u>Applied Economics</u> , 42(7): 825-850. Hakim, A., and McAleer, M. (2009). "Forecasting Conditional Correlations in Stock, Bond and Foreign Exchange Markets." Mathematics and Computers in Simulation, 79(9): 2830-2846.	Others	7
37.	Hoti, Suhejla	Hoti, S. (2005). "Comparative Analysis of Risk Ratings for the East European Region." Mathematics and Computers in Simulation, 68(5): 449-462.	Others	17
38.	Hoti, Suhejla	Hoti, S. (2005). "Modelling Country Spillover Effects in Country Risk Ratings." <u>Emerging Markets Review</u> , 6(4): 325-345.	A	40
39.	Hoti, Suhejla	Hoti, S., Mcaleer, M., and Chan, F. (2005). "Modelling the Spillover Effects in the Volatility of Atmospheric Carbon Dioxide Concentrations." <u>Mathematics and Computers in Simulation</u> , 69(1): 46-56.	Others	10
40.	Hoti, Suhejla	Hoti, S., Mcaleer, M., and Pauwels, L. (2005). "Modelling Environmental Risk." Environmental Modelling and Software, 20(10): 1289 -1298.	Others	33
41.	Hoti, Suhejla	Hoti, S. and McAleer, M. (2005). <i>Modelling the Riskiness in Country Risk Ratings</i> . Amsterdam: Elsevier Science Publishing.	Others	30
42.	Hoti, Suhejla	Hoti, S. (2004). "An Empirical Evaluation of International Capital Flows for Developing Countries." <u>Mathematics and Computers in Simulation</u> , 64(1): 143-160.	Others	19
43.	Hu, Baiding	Hu, B., and McAleer, M. (2005). "Estimation of Chinese Agricultural Production Efficiencies with Panel Data." Mathematics and Computers in Simulation, 68(5-6): 475-484	Others	31
44.	Hu, Baiding	Hu, B., and McAleer, M. (2004). "Input-Output Structure and Growth in China." <u>Mathematics and Computers in Simulation</u> , 64(1): 193-202.	Others	35
45.	Hu, Baiding	Hu, B., and McAleer, M. (1997). "A Probit Analysis of Consumer Behaviour in Rural China." <u>Mathematics and</u> Computers in Simulation, 43(3-6): 527-534.	Others	4
46.	Lan, Yihui	Clements, K. W. and Lan, Y. (2007). "Exchange Rates, Productivity, Poverty and Inequality." <u>Applied Economics</u> , 39(4): 471-476.	A	3
47.	Lan, Yihui	Lan, Y. (2006). "Equilibrium Exchange Rates and Currency Forecasts: A Big Mac Perspective." <u>International</u> Economics and Finance Journal, 1: 291-311.	Others	11
48.	Lan, Yihui	Lan, Y. and Ong, L. L. (2003). "The Growing Evidence on Purchasing Power Parity." In L. L. Ong <i>The Big Mac Index: Applications of Purchasing Power Parity</i> . Pp. 29-50. London: MacMillan.	Others	11
49.	Lan, Yihui	Clements, K. W. and Lan, Y. (2001). "World Fibres Demand." <u>Journal of Agricultural and Applied Economics</u> , 33(1): 1-33.	Others	16
50.	Li, Liang	Clements, K. W, and Liang, Li. (2017). "Understanding Resource Investments." Applied Economics, 49(20): 1950-62.	A	0
	Ren, Weiwei	Ren, W., Rammohan, A., and Wu, Y. (2014). "Is there a Gender Gap in Child Nutritional Outcomes in Rural China?" China Economic Review, 31(4): 145-155.	A	5

A-13 **Table A3** Publications (continued)

No.	Student	Publications	Journal Ranking	Citations
(1)	(2)	(3)	(4)	(5)
53.	Ren, Weiwei	Ren, W., and Miller, P. (2012). "Changes over Time in the Return to Education in Urban China: Conventional and ORU Estimates." <u>China Economic Review</u> , 23(1): 154-169.	A	15
54.	Ren, Weiwei	Ren, W., and Miller, P. (2012). "Gender Differentials in the Payoff to Schooling in Rural China." <u>Journal of Development Studies</u> , 48(1): 133-150.	A	15
55.	Shareef, Riaz	Shareef, R., and Mcaleer, M. (2008). "Modelling International Tourism Demand and Uncertainty in Maldives and Seychelles: A Portfolio Approach." <u>Mathematics and Computers in Simulation</u> , 78(2-3): 459-468.	Others	41
56.	Shareef, Riaz	Hoti, S., McAleer, M., and Shareef, R. (2007). "Modelling International Tourism and Country Risk Spillovers for Cyprus and Malta." <u>Tourism Management</u> , 28(6): 1472-1484.	A*	89
57.	Shareef, Riaz	Shareef, R., and Mcaleer, M. (2007). "Modelling the Uncertainty in Monthly International Tourist Arrivals to the Maldives." <u>Tourism Management</u> , 28(1): 23-45.	A*	95
58.	Shareef, Riaz	Shareef, R., and Hoti, S. (2005). "Small Island Tourism Economies and Country Risk Ratings." <u>Mathematics and</u> Computers in Simulation, 68(5-6): 553-566.	Others	43
59.	Shareef, Riaz	Shareef, R., and Mcaleer, M. (2005). "Modelling International Tourism Demand and Volatility in Small Island Tourism Economies." <u>The International Journal of Tourism Research</u> , 7(6): 313-333.	A	82
60.	Verhoeven, Peter	Verhoeven, P., and Mcaleer, M. (2004). "Fat Tails and Asymmetry in Financial Volatility Models." <u>Mathematics and Computers in Simulation</u> , 64(3-4): 351-361.	Others	83
61.	Verhoeven, Peter	Verhoeven, P., Pilgram, B., Mcaleer, M., and Mees, A. (2002). "Non-linear Modelling and Forecasting of SandP 500 Volatility." <u>Mathematics and Computers in Simulation</u> , 59(1-3): 233-241.	Others	17
62.	Verikios, George	Verikios, G. (2009). "Modelling the World Wool Market: A Hybrid Approach." Economic Modelling, 26(2): 418-31.	A	3
63.	Verikios, George	Verikios, G. (2008). "The Costs of Global Tariff Barriers on Wool Products: 1997–2005." <u>Agricultural Economics</u> , 39(1): 87-101.	A	1
64.	Verikios, George	Verikios, G. (2007). "Understanding the World Wool Market: Trade, Productivity and Growers' Incomes." <u>Australian Economic Papers</u> , 46(1): 88-107.	Others	0
65.	Vo, Duc Hong	Vo, D. (2010). "The Economics of Fiscal Decentralisation." Journal of Economic Surveys, 24(4): 657-679.	Others	50
66.	Vo, Duc Hong	Vo, D. (2009). "Fiscal Decentralisation in Vietnam: Lessons from Selected Asian Nations." <u>Journal of the Asia Pacific Economy</u> , 14(4): 399-419.	Others	15
67.	Vo, Duc Hong	Vo, D. (2008). "Fiscal Decentralisation Indices: A Comparison of Two Approaches." <u>Rivisita di Diritto Finanziario e Scienza Delle Finanze</u> , 68(3): 295-323.	Others	11

Table A3 Publications (continued)

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No.	Student	Publications	Journal Ranking	Citations
(1)	(2)	(3)	(4)	(5)
68.	Vo, Duc Hong	Vo, D. (2007). "Fiscal Federalism." In P. A. O'Hara (ed) <i>International Encyclopedia of Public Policy – Governance in a Global Age (Vol. 3)</i> . Pp. 239-251. Perth: Global Political Economy Research Unit.	Others	0
69.	Watkins, Clinton	Watkins, C. and McAleer, M. (2008). "How has volatility in metals markets changed?" <u>Mathematics and Computers in Simulation</u> , 78(2-3): 237-249.	Others	19
70.	Watkins, Clinton	Watkins, C. and McAleer, M. (2006). "The Pricing of Non-ferrous Metals Futures on the London Metal Exchange." Applied Financial Economics, 16(12): 853-880.	Others	40
71.	Watkins, Clinton	Watkins, C. and McAleer, M. (2005). "Related Commodity Markets and Conditional Correlations" <u>Mathematics and</u> Computers in Simulation, 68(5): 567-579.	Others	5
72.	Watkins, Clinton	Watkins, C. and McAleer, M. (2004). "Econometric Modelling of Non-ferrous Metal Prices." <u>Journal of Economic Surveys</u> , 18(4): 651-701.	Others	53
73.	Watkins, Clinton	Watkins, C. and McAleer, M. (2002). "Cointegration Analysis of Metals Futures." <u>Mathematics and Computers in Simulation</u> , 59(1): 207-221.	Others	17
74.	Williams, Andrew	Williams, A. (2009). "On the Release of Information by Governments: Causes and Consequences." <u>Journal of</u> Development Economics, Vol. 89 (1): 124-138.	A*	43
75.	Williams, Andrew	Williams, A. and Siddique, A. (2008). "The Use (and Abuse) of Governance Indicators in Economics: A Review." Economics of Governance, 9(2): 131-175.	Others	92
76.	Yu, Fei	Yu, F., Wu, Y., and Chen, J. (2016). "Biases in Patent Examination and Firms' Responses: Evidence from the Pharmaceutical Industry." China Economic Journal, 9(2): 101-115.	Others	0
77.	Yu, Fei	Yu, F., and Wu, Y. (2014). "Patent Citations and Knowledge Spillovers: An Analysis of Chinese Patents Registered in the USA." Asian Journal of Technology Innovation, 22(1): 86-89.	Others	7
78.	Yu, Fei	Yu, F. (2013). "Inconsistency in the Assessment of China's Domestic and Foreign Patents." In Wu, Y. (Eds.) <i>Regional Development and Economic Growth in China</i> . World Scientific Publishing Company, Singapore.	Others	0
79.	Zhang, Ying	Arora, V., Tyers, R. and Zhang, Y. (2015). "Reconstructing the Savings Glut: The Global Implications of Asian Excess Saving." Journal of Economics and Finance, 7(7): 19-42.	Others	9
80.	Zhang, Ying	Tyers, R. and Zhang, Y. (2014). "Real Exchange Rate Determination and the China Puzzle." <u>Asian-Pacific Economic</u> Literature, 28(2): 1-32.	Others	4
81.	Zhang, Ying	Tyers, R. and Zhang, Y. (2011). "Appreciating the Renminbi." The World Economy, 34(2): 265-297.	A	45

Notes: Publications are restricted to peer-reviewed journals and books that were directly from theses. Journal rankings are from Australian the 2016 Business Deans Council (ABDC) rankings. "Others" consists of all publications below rank A, those outside the ABDC's field of coverage and publications as book chapters. Citations are from Publish or Perish (Harzing 2007), which uses Google Scholar and Microsoft Academic Search to obtain the number of citations. Citation counts are as of 13th April 2017.

 Table A4 Letters from Graduates

	Name	Year of completion	Page number	
	(1)	(2)	(3)	
1.	Al-Said, Adham	2011	A-16	
2.	Birch, Elisa	2005	A-17	
3.	Cheong, Tsun Se (James)	2012	A-18	
4.	Collins, Jason	2015	A-19	
5.	Crompton, Paul	2002	A-20	
6.	Fogarty, James	2006	A-21	
7.	Gao, Xing (Grace)	2012	A-23	
8.	Giles, Margaret	2003	A-24	
9.	Hakim, Abdul	2009	A-24	
10.	Lan, Yihui	2003	A-26	
11.	Li, Liang	2014	A-27	
12.	Loh, Elaine	2005	A-28	
13.	Ren, Weiwei	2013	A-29	
14.	Verikios, George	2007	A-30	
15.	Wibowo, Heru	2012	A-31	
16.	Williams, Andrew	2007	A-32	
17.	Yu, Fei	2013	A-33	

Dear Ken

My PhD at UWA Economic Department was an engaging experience. I've had the opportunity to work with some exceptional professors and students while writing my thesis. UWA's diverse professional backgrounds of staff and students provided a unique learning experience.

My time in the UWA Ph.D. program has helped developed key research skills through effective supervision and an enabling environment. Through regular intellectual, subject matter seminars, and local and international conferences I've quickly developed necessary skills required in the field.

A notable contribution for being at UWA was Ph.D. conference which was a long standing platform engaging graduate studies students. UWA being one of the key conveners of the conference was particularly dynamic in creating further exposure to some of best researchers and Ph.D.s.

Over all my experience at the UWA Ph.D. Economics program was central to my professional development. I've received great support professionally and administratively during my journey.

Adham Al Said



24th April 2017

Dear Ken.

Thank-you for giving me the opportunity to reflect on my PhD studies at the Economics Discipline. I started my PhD at the University in January 2001. As commencing student, I was incredibly spoilt, given my own office and series of journal, *The Economic Record* which expanded over 40 years. My supervisor, Professor Paul Miller was a wealth of knowledge and was incredibly patient with my lack of knowledge. He had an unbelievable photographic memory and was able to remember publications down to the journal volume, issue number and sometimes even page number. Paul was a fantastic supervisor. He was so very helpful and reviewed my work so very quickly. He had an eye for picking up even the most minor grammatical errors or a coding error with my econometrics. He was very supportive of my ideas and always gave very constructive feedback. Paul was never the most "chattiest" of supervisors but truly cared for his students. I was encouraged to embark on a PhD with Paul from my colleagues at Curtin University, Peter Kenyon and Alison Preston. They felt it would be wise for me to leave my research position at Curtin University and train under Paul at UWA. This turned out to be one of the best decisions of my life.

I found my PhD studies a very rewarding journey. One of the best aspects of the program was that it taught me the ability to write and edit. Whilst I still muddle up the terms "effect" versus "affect", I found that studying a PhD provided me with skills beyond what I needed for a PhD. The PhD programme gave me the opportunity to publish my research and present my research at the Australian Conferences of Economists. I was also given the opportunity to teach for the University in both a tutoring and lecturing capacity. The PhD programme provided me with the "taste" for teaching and research and ultimately drove me to a career in academia.

In 2004, I was offered a full-time research position at UWA and completed the remainder of my PhD part-time. By the end of my PhD I had made a number of lifelong friends and colleagues at the University. I managed to master the use of econometric software and the art of procrastination during the difficult periods of my research. One of my most memorable moments of my studies was when you, Ken, can up to me to enquire about the t-shirt that I was wearing. I was wearing an ACDC t-shirt and told you that I was taking casual Friday to a new level. I was worried that I would have to explain to you who ACDC were. Much to my shock, you were well and truly aware who ACDC were and went on to tell me that Bon Scott's mother had worked for the Discipline as a tea lady. This is still one of my favourite stories to tell my students, of whom some are more impressed that Professor Ken Clements has heard of Bon Scott rather than ACDC's links to the Economics Discipline. I finished my PhD in 2005 and was honoured to deliver the valedictory address at my PhD graduation. In 2007, I was offered a Lecturer position at the Economics Discipline where I have now worked for the past decade.

Without studying a PhD at UWA I would not have the career or life that I have. It was a very special and happy period of time for me personally, having met my husband the week before starting my PhD and getting married to him a few months after completing it. Unfortunately, my PhD supervisor and co-author on 12 twelve publications, Paul Miller passed away from cancer in 2013. I miss his knowledge and mentorship but are so grateful to have trained under him and done a PhD with him at UWA. My copies of 40 years of *The Economic Record* are still proudly displayed in my office as a reminder of my PhD journey.

Kind Regards

Dr Elisa Birch Senior Lecturer, Economics Discipline University of Western Australia





Dear Ken,

Thank you very much for your invitation for sharing my experience in studying at UWA.

I studied for my PhD from 2008 to 2011 at the University of Western Australia. The Business School of UWA is a great place for studying postgraduate degrees. The academic staff provided professional assistance to me and they helped me a lot in my research. It was a wonderful experience for me as I could work with other eminent scholars at the same office.

My supervisor has always been very helpful and provided strong support to me. He is a caring and loving person. It is worth noting that my supervisor not only provided academic guidance to me, but also helped me in many other ways. When I joined UWA in 2008, I did not know anyone there. My supervisor helped me in settling down in Perth over the first few weeks, provided support and advice all the time. I has maintained a close relationship with him even after I graduated from UWA. I have worked closely with him and even now, five years after my graduation, we still work together in conducting research on China's economy. The relationship between my supervisor and me is not only simply academic supervision, but it also creates a strong bond between us.

I provided training to four master and PhD students on economic modelling when I worked as a postdoctoral research fellow at UWA after I graduated. In my contact with them, I found that all the students are very smart and industrious. Many of the students of UWA are from countries across the globe and it is great to enjoy the cultural diversity of fellow students and colleagues.

It was such a wonderful experience studying at UWA. I strongly recommend their postgraduate courses.

Thank you very much and wish you have a good day.

Best Regards

James Cheong, Ph.D.

Assistant Professor Department of Economics and Finance School of Business Hang Seng Management College

Treasurer Chinese Economics Society Australia (CESA) Ken Clements and Jiawei Si UWA Business School 35 Stirling Highway Crawley WA 6009

29 May 2017

Dear Ken and Jiawei,

Thank you for the opportunity to contribute to your project on the experiences of UWA economics PhD students.

Initially, I intended my research to be nothing more than an intellectual exercise. It reflected a desire to explore some topics more interesting than those I was dealing with in my day job at the time.

That small goal was easily met. My subject area, the intersection of economics and evolutionary biology, is a growing sub-field that is greatly benefiting from rapid advances in genetics. I started my research at a moment when many of the foundational ideas were being established and challenged, making for an intellectually stimulating period.

But despite the absence of other goals, my research triggered a substantial number of opportunities. As a start, my topic of the interaction of human evolution and economic growth required me to build an understanding of human decision making from areas such as evolutionary psychology, behavioural science and behavioural economics. That background allowed me to cofound PwC's behavioural economics practice with a like-minded colleague.

Another set of skills I built through the research was in the open-source statistical programming language R, which I used to develop simulations for four of my thesis chapters. In today's wave of excitement about data science, R has emerged as one of the most popular tools. Today I lead a team of data scientists and analysts in the Australian Securities and Investments Commission, playing a central role in driving ASIC's data science agenda and using data science and analytics to detect risks and misconduct in financial services and markets.

Other opportunities that arose from the research were of less career benefit, but still valuable. Having two Swiss supervisors led to four months at ETH Zurich with the experimental ecology and theoretical biology groups. A chance meeting through my blog led to me co-hosting a conference linking evolutionary biology and economics. [As an aside, blogging is something I recommend PhD students do. If you are lucky enough to find some readers, you can access instant peer review of your ideas without the pains of journal submission.] Even today new opportunities regularly arise from the connections I made.

Finally, I greatly appreciated the openness of the Business School in accepting me as a PhD student despite my unorthodox proposal. This was in large part due to my economics supervisor Juerg Weber, who in turn found me an evolutionary biology co-supervisor in Boris Baer. Their willingness to join me in exploring a subject that they possibly had not contemplated before was greatly appreciated.

Best regards

Jason Collins

PhD Reflection

Paul Crompton

I completed my PhD in economics at the University of Western Australia in 2002 under the supervision of Professors Ken Clements, Juerg Weber and Moonjoong Tcha. The title of my dissertation was "Economic Aspects of the East Asian Steel Industry". I had three papers published in journal from my thesis and I continued to work in the field of commodity markets for many years after the submission of my PhD. My PhD gave me the research skills that are required to conduct academic research. I found the experience to be incredibly challenging, but rewarding, as I was also taking lectures and tutorials in undergraduate classes throughout the entire time I was enrolled in the PhD program.

Furthermore, I completed a number of consultancy projects for resource companies in Western Australia such as BHP Billiton and Rio Tinto. My PhD training gave me the confidence and breadth of knowledge in the field of commodity markets that is required to successfully complete such projects.

More recently, my research has focused on electricity markets, in particular, the integration of wind power into existing electricity networks and the true costs of such integration. While this has been a complete change in research fields, the transition was made far easier by the mobility of the economic and econometric skills acquired during my PhD. My most recent project is examining the impact of the growing penetration of solar-roof top panel technology on the existing network in Western Australia. It is a particularly fascinating area as few people understand the negative impacts of renewable energy sources. I am particularly interested in areas of research that are topical and relevant to everyday Australians.

I have also taken on leadership roles with the Business School at the University of Western Australia, including the Director of Postgraduate Programs (2010–14) and Associate MBA Director (2017–). Despite these roles, I am managing to remain engaged with my research into electricity markets.





9/06/2017

Professor Ken Clements Economics (UWA Business School) The University of Western Australia (M251) 35 Stirling Highway CRAWLEY WA 6009 Australia

Dear Ken,

Thank you for the invitation to reflect on my time as an Economics PhD student at UWA. As I currently hold an academic position in Agricultural and Resource Economics, my PhD study was a fundamental step in my career path. Without a PhD in Economics I would not have the job I have today. My time as a PhD student was, however, a much richer experience than one of simply gaining a technical qualification.

My time as a PhD student was an opportunity to immerse myself in research in a way that I have not again experienced. I was able to study the issues related to alcohol demand in general, and the wine market in particular, exhaustively, and without interruption. As I prepare to head to the 11th Annual American Association of Wine Economists Conference in Padova, Italy, I am reminded of how well this research topic has served me over the past decade.

Over recent years my research program has increasingly focused on local Western Australian issues, and I have spent time working on: understanding the implications of the local government amalgamation program; how to manage the depletion of Perth's main ground water resource; and mining exploration policy. This work has been interesting, and at least in some cases, has been well received by policy makers.

While I did develop strong research skills during my PhD study, I also learnt many general skills that continue to serve me well. For example, the general training in microeconomics and econometrics I received during my time as a PhD student has meant that I have had the opportunity to work as an economic consultant for a wide variety of government and private sector clients, and this has been interesting. Over the past decade I have spent time working on a diverse role of projects, including: economic development issues for both Norfolk Island and Christmas Island; deregulation of the ware potato market in Western Australia (at last, free choice in spuds!); mining royalties; trade with Indonesia; a wide variety of waste and water market issues; and government housing policy, to name just a few topics. The ability to tackle such a diverse range of topics easily is due the training I received during my PhD study at UWA.

The presentation standards that were instilled in me during my time as a student have also served me well. I may no longer always format my tables in the patented Clements style -- caption details in all caps, double line for the top line of the table, single line separating column heading information from the table body, single line for the bottom of the table -- but the presentation instructions for tables I provide to my first year class (reproduced in Box 1) will look remarkable familiar to you.

Box 1: Instructions for students (extract table and figure guide)

Table font size: All table information is to be in 10pt font

Line spacing: Within a table line spacing is to single line spacing

Decimals: Within a table column a common decimal place format is to be used

Top line: A double solid line is to be used for the top line of a table

Bottom line: A single solid line is to be used for the bottom line of a table

Heading separator: A single line is to be used to separate column headings from numbers

Caption location: the Table caption must be placed above the table

Caption label font: The caption label is to be in 12pt font

Caption label line spacing: The caption label line spacing is to be single line spacing

Sub groups: identification of subgroups with a line is optional

Pooled groups: identification of a pooled group with a dashed line is optional.

Table 1 A useful description (units of measurement)

Category	Location 1		Locati	Location 2		Location 3		Location 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Gender A	12.1	4.0	12.1	4.0	5.2	2.9	5.2	2.9	
Gender B	14.1	3.7	14.1	3.7	5.9	2.8	5.9	2.8	
All	13.1	87	13.1	87	6.1	3.4	6.1	3.4	

Source: SCIE1104, Science Society and Data unit table and figure presentation guide

Finally, and most importantly, the friends I made during my time as a PhD student have also stayed with me. As many of these people now have careers at institution across the globe, this network of friends is a wonderful source of research collaboration partners, and when we get together our conversation always returns, at some point, to those UWA days.

My PhD years have very much shaped my career to date, and it is a time I remember with much fondness.

Best wishes. And, thank you for you patient supervision all those years ago.

Yours sincerely,

James Fogarty

9 June 2017

Professor Ken Clements UWA Business School 35 Stirling Highway Crawley, WA 6009

Dear Ken,

RE: UWA ECONOMICS PHD PROGRAM

Thank you for the opportunity to reflect on my study of economics at the University of Western Australia.

It was the summer of 2007 and I was standing on a fully packed bus to work in Shanghai. Squashed up against other commuters, I made the decision to study economics in Australia. A family friend introduced me to Yihui Lan and you at Business School. Any prominent professor in economics would have rejected an applicant with overly narrow knowledge like me (I was a math and statistics major), but you did not. Luckily, I received a scholarship and started my PhD study at UWA in March 2008.

You have been very supportive and inspiring through my study. Encouraged by you, I read a board range of research articles and took a number of graduate courses in the first year. I decided to focus on consumer demand analysis after reading a book written by Henry Theil borrowed from you and working on the research project on food affluence. With your guidance, I finished my first paper in the second year and two other chapters followed naturally. My knowledge and research skills were quickly build up through the thesis writing and involvement in a number of research projects run by you and Yihui. Teaching undergraduate tutorials has also enhanced my communication skill and strengthened my knowledge of economics and econometrics.

In addition to the first-rate supervision I had received, the information resources and general support for PhD students were excellent at UWA. The library facilities provided access to all resources needed. The administrative support was great. PhD students were motivated to attend conferences and apply for research grants from both the university and the Business School. The graduate student accommodation service was very helpful with my application for long term accommodation.

Having graduated in 2012 with two accepted papers and a couple of research awards, I was assured of my decision in 2007. It was such a rewarding journey going from a math major student to an economist. PhD study at UWA has opened up a lot of opportunities for me, and I greatly appreciate your guidance and all support I have received at UWA.

Yours sincerely,

Grace Gao Senior Economist Victorian Department of Treasury and Finance



JOONDALUP CAMPUS

270 Joondalup Drive, Joondalup Western Australia 6027

www.ecu.edu.au

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18 April 2017

Prof Ken Clements
Business School
The University of Western Australia

Reflections on my PhD in Economics at UWA

I enrolled in the PhD program in 1993 and achieved my parchment in 2003. On reflection, this was a remarkable achievement given that I was working full-time and had three young children, the oldest having just started primary school when I commenced the thesis journey.

My supervisors were Prof Ken Clements and Prof Paul Miller. Both supervisors provided excellent support. Prof Clements was always available for encouragement and help with process problems that arose from time to time, and Prof Miller provided thorough technical support with lightening- speed turnaround of my draft chapters. Prof Miller also, at the proposal stage, recast my vague and ambitious ideas into a methodology that was cutting edge - Heckman had just won the Economics Prize in honour of Alfred Nobel for his work on correcting selectivity bias in non- random samples. Both supervisors also enabled me to develop a fluent academic writing style in lieu of the terse government report writing that I used for my written work with the State and Federal governments prior to entering academia.

Midway through my thesis process, I wrote up two of my chapters and one appendix as journal articles. These were published in 2001 and 2003. As a full-time academic at the time, it was not enough to be researching a thesis; articles had to be written and submitted. Two of the articles were accepted for publication prior to submitting my thesis for examination which allowed me to thank the journal editors in the Acknowledgement section of the thesis.

The PhD process was a steep learning curve for me. I had to update my econometrics knowledge and learn two statistical software packages. I had to learn to write with authority. Now, when I re- read parts of my thesis to see how I reported the data analyses or how I modelled the Heckman technique which is still one of my go-to methods for analysing data compiled from a non-random samples, I am still surprised at the quality of the writing.

In my post-PhD working life as an academic (2003-2006, 2008-current) and project coordinator (2006-2008), the skills I acquired during my PhD research and writing processes have been well exercised. They have been invoked in my roles as a supervisor of research students, as a lead chief investigator of ARC and other funded research, and as an author of one book (with others), two book chapters and many articles in good quality journals. I now know how time-poor academics are and how the workload allocation for supervising research students is woefully insufficient. Yet Prof Clements and Prof Miller did not shrink from the task of supervising my PhD which, in the early years, must have been onerous. Many thanks to you both.

Yours faithfully

Margaret Giles, PhD (UWA 2003)

Dear Ken Clements and Jiawei Si

A-25

These are some words to share.

Learning at UWA is a gift for me. Most master students are well informed about the main idea of taking doctoral program, but still, the process of learning in UWA provide a unique experience to me. I got most of the valuable experience from the professors who guided me in completing the preparation of the thesis. I also got invaluable experience from the academic atmosphere in the UWA. One special thing I got from UWA is an atmosphere of mutual help and mutual encouragement in completing the learning program.

High academic atmosphere is a value added you get if you study at UWA. It is characterized, among others, by weekly conference held every Friday afternoon. Although it is a local conference, but the presenter who presented their works come from various prestigious institutions around the world. In addition, the professors in UWA with their progressive publications in high respected journals provide a huge motivation to complete my PhD program and publish the papers resulted from the thesis. Indeed, I manage to publish two papers in respected journal publications.

The involvement of doctoral students to help provide a tutorial is also a very good thing, which could provide doctoral students, especially international students, to share in the experience as a lecturer at a prestigious institution in a developed country. Standing in front of the class, and speaking a language that is not your mother tongue, is truly a unique, expensive and motivation boosting experience to an international student like myself.

A wide range of experience, both in teaching and research, have extended my knowledge and insight in these areas. With these experiences, I became more confident to become a teacher and researcher at my institution in Indonesia. I manage to get several prestigious research grants from the government and private sectors. Even today I am trusted to organize a doctoral program at my school.

Kind regards,

Abdul Hakim

Coordinator of PhD program,

Fakultas Ekonomi, Universitas Islam Indonesia



Business School Accounting and Finance Discipline

Dear Ken,

Thank you for inviting me to write about my Economics PhD study at UWA.

I unexpectedly enrolled into the PhD program in the Economics Department after undergraduate studies in Engineering and then MBA studies. Due to the lack of sufficient background in economics, in my first year of PhD I was busy sitting in a variety of economics units taught by the academics with very different characters. Ken, you always brought to classrooms interesting real world cases that stirred up students' interests and lots of discussions. Professor Paul Miller and Dr Radhika Lahiri always wrote down lengthy derivations without referring to any textbooks or notes. Professor Michael McAleer frequently questioned seminal articles and brought our attention to the debates still remained. Professor Darrell Turkington and Dr Moonjoong Tcha gave very detailed explanations and made textbook material so accessible.

In my second year of PhD I was lucky enough to be under your direct supervision. Unlike other supervisors, you made yourself available on a daily basis. When you were unable to be in office or during weekends, we could still drop work in your mailbox and receive your comments right on the day via email or fax. When I came across difficult research problems you always had confidence in me. By pointing out several directions towards a problem, you encouraged me not to give up explorations. When I eventually solved a problem, even I myself was surprised that I had this persistence and competency that led to solutions. When I could not solve a problem, you emphasized that this was common during the PhD process and I always felt being in safe hands.

Writing a PhD thesis at a high academic standard was never easy for me with my non- English speaking background. You made relentless efforts correcting my English mistakes and helping me strive for precision in writing. Like me, all of your other PhD students coming from overseas had all learnt a great deal from your succinct writing style. For years after my PhD studies when working as an academic, I have kept the habit of going through numerous iterations to achieve clearer writing.

You also provided me with support in aspects other than research. You encouraged me to give short presentations related to my research to honours students, and to become a tutor in economics units. Teaching in small classes gradually built up my confidence in improving my communication skills and eventually helped me land a job as an academic. When I suffered from a serious illness just before obtaining my PhD degree, both Izan and you supported me not only professionally but also emotionally just like family, for which I am forever grateful.

During my PhD study, all academic and administrative staff in the Department were always ready to help and all fellow PhD students were very collegial. These four years has definitely shaped my future career. I would recommend the Department to any perspective PhD students.

Yours sincerely,

Yihui Lan June 2017





Professor Kenneth W Clements Winthrop Professor of Economics Business School University of Western Australia

Dear Ken

Thanks a lot for the opportunity to reflect on my PhD study of economics at the University of Western Australia.

I completed my PhD degree in economics at UWA in 2014. My thesis was "Understanding Resources Investment". The experience was memorable and challenging for me but it has thoroughly opened a new door for me and changed the way I think about the world. Every day, I make use of the knowledge learned from my PhD program to understand how the economy works and how it impacts our life.

I thoroughly enjoyed my study at UWA. UWA provides rich resources and facilities to help PhD students' study, from generous scholarship to supervisor's great support. More importantly, I enjoyed working with a lot of excellent people together, including PhD students and professors, and learning from them. In economics department, the best thing, I think, is the brown-bag seminars on each Wednesday, which is a type of informal seminar. Unlike a formal seminar, in a brown-bag seminar participants friendly and frankly give you their opinions on your research and tolerate your minor errors. It is very useful for PhD student to improve their presentation skills and sharpen papers which will be presented in academic conferences later.

Thanks to the training during my PhD program, I joined Industrial and commercial Bank of China (ICBC) after graduation as a Relationship Manger covering resources sector. As I worked with my colleagues and clients, I gradually found that what I learned from my PhD study, including micro/macroeconomics, global financial market, commodity market, corporate finance, resources investment and monetary and fiscal policy, give me a lot advantage and confidence to analyse and forecast the business world, which is very important for banking industry.

I would, without hesitation, recommend an economics degree for future PhD student. I believe that many people know they are affected by economic rules everyday. But if they want to know how these rules work and how to make use of them or even find new rules to change the world, economics degree must be a good choice.

Overall, my PhD study was a very rewarding experience, and I benefit from it in my lifetime.

With Sincere thanks,

Liang Li

Relationship Manager, Industrial and Commercial Bank of China

Kenneth W Clements Winthrop Professor of Economics Head of Economics University of Western Australia 35 Stirling Highway Crawley, WA 6009

9 June 2017

Dear Ken,

Thank you for the opportunity to contribute to on my PhD reflections.

12 years after I have completed my PhD, I still remember my days at UWA with fondness. Throughout my time as a PhD student, I received significant support from my supervisor, Nic Groenewold. I recall the frustrations of writing the literature review - I remember spending the first year simply writing my literature review, and I could not understand then why I could not stop writing the literature review and start the real research! At the same time, I recall the joys I felt when I finally got my first RATS coding right and was finally able to generate GARCH distributions.

Today, I understand the purpose of the literature review and how it serves a purpose of keeping me informed of the latest developments in academia. Today, I no longer generate GARCH distributions – although a good appreciation of distributional properties has helped me establish my role as a subject matter expert in the area of Risk and Uncertainty where I work. Today, I still rely on the research skills developed as a result of my experience at UWA.

Today, I am a Senior Economist in Shell Australia. Whilst this was never the career I intended when I pursued my PhD, I am glad for where I have landed. Having a PhD from UWA has helped me land where I am today, as the university is prestigious and a PhD from the School of Economics is highly regarded.

Writing this letter has helped me remember some of the most formative years of my life. Thank you for helping me develop, thank you for helping me grow and thank you again for helping me reflect.

Yours Sincerely,

Elaine Loh, PhD

A-29

I was benefited a lot during my PhD at Business School, UWA. I was lucky to be supervised by very good supervisors, Professor Paul Miller, Professor Anu Rammohan and Professor Yanrui Wu. Regular meetings kept me reading literature and analyzing data and their timely useful suggestions helped me make progress in my research. I had became more interested in Labor Economics and found my interested area-gender differentials in China. Seminar every two weeks at Business School was so impressing which widened my vision and extended my economics knowledge. Because of the good guidance of my supervisors and academic atmosphere at Business School, UWA, I finished my PhD fluently with good dissertation and publications.

So far, I have published three English papers on China Economic Review and Journal of Development Studies. I hosted a project supported by National Natural Science Foundation of China 2016, which is the highest level fund in China. I am hosting a project cooperated with IAST, Toulouse of University, which ranks first in Economics in France. I was invited by Professor Paul Seabright to visit IAST for further cooperation in January, 2017 and finished a paper based on our survey data. In 2016, I was promoted as an associate professor because of my excellent research and teaching.

I often receives emails from UWA which keeps me informed what happened in UWA. I still keep in touch with my supervisors and we published a paper after my graduation. Yanrui and Anu concerned my current situation and give me timely advice both in my work and my life.

I have to say: Doing PhD in UWA was worthwhile in my life.

Weiwei REN



KPMG Economics 71 Eagle Street Brisbane, QLD 4000 Tel +61 7 3233 3282 gverikios@kpmg.com.au

14 June, 2017

Professor Kenneth W Clements Winthrop Professor of Economics Business School The University of Western Australia

Dear Ken,

Thank you for the opportunity to give my perspective on PhD study at UWA and the impact on my career.

In 2003 I began a 3-year appointment as Research Fellow undertaking an ARC Linkage project *Economic Aspects of Wool in Western Australia* led by you. It seemed to me that my work in the project was significant enough to form the basis of a PhD. You agreed and kindly allowed me to enrol in a PhD while concurrently working on the Linkage project. I also undertook some undergraduate teaching while I was at UWA and I was always impressed by the high quality of the students.

I found working and studying at UWA a very pleasant experience. UWA has one of the most attractive university campuses in Australia, with a relaxed atmosphere, beautiful gardens and wildlife, all perfectly located by Matilda Bay. Consistent with this, I found the staff in the Economics program always welcoming and sociable.

I completed my PhD study in 2006. I was able to submit my thesis within three years of enrolment. A major reason for this was your guidance as a PhD supervisor. I can remember many meetings where you suggested I reduce rather than expand the scope of the thesis. This helped me maintain focus on the task at hand: completion of the thesis. During our regular meetings I could not help but be impressed by your almost encyclopaedic knowledge of many areas of economics, plus your ability to remember author names from the distant past as you constantly suggested pieces of research that might be relevant to my thesis *Understanding the World Wool Market: Trade, Productivity and Grower Incomes*. These suggestions encouraged me to read widely and I was exposed to a diverse array of research in economics. Interaction with other PhD students was also important in this regard. I found and still find this exposure invaluable to thinking broadly when applying economic principles to the issue at hand.

My time at UWA allowed me to move easily into the world of economic consulting, first at Access Economics and now at KPMG, with a period in between at the Centre of Policy Studies at Monash University and Victoria University. I am always grateful for my time at UWA.

Yours sincerely,

George Verikios Associate Director

g. Verti

Jakarta, 15 April 2017

Professor Kenneth W Clements
Winthrop Professor of Economics
The University of Western Australia

Dear Professor Ken,

I would like to thank you for the opportunity to share my experience in pursuing a PhD in Economics at the Business School UWA. I completed a PhD under supervision of Dr. Abu Siddique and Professor Yanrui Wu in 2012. My dissertation was on "Inequality and Fiscal Decentralisation in Indonesia: Evidence from the Households Expenditure Data". It was a truly fascinating and rewarding both academic and social life experience for me that I would like to pass through generations.

I was grateful to pursue a PhD degree at UWA with such a vibrant academic environment and supportive supervisors. The supervisors have guided me throughout the dissertation processes with care and encouragement that made the journey became more focused and enjoyable. Further support from the Business School UWA had significantly contributed toward completion of my study. I would like also to provide special credit to a regular twice a week seminars that was presented by scholars (both local and abroad) and PhD students to discuss various interesting topics in economics. It was undoubtedly useful in enriching analysis on various topics in economics as well as contributing toward refining my dissertation.

Completing a PhD study from UWA has a pivotal role in developing my career within the Ministry of Finance Indonesia. It gives me an improved analytical and economic framework as well as confidence in discussing, analyzing, evaluating, and formulating fiscal policy. Considering national development objectives, budget constraints and others, it is expected that undertaken fiscal policy should both theoretically and practically sound in order to optimize its impact toward welfare of the country. Reflecting to my experience, I strongly advise to pursue graduate study in Economics at the Business School UWA.

Kind regards,
Heru Wibowo
Directorate General of Budget
Ministry of Finance Indonesia

My PhD experience at UWA

Andrew Williams

For me, the decision to undertake a PhD was driven largely by the desire to answer a specific question, rather than any future employment considerations. At the time I started my thesis, I really gave no thought to what kind of job I would do when I had finished. Although I would not advocate this approach to others, it did give me one advantage – I was deeply motivated by the research question I was trying to answer and, as such, the time spent writing the thesis was one of the most rewarding of my career.

This experience now underpins advice I give prospective PhD candidates. Gaining a doctoral degree is a long and difficult process, and therefore the topic you are researching needs to be one you are passionate about. Without that, a PhD can easily become a grind. Hard work if you will. Even though I spent many hours, days, weeks and years on this single idea, it never actually felt like 'work' to me at all. Motivation therefore was never an issue, but it certainly can be if you've chosen an area of research that you lack a deep and abiding interest in. So think long and hard about *what* you are doing, as much as *why* you are doing it.

I was also extremely fortunate to be surrounded by people in the department who helped me enormously over the journey, often without any thought of compensation. They were just happy to help someone who shared the same passions that they did. Although writing a PhD can be a solitary experience for much of the time, everyone still relies on feedback, advice and encouragement along the way. In this respect, UWA was a wonderful place to be at. There is no doubt that whatever merits my thesis ultimately had, it was due in no small measure to the many conversations I had with a number of academics over the course of my research. This is what people often mean when they talk about the 'research environment', and I consider myself fortunate to have been able to experience such an environment here at UWA.

Dr. Fei Yu Research Center for Technological Innovation, School of Economics and Management, Tsinghua University, China

Prof. Ken Clements UWA Business School 35 Stirling Highway Crawley, WA 6009

Dear Prof. Clements:

Thank you for your letter to ask me write for the personal experiences of economics students at the University of Western Australia (UWA). I think I have many words to share with the UWA colleagues.

On the very day when I arrived the UWA campus, I was impressed by the tropical greens along the avenue of the main gate. That beautiful place is where I will spend my four-year PhD studies. Then I was guided all the way back to the endpoint of the campus, where a brand new building of business school appeared. I was very thankful that I chose Perth to begin by research career.

Prof. Yanrui Wu is my PhD supervisor and he is a very kind man to work with. Two little things, however, had call to my mind when I think back of the life in UWA. The first one is that he refused to speak Chinese with me in the office even though it is both our mother tongue. This helped me to think in English and learn how to communicate with daily languages. The second issue is the red proofreading marks on my draft papers. I regularly submitted my draft works to Prof. Wu by every two weeks. In the beginning, my draft works are full of red corrections. (I believe he still will add a lot to this letter). Oh, that man is not only having a kind face but also is very strict on the work! I learnt deeply about how to do the research properly. In the life, though, Yanrui is a very good friend and took care of the Chinese students well. For instances, he will invite us, Chinese and Indonesian students to visit his home during the day of Chinese traditional spring festival. They were very good memories when I think back of the passed days.

I also have witnessed your work style: arrive on 9:00am and leave on 17:00pm, on spot of time every day! I am still struggling with my work plan but you are the model of the time-keeper and a well-planned researcher to me. The other help is your enraging words to my every little progress and each time after my presentation of a recent paper. They are sweet water to me after a long run of a paper-marathon. Besides, your talk is always clear-cut and slow in speed. You may not know how a great help to a non-native speaker.

I also had a lot of good memories of the co-work time with my PhD colleagues. They are very good inspirations to my work. Doing research work is very lonely. Yet, with the occasional short chats it smoothed the tensions in the mind. And I love the seminars where I can learn from each scholars' research. Compare to the life in China, I have to say the research in UWA is much relaxed and people are more enjoy the process of research. This experience has taught me where I could not learn elsewhere, I believe. If I have to add a piece of suggestion to the research environment, I would say it will be perfect if the school can regain the tradition of sandwich lunch after the seminar. In the last year of my stay in UWA business school, the lunch arrangement was cancelled. It is not only about food but also a happy time to share tacit knowledge. I hope you can raise fund for the future students. \odot

I am greatly thankful that after six months of returning home, I was informed that I had won the best PhD thesis award. It is a great honor to me, especially with my far-to-perfect English expressions. I hope to continually contribute to the community of the economic department in UWA and consider myself as a permanent member of the big family back in Perth.

I hope in the future I can re-visit UWA and meet all the old friends. The best time of my research life is in Perth, and writing this letter makes me so happy when I recall it.

Thank you and I wish all the best to you and the colleagues of the team,

Yours sincerely,

Fei Yu

Editor, UWA Economics Discussion Papers: Sam Hak Kan Tang University of Western Australia 35 Sterling Hwy Crawley WA 6009 Australia

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