Grant: **The NBER Household Finance Working Group Small Grants**

Research Title: **University student loan debt: Knowledge, attitudes and financial decision-making impact**

Research Team: **CI1** Dr **Tracey West**, Lecturer, Griffith Business School, Griffith University
CI2 Dr **Craig Cameron**, Lecturer, Griffith Business School, Griffith University
CI3 Professor **Andrew Worthington**, Lecturer, Griffith Business School, Griffith University

Rationale

An increasingly competitive environment in higher education brings into sharp focus the need for universities to achieve better outcomes for students. The financial decisions made by students can impact their study outcomes and consequent stress levels, as well as impact their future lives through the burden of accumulated debt. At the university level, student outcomes in terms of grades, ability to engage in the courses, retention and graduate success factor significantly into policy settings and initiatives. Accordingly, this project aims to ascertain students' level of understanding of their work/study decisions and impacts on grades, tolerance and need for incurring formal and informal debt, their understanding of the student loan scheme, and the knowledge of the student loan scheme in the context of the current debate around privatisation.

Previous surveys of Australian university students support the notion that the financial circumstances of students have a significant impact on their study. These surveys include the Australian Vice Chancellors' Committee survey in 2000 entitled *Paying their way: A survey of Australian Undergraduate University Student Finances* and the 2014 study by the National Centre for Vocational Educational Research entitled *Does financial stress impact on young people in tertiary study?* This project will incorporate many of the variables identified in these surveys including: a student's living situation, levels and indicators of financial stress, social impacts of financial stress, the need to ask family and friends for money, the level of parental assistance, various sources of income including government support, ability to find work, savings habits and attitudes, attitudes to debt in general, attitudes and usage of credit cards, attitudes and usage of payday lending facilities, and particular areas of expense concern (textbooks, food, transport, childcare, health etc.).

Finally, the survey will include questions regarding students' understanding of the student loan system, given the increasing cost of funding the program, and the impact on students' future lives regarding paying off student debt. An independent review of Australia's Higher Education Loans Program (HELP, formerly known as HECS) recently reported that the annual cost of HECS-HELP loans will rise from $1.7 billion in 2015-16 to $11.1 billion in 2025-2026, which will account for 46.3 percent of Australia's public debt (The Australian, 6th April 2017), with a relatively high (21.8 percent) proportion of these loans unlikely to ever be repaid. In the post-GFC era of fiscal austerity, there is increasing interest by some politicians to adopt the American model for student loans and privatise student debt. With this in mind, students will be surveyed about their attitude to the HECS-HELP program, their knowledge of the fees attributable to their program of study, whether the fees impacted on their choice of study, their knowledge of the details of the program (including repayment), and their attitudes to alternatives to the current system such as privatisation. In addition, questions regarding attitudes to debt in general, and the student loan scheme in particular, will be asked to ascertain how incurring student debt factored into their decision to study and their perception of the magnitude of the charge.

This project is important as the Australian National Financial Literacy Strategy 2014 (Strategy) to date has focused on strategies to address financial literacy gaps in school curricula and vocational education and training (VET) settings, but Action Plan to execute the Strategy has not addressed the financial literacy needs of students at university. Thus the research is timely in that it examines the need for a financial literacy program at the university level, and can suggest ways to identify 'at risk' students and curriculum content. As it is likely that some of the students surveyed have been involved in the school financial literacy programs, the survey will include questions to address the relevance and efficacy of school programs to their current financial decisions, thereby providing important feedback on the Strategy.

Approach the Project will take

The project will gather primary data from Griffith University students via an online survey. This survey will include questions regarding their attitudes and behaviours towards work and study decisions, credit card and payday lending, asking family and friends for money, their knowledge of student loans and the debate around privatisation of student loans, as well as a number of questions relating to their personal details (demographic and

socioeconomic). The results will help to identify 'at risk' categories of students most affected by financial hardship and at risk of withdrawal from study. The insights gained will be used to formulate recommendations to financial educators and policymakers about appropriate financial literacy support for students.

This project is considered to form part of a longer term project to understand and develop a financial literacy strategy for implementation at the tertiary level. The survey results will be used to inform the need for and development of a financial literacy strategy to be implemented at Griffith University. Thus, future extensions of this project include development of the curriculum, as well as taking a longitudinal approach to survey implementation by re-surveying respondent's post-graduation.

Deliverables

The team of investigators are committed to disseminate the project results via the following methods:

1.	Journals	A paper will be submitted to a leading international journal in personal finance, including targeting leading publications in this field such as the Journal of Financial Education, the Journal of Financial Counselling and Planning, and the Journal of Personal Finance.
2.	Industry Magazine	Article will be submitted to a leading industry publication such as 'Financial Planning' or the 'Professional Planner'.
3.	Working papers	Initial results will be published in a working paper series.
4.	Conferences	Work in progress will be presented at key national and international conferences. Domestic conferences include the *Accounting and Finance Association of Australia and New Zealand Conference* and the *Australasian Finance and Banking Conference*; International conferences include the *American Council for Consumer Interests* and the *Meetings of the Society of Economics of the Household*.
5.	Seminars	Research seminars (Griffith and in other universities) will be delivered to academics, government and industry representatives.
6.	Data	Survey data will be made available by request.

Outcomes

The outcomes of the project are fourfold. First, the insight gained into tertiary student attitudes and behaviours to work/study decisions provide feedback to academic and executive staff regarding course modality and access to education. Second, attitudes and behaviours to debt accumulation, whether formal or informal, may (or may not) show that there is a need for financial literacy support at the tertiary level. Third, student knowledge and attitudes towards student loan debt may inform the debate regarding privatisation of the Australian student loan system. Finally, an understanding is gained about the financial attitudes and behaviours regarding these financial decisions by special interest groups, for example women, ethnic minorities, international students and students from regional areas.

References

Australian Securities and Investments Commission, 2014, National Financial Literacy Strategy 2014-2017.

Australian Securities and Investments Commission, 2014, National Financial Literacy Strategy 2014-2017: Action plan.

Everfi, 2014, Money matters on campus: How early attitudes and behaviours affect the financial decisions of first-year college students, *HigherOne*.

Foskett, N., Roberts, D. & Maringe, F. 2006, Changing Fee Regimes and their impact on student attitudes to higher education, *Report of a Higher Education Academy Funded Research Project 2005-2006*.

Griffith University, 2011, Griffith 2020 Plan, Griffith University. Accessed on March 2 at https://www.griffith.edu.au/__data/assets/pdf_file/0008/440882/griffith-2020.pdf.

Griffith University, Operation Student Success: Griffith's Student Retention Strategy 2012-2014, Griffith University. Accessed on March 2 at https://www.griffith.edu.au/__data/assets/pdf_file/0006/419469/Student-Retention-Strategy.pdf .

Halliday-Wynes, S. & Nguyen, N. 2014, Does Financial Stress Impact on Young People in Tertiary Study?, *NCVER*, Adelaide.

Long, M. & Hayden, M. 2001, Paying Their Way: A Survey of Australian Undergraduate University Student Finance, 2000*, Australian Vice-Chancellors' Committee Report*.

Owens, J. 2016, University student HECS debt to explode to $11 bn by 2026, The Australian, April 6.

West, T. and Worthington, A.C. Life Events and Portfolio Rebalancing of the Family Home, *Journal of Financial Counseling and Planning*, forthcoming.

West, T. and Worthington, A.C. The Impact of Major Life Events on Australian Household Financial Decision-making and Portfolio Rebalancing, School of Accounting, Finance and Economics Discussion Paper Series- Exploring Finance and Financial Planning Issues, 2016-02. 2016, pp 1-13.

West, T. and Worthington, A.C. Macroeconomic Conditions and Australian Financial Risk Attitudes, 2001–10, *Journal of Family and Economic Issues*, Vol. 35, No2, 2014a, pp 263-277.

West, T. and Worthington, A.C. Personal Attributes and Financial Risk-Taking in Australia, Financial Services Institute of Australasia, Volume 1, March 2014b, pp 1-25.

West, T. and Worthington, A.C. A Canonical Correlation Analysis of Financial Risk-Taking by Australian Households, *Consumer Interests Annual*, Volume 59, 2013, pp 1-4.

Funding Sought

The current project seeks funding of **US$10,000** to cover each stage of the research from the development and implementation of the surveys to the communication of the results. The funds will be primarily used to engage research assistance, at a cost of US$30 per hour (AUD40 p/h[1]) and travel expenses. An outline of the funding use is as follows:

Amount	Purpose
$1,000	Research assistance to conduct a literature review, develop the survey instrument and assess options for distribution (33 hours)
$500	Research assistance to conduct the pilot study of the survey to ensure reliability and validity (17 hours)
$500	Research assistance to distribute the survey (17 hours)
$1000	Research assistance to prepare the data for statistical analysis (33 hours)
$3,000	Research assistance to develop the working paper, academic and professional articles to disseminate the results of this research (100 hours)
$4,000	Travel expenses to the US to present at the working group meeting.

Role of Personnel

CI1 West will take responsibility for the overall management of the project in designing and developing the survey instrument, analysing the data, and working closely with the RAs. She will provide important communication channels between the RAs and the other CIs, collaborating fully with project members in all parts of the project. She has a strong background in household finance and analysing survey data (see West and Worthington, 2016; 2014a; 2014b; 2013). She has experience in managing grant projects, the most recent being a grant awarded by the Financial Planning Education Council of Australia.

CI2 Cameron will contribute to the development of the academic and industry publications. He will also contribute to the interpretation of the results and the policy implications and consequences of the analysis.

CI3 Worthington is an expert in financial literacy and household finance, including the application of qualitative analysis as demonstrated in his list of publications. He will be involved in the entire project. In particular, he will be responsible for establishing appropriate institutional context for the university sector, providing an input on both empirical methodology as well as interpretation of the results.

RA1 will be responsible for many support tasks during the project including the literature review, developing the survey instrument, conducting a pilot test of the survey instrument, distributing the survey, collating the data, and drafting the working paper.

[1] Based on 1 AUD=0.765981USD quoted from xe.com on 1.03.2017

Tracey WEST

8 Fuji Close
Southport QLD 4215
mobile: 0449 797 646
email: t.west@griffith.edu.au

Education

2011 ~ 2015 PhD in Finance, Griffith University
Thesis Title: Australian Household Asset Portfolios: Diversification, Ownership and Life-Cycle Events
Supervisors: Professor Andrew Worthington, Associate Professor Helen Higgs

2011 ~2013 Graduate Certificate~ Research Management
Southern Cross University, Lismore

2009 ~ 2009 Graduate Diploma~ Secondary Education
Griffith University, Gold Coast

2008 ~ 2009 Graduate Diploma~ Property Valuation
Bond University, Gold Coast

1996 ~ 1999 Bachelor of Commerce- Banking, Finance & Risk Management (First Class Honours)
Griffith University, Brisbane

A list of published papers and conference attendance is annexed.

Employment History

2016 ~ 2018 GRIFFITH UNIVERSITY, GOLD COAST
Associate Lecturer in Finance

2010 ~ 2015 GRIFFITH UNIVERSITY, GOLD COAST
Sessional Lecturer in Finance

2010 ~ 2015 EDUCATION QUEENSLAND
Supply Teacher, various schools

2008 ~ 2009 CONICS, GOLD COAST
Research Officer

2005 ~ 2007 VIRGIN MEGASTORE, IRELAND
Customer Service Officer

2004 ~ 2005 BORDER & KIRRA CHEMMART PHARMACY'S, GOLD COAST
Proprietor /Administration Manager

2002 ~ 2004 QUEENSLAND UNIVERSITY OF TECHNOLOGY, BRISBANE
PhD Student

2002 ~ 2002 GRIFFITH UNIVERSITY, BRISBANE
Research Assistant

2001 ~ 2001 THOMAS CONSULTANTS, ROBINA
Research Officer

2000 ~ 2000 CITYSCOPE PUBLICATIONS, NERANG
Research Officer

HDR Supervision

2017- Luthfi Hamidi- Islamic Social Banking: A Proposed Framework & Performance Measurement
2017- Abdullah Alajmi- The Influence of internal corporate governance mechanisms on Firm Performance: Evidence from Kuwait)
2017- Mahfod Aldoseri-A Comparison of Credit, Liquidity and Operational Risk Management in Islamic and Conventional Banks: Evidence from Saudi Arabia
2017- Nurhastuty Wardhani-TBA
2017- Elizabeth Mitchell- Determinants of financial literacy - why are some individuals more financially literate than others.
2017- Raymond Griffin- Assessing the Consumer Benefits of Financial Planning Legislation in Australia 1988 to 2017.

Teaching

T2 2017 Associate Lecturer- 7246AFE Behavioural Finance and Wealth Management
TP2 2017 Associate Lecturer- 7812AFE Behavioural Finance and Wealth Management
S2 2016 Associate Lecturer- 7246AFE Behavioural Finance and Wealth Management
S1/S2 2016 Course Convenor for 7259AFE Financial Planning Skills (AMP Program)
S1 2015 Sessional Lecturer- 1203AFE Money, Banking and Finance
SS 2015 Sessional Lecturer- 1203AFE Money, Banking and Finance
SS 2014 Sessional Lecturer- 1203AFE Money, Banking and Finance
S2 2013 Sessional Tutor- 1203AFE Money, Banking and Finance
S1 2013 Sessional Tutor- 1203AFE Money, Banking and Finance
S2 2012 Sessional Tutor- 1203AFE Money, Banking and Finance
S1 2012 Sessional Tutor- 1203AFE Money, Banking and Finance
S2 2011 Sessional Tutor- 1203AFE Money, Banking and Finance
S1 2011 Sessional Tutor- 2204AFE Financial Institutions Management
S2 2010 Sessional Tutor- 3210AFE Advanced Corporate Finance

Service

2017 Chair of FFP Teaching and Learning Committee
2017 Acting AFE Director of Teaching and Learning for 3 weeks
2016 Acting Program Director for Master of Financial Planning for 25 weeks
2016 ~ ongoing Develop online course materials for Accelerated Online version of 7812AFE Behavioural Finance and Wealth Management
2016 ~ ongoing Organising HDR Methodology Workshops
2016 ~ ongoing Develop and maintain Finance HDR Facebook group
2016 ~ ongoing Develop and maintain Finance L@G Organisation site
2016 ~ ongoing Administration support for Accelerated Online teaching team in the Masters of Finance and Masters of Financial Planning
2016 ~ ongoing Develop and maintain Finance HDR Facebook group
2013 ~ 2014 HDR Representative on the Board of Graduate Studies

Research Assistant

Sept 2015 Prof. Ross Guest- Textbook revision
Sept 2015 National Affordable Housing Consortium-Disability Housing Futures project
July 2015 Prof. Anne Tiernan – Teaching materials assistance
Aug 2012 Dr Chris Fleming- textbook
Sept 2012 Prof. Mark Brimble- Maths project
June 2013 Dr Julie Knutsen- Golf project

Professional Memberships

2012 ~ 2016 Financial Management Association
2012 ~ 2015 Accounting and Finance Association of Australia and New Zealand
2013 ~ 2015 Financial Services Institute of Australia (FINSIA)
2010 ~ 2014 Queensland College of Teachers

Awards and Scholarships

2017 CFP Board ACCI Financial Planning Paper Award at the 2017 ACCI Conference, $500
2017 FPEC Project Sponsorship $5,000
2010 ~ 2014 Griffith University Postgraduate Research Allowance $24,653
2010 ~ 2012 Commercialisation Training Scheme $10,000
2013 GCAP Higher Degree Research Scholarship Honourable Mention $250

Demonstrated Skills

- Experience with statistical applications including Stata and EViews.
- Extensive experience sourcing and collating data
- Critical analysis and evaluation of data
- High level of report writing and presentation
- Proven ability to work independently and in a team
- Well developed time management skills
- Advanced Microsoft Office - Excel, Access, Word, Powerpoint, Outlook, Explorer
- Extensive experience with ABS statistical data including Census Data, Retail Trade, Building Approvals and Population Projections

Referees

Prof. Andrew Worthington
Department of Accounting, Finance and Economics
Griffith University
Nathan QLD 4111
Ph: (07) 3735 4273
Email: a.worthington@griffith.edu.au

Prof. Mark Brimble
Department of Accounting, Finance and Economics
Griffith University
Nathan QLD 4131
Ph: (07) 3735 3719
Email: m.brimble@griffith.edu.au

Assoc. Prof. Robert Bianchi
Department of Accounting, Finance and Economics
Griffith University
Nathan QLD 4131
Ph: (07) 3735 7078
Email: r.bianchi@griffith.edu.au

Appendix

PhD Thesis

Thesis Title: Australian Household Asset Portfolios: Diversification, Ownership and Life-Cycle Events

Supervisors: Professor Andrew Worthington, Associate Professor Helen Higgs

Overview: The objective of this thesis is to gain insight into the broad asset class decisions of households, in comparison to saving and investment theory using Waves 1 to 10 (years 2001 to 2010) of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Survey is aims to follow the 7,682 households and 19,914 individuals from Wave 1 as their lives change over time, and includes broad social and economic topics, including attitudinal questions on financial risk-taking. In addition, the Wealth Module of the HILDA Survey (Waves 2, 6 and 10) includes questions relating to investment in assets such as the family home and other property, superannuation, equity and cash investment, business assets, bank accounts, life insurance, trust funds and collectables.

The first empirical analysis in the thesis measures the portfolio allocation decisions, and includes utilising ten diversification measures and household demographic, socioeconomic, and financial sophistication characteristics. The second analysis focuses on broad asset class decisions, and includes an analysis of participation rates and the portfolio share of ten primary asset classes and the aforementioned household characteristics. The final analysis examines the extent to which households rebalance asset portfolios around ten planned or unforseen life events. Panel data regression, logit and Tobit models are employed in all three analyses, and a dynamic model in the third only. The longitudinal nature of the data, the inclusion of financial sophistication characteristics, and the examination of the impact of life events on asset portfolios are all important and novel contributions to the literature on Australian household finance.

The thesis highlighted some areas of concern and made some recommendations for public policymakers, financial planners, and financial educators in order to lessen welfare dependence and financial vulnerability to unforeseen events and market fluctuations. First, women are particularly financially vulnerable and public policy can assist with childcare, employment training and better targeted superannuation policies. They also need to improve their financial literacy skills and be willing to assume more financial risk-taking to accumulate wealth. Second, segments of the population excluded from home ownership miss a significant wealth-creating opportunity. Public policy could play an important role in promoting affordable housing and in conjunction with industry could provide low-interest loans or incentivised savings products. Third, long-term financial planning may improve the financial outcome of many planned and unforeseen life events like retirement, the GFC and household structure changes. Finally, widening and better targeting financial literacy education, as well as expanding and better funding access to financial counsellors may improve wealth outcomes for many households in lower socioeconomic categories.

Published Papers:

West, T. and Worthington, A.C. Life Events and Portfolio Rebalancing of the Family Home, *Journal of Financial Counseling and Planning*, forthcoming.

Knutsen, J., Malin, M., West, T. and Brimble, M. True Links: Precursory Lessons from Golf for Effective Financial Behaviour, *Financial Planning Research Journal*, forthcoming.

West, T. Asset Holding Disparities by Ethnicity, in F. F. Wherry (Ed.), *The SAGE Encyclopedia of Economics and Society*. Thousand Oaks, CA: SAGE Publications, 2016, pp1-8.

West, T. and Worthington, A.C. The Impact of Major Life Events on Australian Household Financial Decision-making and Portfolio Rebalancing, School of Accounting, Finance and Economics Discussion Paper Series- Exploring Finance and Financial Planning Issues, 2016-02. 2016, pp 1-13.

Knutsen, J., Brimble, M., Malin, M. and West, T. Play Safe, Putt for Par, Financial Planning Magazine, 1 September, 2014. http://www.financialplanningmagazine.com.au/analysis/play-safe-putt-for-par.

West, T. and Worthington, A.C. Macroeconomic Conditions and Australian Financial Risk Attitudes, 2001–10, *Journal of Family and Economic Issues*, Vol. 35, No2, 2014, pp 263-277.

West, T. and Worthington, A.C. Personal Attributes and Financial Risk-Taking in Australia, Financial Services Institute of Australasia, Volume 1, March 2014, pp 1-25.

West, T. and Worthington, A.C. A Canonical Correlation Analysis of Financial Risk-Taking by Australian Households, *Consumer Interests Annual*, Volume 59, 2013, pp 1-4.

West, T. and Worthington, A.C. "Macroeconomic Risk Factors in Australian Commercial Real Estate, Listed Property Trust and Property Sector Stock Returns: A Comparative Analysis using GARCH-M" *Journal of Financial Management and Property Construction*, Vol. 11, No 2, August 2006, pp 21-31.

Worthington, A.C. and West, T. "Australian Evidence Concerning the Information Content of Economic Value-Added" *Australian Journal of Management*, Vol. 29, No 2, December 2004, pp 201-224.

West, T. and Worthington, A.C. "Macroeconomic Risk Factors in Australian Real Estate, Listed Property Trust & Property Sector Stock Returns: A Comparative Analysis using GARCH-M*", Discussion Papers in Economics, Finance and International Competitiveness (EFIC) Series,* School of Economics and Finance, Queensland University of Technology, No. 160, October 2003. ISSN 1324 5910.

Worthington, A.C. and West, T. "Economic Value-Added: A Review of the Theoretical and Empirical Literature" *Asian Review of Accounting*, Volume 9 Number 1, 2001, pp 67-86.

Worthington, A.C. and West T. "The Usefulness of Economic Value-Added in the Australian Context", *Accounting, Accountability and Performance,* Vol. 7, No. 1, 2001.

Worthington, A.C. and West, T. "The Value Relevance of Economic Value-Added, Residual Income, Net Cash Flow and Earnings in Australia: A Comparative Analysis", *School of Finance and Economics, University of Technology Sydney*, 7 November 2001.

Worthington, A.C. and West, T. "A Review and Synthesis of the Economic Value-Added Literature" *Discussion Papers in Economics, Finance and International Competitiveness*, School of Economics and Finance, Queensland University of Technology, No. 75, February 2000. ISSN 1324-5910.

West, T. and Worthington, A.C. "The Information Content of Economic Value-Added: A Comparative Analysis with Earnings, Cash Flow and Residual Income*" Discussion Papers in Economics, Finance and International Competitiveness (EFIC) Series,* School of Economics and Finance, Queensland University of Technology, No. 66, September 1999. ISSN 1324 5910.

West, T. and Worthington A.C. "The Usefulness of Economic Value-Added in the Australian Context", *Economics, Finance and International Competitiveness (EFIC) Series*, School of Economics and Finance, Queensland University of Technology, 12 May 1999.

West, T. "The Usefulness of Economic Value-Added in the Australian Context", *Thesis (B.Comm (Hons.))*, School of Accounting, Banking and Finance, Griffith University, 1999.

Conference Papers:

West, T. and Worthington, A.C. "The Impact of Major Life Events on Australian Household Financial Decision-Making and Portfolio Rebalancing", paper presented at the Asian Finance Association Conference, 6-8 July, 2017, Seoul, Korea.♦

West, T. and Worthington, A.C. "The Impact of Major Life Events on Australian Household Financial Decision-Making and Portfolio Rebalancing", paper presented at the 92nd Western Economic Association International Conference, 25-29 June, 2017, San Diego, United States of America.♦

West, T. and Worthington, A.C. "The Impact of Life Events on Homeownership", paper presented at the Meetings of the Society of Economics of the Household, 25-26 June, 2017, San Diego, United States of America. ♦

West, T. and Worthington, A.C. "The Impact of Life Events on Homeownership", paper presented at the American Council on Consumer Interests Annual Conference, 21-23 April, 2017, Alberquerque, United States of America. ♦ Received CFP Board's ACCI Financial Planning Paper Award.

West, T. and Worthington, A.C. "The Impact of Major Life Events on Australian Household Financial Decision-Making and Portfolio Rebalancing", paper presented at the *4th IFMA Conference*, 14-15 December, 2016, Yogyakarta, Indonesia. ♦

West, T. and Worthington, A.C. "The Impact of Major Life Events on Australian Household Financial Decision-Making and Portfolio Rebalancing", paper presented at the *11th Asian Consumer and Family Economics Association Conference*, 7-9 July, 2016, Hong Kong. ♦

West, T. and Worthington, A.C. "A Canonical Correlation Analysis of Financial Risk-Taking by Australian Households", Paper presented at the *American Council on Consumer Interests (ACCI) Annual Conference,* 10-12 April, 2013, Portland, United States of America. ♦

West, T. and Worthington, A.C. "Macroeconomic Conditions and Australian Financial Risk Attitudes, 2001–10", Paper presented to the *School of Economics and Finance, Queensland University of Technology*, 7 March, 2013, Brisbane. ♦

West, T. and Worthington, A.C. "Financial Risk Attitudes in Australian Households: A Comparative Analysis of the Impact of Demographic and Socioeconomic Factors and Macroeconomic Conditions", Paper presented to*25th Annual Australasian Finance and Banking Conference*, 16-18 December 2012, Sydney. ♦

West, T. and Worthington, A.C. "Financial Risk Attitudes and Macroeconomic Factors: Evidence from the HILDA Survey", *21st European Financial Management Association (EFMA) Conference*, 27-30 June 2012, Barcelona, Spain.

West, T. and Worthington, A.C. "The Relationship between Household Financial Risk Attitudes and Market Conditions in Australia: Longitudinal Evidence", *2012 Accounting and Finance Association of Australia and New Zealand Conference*, 1-3 July, Melbourne, Australia. ♦

West, T. and Worthington, A.C. "Macroeconomic Risk Factors in Australian Commercial Real Estate, Listed Property Trust and Property Sector Stock Returns: A Comparative Analysis using GARCH-M", *2005 Asian Finance Association Annual Conference*, 11-13 July, Kuala Lumpur, Malaysia.♦

West, T. and Worthington, A.C. "Macroeconomic Risk Factors in Australian Commercial Real Estate, Listed Property Trust and Property Sector Stock Returns: A Comparative Analysis using GARCH-M", *10th Pacific Rim Real Estate Society Conference*, Bangkok, Thailand, 25-28 January 2004.

West, T. and Worthington, A.C. "Economic Risk Factors and Australian Commercial Real Estate Returns: A GARCH approach", *8th Asian Real Estate Society (AsRES) International Conference*, National University of Singapore, 21-23 July, Singapore, 2003.♦

Worthington, A.C. and West, T. "The Value Relevance of Economic Value-Added, Residual Income, Net Cash Flow and Earnings in Australia: A Comparative Analysis", *School of Finance and Economics, University of Technology Sydney*, 7 November 2001.♦

West, T. and Worthington, A.C. "Australian Evidence Concerning the Information Content of Economic Value-Added", *Accounting Association of Australia and New Zealand (AAANZ) 2001 Annual Conference*, Auckland, New Zealand, 1-3 July 2001.♦

Worthington, A.C. and West, T. "The Information Content of Comparative Performance Measures: A Comparative Analysis of Economic Value-Added, Residual Income, Cash Flow and Earnings", *British Accounting Association Annual Conference*, University of Exeter, United Kingdom, 11-13 April 2000.♦

West, T. and Worthington, A.C. "The Usefulness of Economic Value-Added (EVA) and its Components in the Australian Context", *12th Annual Australian Finance and Banking Conference*, University of New South Wales, Australia, 16-17 December, 1999.

♦ Attended by Andrew Worthington.

Publishing Statistics

Published Papers:	15
Citations:	289
h-index:	5
i10-index	4

Source: Google Scholar Citations, statistics updated on the 9th March 2017.