

FIMARC

**Finance, Markets
and Accounting
Research Centre**



Review of FIMARC: the Finance, Markets and Accounting Research Centre, of the School of Accounting, Finance and Economics, Edith Cowan University.

Review Panel comprises:

**Professor P. Maxwell, School of Economics and Finance, Curtin University of Technology (Chair).
Professor J. Burn, School of Management and Information Systems, Edith Cowan University.
Mr M. Barnaba, Poynton and Partners and Gem Consulting.**

The Review will take place On November 8th 2002 in Room 6.216B on the Joondalup Campus

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1.INTRODUCTION

FIMARC (Finance, Markets and Accounting Research Centre) was originally set up in 1997 in the then School of Finance and Business Economics as FICAMREG (the finance and capital markets research group). It had a brief to promote high quality applied research in the general areas of finance and capital markets, within Australia and across the Asia-Pacific region in particular. The merging of the school of Finance and Business Economics with the school of Accounting to create the school of Accounting, Finance and Economics, led to a renaming of the centre to FIMARC and an extension of its research brief to cover accounting research and all market-based research which includes the work of the remaining economists within the new school.

1.1 Aims of FIMARC

The principal aims of FIMARC are:

- a) to undertake high quality research in the previously-mentioned areas,
- b) to build up local, national and international collaborative research activities,
- c) to develop nodes of research concentration and research excellence,
- d) to foster the development of research infrastructure and a research culture,
- e) to develop industry research partnerships,
- f) to enhance facilities for the research training and development of postgraduate students,
- g) to seek external research funding including national competitive ARC funding,
- h) to raise Edith Cowan university's research profile by participation in national and international research conferences, and by publishing in high quality refereed national and international journals,
- i) to serve the Australian community at large by the provision of research reports and the lending of FIMARC's expertise in the service of the broader community, public sector and government.

1.2 Congruence with University and Faculty plans

These aims are congruent with both the University's strategic plan (1998-2002) and the Faculty of Business and Public Management's Business Plan (2001/2). The University's strategic plan (1998-2002, page 20) stresses the importance of concentrating support in selected fields of research according to success in external research funding and research outcomes. (Research in financial economics is currently recognised as being one of the University's research strengths). It is hoped that this document demonstrates its continuing strength, which has been nevertheless constrained by the freezing of the bulk of its budget in 2002 as a consequence of the budget deficit in the newly

formed School of Accounting, Finance and Economics, and a policy change which maintained that all faculty research centres must be funded by the Schools, rather than centrally by the faculty, as was previously the case.

The University strategic plan further stresses the maintenance of funding for research and scholarship which supports the professional excellence of the teaching program, and the provision of adequate research funding for novice researchers and newly appointed staff.

The Faculty Business Plan 2001/2 recommends a focus on research income/reputation, research training and research management. These strategic aims are congruent with FIMARC's. FIMARC currently sits under the broad umbrella of the research groupings within the University's Institute for Research in the Service Professions and clearly has a focus on research relevant to the financial services sector.

1.3 management structure

FIMARC has Professor David Allen as its Director and a management committee drawn from the School of Accounting, Finance and Economics plus an external representative. The current management committee comprises Professor Allen (chair), Dr. M. Clark-Murphy, Mr Paul Gerrans, Dr. C. Reynoldson, Associate Professor A. Islam, Dr. E. Lin, Dr. L. Lim, Mr. T. Christopher, plus Dr. G. MacDonald (School of Economics and Finance, Curtin University of Technology).

Structure of the Research Unit.

Director Professor David Allen

Management Committee

Chair Professor David Allen

Members Associate Prof. Atique Islam

Mr T. Christopher

Dr. M. Clark-Murphy

Mr. Paul Gerrans

Dr. E. Lin

Dr. L. Lim

Dr. C. Reynoldson

Dr. Y.H. Cheung

External member

Dr. G. MacDonald, School of Economics and Finance, Curtin University.

1.4 Research infrastructure

A central theme of FIMARC's activities has been the development of research infrastructure such as access to databases, appropriate computer software and access to expertise to facilitate research in its areas of research concentration. It has developed a national and international reputation for research in applied financial econometrics and the other areas such as funds management and superannuation research. A vital component of this has been the provision of Databases. The former Head of School of Finance and Business Economics, Dr C. Reynoldson was particularly supportive in this regard, providing continued funding for access to the Datastream Database and the new Head of the combined school, Associate Professor Islam has maintained single line access to Datastream. This is a vital resource that has underpinned the bulk of the research work undertaken by staff and postgraduate students. It covers all the world's markets and includes price data, economic series, and company financial statement data.

The access to data has been enhanced by industry partnerships and collaborative research activities. The ARC linkage grant funded work with the fund rating agency ASSIRT has provided access to ASSIRT's proprietary 'library' of information on managed fund performance. This data has been used by three Ph.D students, one is in the process of finalisation of his Ph.D and two others have nearly completed their's. It has also provided data for a number of research and conference papers.

The industry partnership initiated by Dr Marilyn Clark-Murphy and Mr Paul Gerrans with UNISUPER has lead to their development of a unique database which has served as the foundation for some significant refereed publications and the development of a linkage grant application.

Professor Allen's association with SIRCA as Director of its Funds Management Research Centre has further fostered access to SIRCA's extensive databases. The School joined SIRCA in 1998 as a subsidiary member but its participation in the recently successful Strategic Infrastructure Research Grant application which will provide AUD 5.3 million over the next three years to SIRCA, commenced in January 2002 and supports the provision of national finance databases. Some of SIRCA's high frequency data is already being used in a research collaboration with the University of Sydney and by an ECU Ph.D student, Ms. Wenling Yang.

The applied financial econometrics work has been supported by the purchase of a range of computer programs including Microfit, Eviews, Rats and Cats, PC Give and PC FIML, Shazam and Gauss. These computer packages facilitate advanced econometric analysis, time-series analysis in

particular such as VAR analysis, unit root testing, cointegration analysis, impulse response analysis and variance decompositions.

1.5 Researchers involved with FIMARC.

ECU STAFF

Professor David Allen, (Professor of Finance)

(Ph.D in finance at UWA, M.Phil. Economics Leicester University)

Dave Allen joined the Faculty of Business at Edith Cowan University as the foundation Professor of Finance in February 1996 after a four year incumbency of the Challenge Bank Chair of Finance at Curtin University of Technology. Other employment includes six years at the University of Western Australia as lecturer and senior lecturer, plus lectureships at the University of Edinburgh and Leicester Polytechnic in the UK. His research interests range across financial economics and he has published 2 books and over 50 refereed publications on topics in corporate finance, investments, and applied financial econometrics. He is currently the Director of SIRCA's Funds Management Research Centre.

Research interests:

corporate finance, investments, funds management, applications of applied time series econometrics and financial econometrics.

Dr Lee Lim, Lecturer in Finance

(Ph.D. in Economics at UWA, Research Associate with IRIC)

Research interests:

Applied Econometrics, applied time series analysis, financial econometrics and modelling and modelling economic growth.

Dr Edward Lin, Lecturer in Finance

(Ph.D. in Finance at Texas Technological University)

Research interests:

Edward Lin is currently the lecture of Finance at the school of Accounting, Finance and Economics. His current research focus is on the areas of Investment and Corporate Finance. In investment, he has developed a multi-period asset pricing model that explains average stock returns. The asset pricing model generalises Sharpe's Capital Asset Pricing Model that is used widely in finance academic and community. In addition, he has empirically examined the robustness of different empirical asset pricing models. In Corporate Finance, he investigates the dividend policies of large corporation in the Asia-Pacific countries that differ in legal regimes and financial systems. He and his collaborators have also worked on the financing issues and their impacts on firms' liquidity.

Dr. Marilyn Clark-Murphy, Senior Lecturer in Finance

(Ph.D in finance at the University of Western Australia)

Research interests:

Financial decision-making and attitudes to financial risk. In particular way in which individuals make decisions about share purchases and superannuation fund investments. Perceptions of and attitudes to financial risk and to risk over the long-term. Also the degree to which financial advisers have an accurate picture of their client's approach to financial risk.

Mr Paul Gerrans: Lecturer in Finance

(Undertaking Ph.D in finance at Edith Cowan University)

Research interests:

Paul is working on a Ph.D thesis on the assessment of the usefulness of qualitative and quantitative ratings provided by Fund Rating agencies for the Funds Management industry. He is researching in investments finance on several current projects. These include the decisions of superannuation fund members who are being presented with increased choice and responsibility for their investments, the usefulness of managed fund ratings to investors and financial advisers when making investment decisions, and ethical and socially responsible investment. Paul has also published in corporate finance in the area of capital budgeting.

Mr. Mahendra Chandra: Lecturer in Finance

(Undertaking Ph.D in financial econometrics at UWA)

Research interests:

Mahendra is working on a Ph.D thesis "Modelling volatility transmission and correlation structure across international equity markets". This involves applications of time-series econometrics.

Dr. Y.H. Cheung: Lecturer in economics

(Ph.D in Economics at the University of Oregon)

Research interests:

YH is active in research and acts as an economic consultant for listed companies. His current research interest is in industrial organisation and business policy, and information, risk and uncertainty. He has published a number of papers in refereed conference proceedings and in journals including Economic Papers and the International Journal of Business Studies.

Dr. C. Reynoldson: Senior lecturer in economics

(Ph.D in Economics and Politics at the University of Western Australia)

Research interests:

Clive's research interests include Managerialism, Marketisation and Contracting Out of Government Services'.

Mr T. Christopher: Senior lecturer in accounting.

(Just submitted Ph.D in Accounting at Edith Cowan University)

Research interests:

Theo Christopher is a senior foundation staff member of the former Department of Accounting and School of Business. His initial qualification with distinction was obtained from the Western Australian Institute of Technology (now Curtin University of Technology). He also has an Honours Degree and a Master of Commerce by research from the University of Western Australia. His PhD in Accounting with Edith Cowan University (supervisor Garry Monroe) has recently been submitted for examination. Theo has, with other coauthors, received best paper awards from conferences held in Hong Kong and Vancouver, Canada, and the best paper award in the Accounting Research Journal. In 1999 he received The Award for Best Researcher in the Faculty of Business and Public Management. He is a Certified Practising Accountant (CPA) and an Associate of the Chartered Institute of Secretaries (ACIS).

Associate Professor Atique Islam: Head of School of Accounting, Finance and Economics.

(Ph.D Accounting, University of Sydney)

Atique's research interests include financial reporting and accounting disclosure.

External staff associated with FIMARC

Adjunct Professorship

Professor Lyn Thomas:

Department of Management, University of Southampton is the adjunct Professor of the School of Accounting, Finance and Economics and FIMARC. He will continue collaborative work on a number of projects on the estimation of Duration, Risk Spreads and Bond Pricing. Lyn was appointed Professor of Management Science at Southampton University in 2000. Adjunct Professor at Monash University, Melbourne, and Edith Cowan University, Perth, Australia. Formerly Professor of Management Science at the University of Edinburgh, 1985-2000, (Head of the Department of Business Studies 1987-1990 and Head of the School of Accounting, Economics and Management Studies 1999-2000). President of the Operational Research Society 1994 - 1995. Fellow of the Royal Society of Edinburgh 1992. Member of the EPSRC College since 1995. Previously member of the EPSRC Mathematics Committee and Chairman of the Operational Research Panel. Panel member Statistics and Operational Research, UFC Research Assessment Exercise, 1989 and 1992. Research, consulting and teaching on several areas of management science. Specialist areas include credit scoring and credit control, and use of management science techniques in financial and banking areas. Interests in large-scale optimisation and applications of game theory.

Associated Researchers

Professor Tim Brailsford

Tim Brailsford is currently the Professor of Finance and Dean of the Faculty of Economics and Commerce at the University of Queensland. Prior to this Appointment Tim was Professor of Finance and Dean of Economics and Commerce at the ANU, Tim held senior academic positions at the University of Melbourne and Monash University (Clayton). He has also held a professional position with a large chartered accounting firm. He holds a Ph.D, Master and Honours degrees and has professional affiliations with the Australian Society of Certified Practising Accountants (as a qualified FCPA), the Australian Institute of Banking and Finance and Fellowship of the Australian Institute of Management. Tim's area of expertise is in corporate finance, investments and financial management. He is co-author of the best-selling Australian text on Investments, has published a number of books and research monographs and over 30 research papers in leading journals. Tim's research has been recognised through various prestigious manuscript awards. In 1994, Tim was awarded the national prize of Young Accountant of the Year (Government and Academe). He is a member of the editorial boards of several journals in accounting and finance and co-editor of the McGraw-Hill Series in Advanced Finance.

Professor Robert William Faff

Professor of Finance, Monash University.

Academic Qualifications: Doctor of Philosophy, Monash University, 1994, Clayton, Victoria: Empirical Investigations into Asset Pricing in the Australian Equity Market. Master of Economics, Australian National University, 1986, Canberra, ACT. Bachelor of Economics with 1st Class Honours, Australian National University, 1984, Canberra, ACT: A Critical Evaluation of Empirical Research into Corporate Takeovers. Professional Qualifications: Fellow (FCPA), Australian Society of Certified Practising Accountants. Association Membership: American Accounting Association American Finance Association Accounting Association of Australia and New Zealand Asia Pacific Finance Association British Accounting Association.

Dr. Abul Masih

Professor King Fahd University

Dr. Abul Masih obtained his BA(Hons.) and M.A. in Economics from Dhaka University, Bangladesh. He then taught at the Colleges of Dhaka University and at the University of Chittagong

in Bangladesh for six years. He completed an M.A.(Econ.) at Manchester University and a Ph.D at Leeds University, where he also taught as a lecturer during 1974/75. He joined the University of New South Wales, Faculty of Military Studies and worked as a lecturer/senior lecturer for 22 years (1976-1996). He has held visiting appointments with the Department of Economics, University of Pennsylvania (1985); Queen Elizabeth House, Oxford (1986/87); various Economic Research Institutes in Bangladesh, Thailand, Malaysia and Brunei (1990). In recent years he has made a number of field trips, to Southeast and South Asian countries and Korea. He worked as a United Nations consultant to Bangladesh Government to advise on trade and industry policy. Research interests include; money, finance and trade in developing Asian countries, international finance, financial econometrics, and economic and managerial forecasting.

Dr. Garry MacDonald

Garry McDonald has a BA in economics from Leicester University, an MA in economics from Warwick University and a Ph.D in economics from Curtin University of Technology. His Ph.D featured an applied analysis of labour and financial markets time-series data. Garry has had an extensive teaching and research career which included work as a Research Associate at the Development Economics Research Centre at Warwick University, a two year period as the National Westminster Bank Research Associate at Birmingham University and one year as a Research Associate to the joint Anglo-French project on Macro-economic Policy Co-ordination at Warwick University and has previously held lecturing positions at Murdoch University, Leicester Polytechnic and Loughborough University. Garry is an expert in applied time-series econometrics and has published on a broad range of topics in numerous journals. These include Public Finance and Accountancy, the Oxford Bulletin of Economics and Statistics, Applied Economics, the Journal of Economics and Financial Computing, the Economic Record, Australian Economic Papers, Applied Financial Economics, Research in Finance, and Applied Economics Letters. He has also published a number of contributions to books.

Dr. David M Walsh

David Walsh completed a Bachelor's degree in Engineering (Electronics) at the University of Western Australia, a Master of Business (Distinction) degree at Curtin University and a Postgraduate Diploma in Science (Maths) at UWA. He finished his Ph.D in Finance (UWA) in the area of Market Microstructure and Information Content of Order Flow. He worked at State Street Investments in Sydney prior to taking up his current position as Equity Funds Manager with Barclays Global Investments in Sydney. He previously was Senior Lecturer in the Department of Accounting and Finance at UWA. David has published a number of papers in the University

Working Paper Series and in journals including Managerial Finance, Pacific Basin Finance Journal, Applied Financial Economics.

Dr. Shelton Peiris

Shelton is a Senior Lecturer in the School of Mathematics and Statistics at the University of Sydney. His research interests include the statistical analysis of stationary and non-stationary time series data, theory and applications of estimating functions. He has a wide range of publications including recent publications in Mathematical and Computer Modelling, Statistics and Probability Letters, Journal of Statistical Computation and Simulation, IMA Journal of Mathematics Applied In Medicine & Biology, Biometrical Journal.

Dr. Rumi Masih

Rumi is a consultant, Emerging Markets Economics Research, Goldman, Sachs & Co. (Head Office), New York, U.S.A. Rumi Masih has over sixty publications and is the youngest fellow of the Royal Statistical Society in the UK. He has submitted his Ph.D to the Faculty of Economics and Politics, University of Cambridge, Cambridge, England. His Ph.D was supervised by Professor M.H. Pesaran (Funded by: Royal Economic Society Junior Fellowship, Cambridge Commonwealth Trust Fees Scholarship, Overseas Research Studentship, Leventis Teaching Studentship). He has also been a Teaching Assistant for Graduate (MPhil level) Econometrics Courses, University of Cambridge, Cambridge, England.

Dr. Harry Zheng

School of Mathematics, Imperial College, London University. Harry is a specialist in stochastic processes and statistics who concentrates his research activities in applied mathematical finance.

Mr Nigel Morkel-Kingsbury

Nigel is a member of the Department of Accounting and Finance, Monash University, and was the research assistant from 1997 until December 1998 when he moved to Monash. Nigel graduated from Curtin University of Technology as top student in Economics and Finance in 1995. He worked for 12 months as a Business Banker with Bankwest. Previous experience include taxation authorities and tourist/hospitality operations in Australia and Canada. He is involved in various projects on the term structure of interest rates, bond pricing and bank interest rate behaviour.

FIMARC therefore has access to a very broad range of expertise, drawn from researchers in finance, economics, accounting, econometrics, statistics, applied mathematics and management science based both at ECU, nationally across Australia, and internationally in the UK, USA, and Middle East.

The next sections of this document will address the research performance of FIMARC in the light of the various performance measures which the University's research office has recommended as being appropriate in the review process of the university's research units.

2. COLLABORATION, RECOGNITION AND LINKAGES

2.1 Research focus

FIMARC (Finance, Markets and Accounting Research Centre) has a brief to promote high quality research in Financial and Economics markets, financial markets, investments, market and microstructure, applications in corporate finance, accounting, plus funds management and superannuation. It is also involved in cross-disciplinary work using techniques from management science, statistics and mathematics and econometrics to these previously mentioned areas.

2.2 Links with SIRCA

It is active in national and international collaboration with links to SIRCA (Securities Industry Research of the Asia Pacific) an international finance research consortium involving 25 universities from Australia and New Zealand, plus numerous individual research project collaborations involving both Australian and international academic research partners.

FIMARC has built up a corpus of research activities in a number of focused areas

- a) funds management research, superannuation and investment choice
- b) applied financial econometrics as applied to topics across financial markets
- c) applications of financial mathematics and management science techniques to financial research issues

FIMARC has a very successful publications track record in national and international referred journals. FIMARC researchers have received a succession of Best Papers Awards at international conferences and ANBAR citations of merit.

The linkage with SIRCA has been particularly productive, Professor Allen is the Director of SIRCA's funds management research centre, one of five national research centres operated by SIRCA, this research centre was set up in 2000. SIRCA is a university based, industry sponsored, financial markets research centre representing 25 universities across Australia (22) and New Zealand (3) with the common objective (in association with major industry partners from the securities industry: the Australian Stock Exchange (AFX), the Sydney Futures Exchange (SFX) and the Australian Financial Markets Association (AFMA)) of building and sharing research infrastructure to support research aimed at promoting efficient and capital market design.

SIRCA recently won approval from the Government to establish a Cooperative Research Centre (CRC) to build upon Australia's role as a key financial markets technology provider. The bid was supported by the State Government of NSW and AXISS, the Federal Government task-force aimed at ensuring that Australia becomes a core participant in global financial markets. The CRC will design and build technology in all areas of financial markets (pre-trade, trading, surveillance, settlement and registry). The CRC of Technology Enabled Capital Markets (CRCTECM) involves an initial capital commitment of approximately \$90 million over 7 years, with approximately \$14 million to be contributed by the Federal Government providing a leverage on Commonwealth resources of 5:1.

2.2.1 The Funds Management Research Centre (FMRC) at SIRCA

The objective of the Funds Management Centre is to directly assist Australia's global financial centre aspirations and the efficient management of its savings flows by facilitating more and better research aimed at monitoring the performance, effectiveness and efficiency of the Insurance and Managed Funds Industry. These objectives will be achieved in association with numerous industry partners. Various research activities conducted by the centre draw directly on industry data thus producing a comprehensive and detailed review of the performance as well as strengths and weaknesses of the Australian superannuation and managed funds industries. The research work of the FMRC is spread across a number of locations: Edith Cowan University, Australian National University, Monash, the University of Queensland, RMIT, UTS as well as in SIRCA's Sydney offices.

The FMRC has established a strong working partnership with ASSIRT, a leading fund ratings agency and SPIRT partner for a project for one of our APA funded Ph.D students. Two more students at ECU and a number of students at ANU, RMIT and SIRCA are developing their Ph.D's and working on various funds management research issues. All students are also writing papers of their research and presenting them at conferences.

The FMRC has organised a series of annual Funds Management Conferences in Sydney which have been sponsored by Colonial First State Investments (Details of some of the conference programs are provided in the appendix). The management of the FMRC involves close collaboration with the CEO of SIRCA, Dr. M. Briers (of the UNSW, CEO since the beginning of 2002) and the three other research directors, Professor T Brailsford, (formally Dean of Commerce at ANU, now Dean of Commerce, University of Queensland) Professor R Faff (formally of RMIT, and now at Monash

University) and Professor Emeritus R Bird (of University of Technology, Sydney). Members of this team have secured two ARC linkage grants with two of the major rated fund rating agencies in Australia: ASSIRT and Morning Star. The linkage grant with ASSIRT was located at Edith Cowan University. The project has been completed and the APIA on the project, Mr V Soucik, has just completed his PhD which, at the time of writing, is in the process of minor corrections, prior to lodging in the library. The research project with Morning Star will be operated from Monash University.

This concentration in funds management research and the access to ASSIRT's data via the linkage grant has encouraged other ECU PhD students to undertake topics in the funds management area. Mr P Gerrans, a staff member in SAFE, is about to submit a PhD which features an examination of the relative contribution of the qualitative and quantitative fund rating provided by Morning Star. Another PhD student, Mr J Parwada, is using ASSIRT's data to look investor discipline in response to funds performance (ie, whether superior performance is followed by investment funds flows) in a variety of contexts, ratings changes, mergers etc. Mr Parwada has received the SIRCA PhD scholarship and is now located at SIRCA's offices in Sydney.

Other industry partners involved with the work of the FMRC include Mercers, GMO and Charles Schwab. Mercers and GMO have sponsored Ph.D students working on funds management topics via SIRCA's agencies.

2.2.2 Market microstructure research at SIRCA

The interest in market microstructure research has been triggered by access to SIRCA's very high frequency data sources. This features real time transaction based data, which in the Australian case included details of the order flow. (SIRCA's recently consummated deal with REUTERS has secured access to high frequency data from all the worlds major financial markets.) Collaborative work with Dr Shelton Peiris of the Department of Applied Mathematics and Statistics at the University of Sydney has commenced, featuring applications of recently developed time series econometrics techniques developed for application to on equally intervalled data (Engle's ACD model).

Part of this work involves an Edith Cowan University PhD student, Ms Wenling Yang, who moved to Sydney to take up a SIRCA PhD scholarship, and worked for six months with the investment bank Salomon Smith Barney, on a market microstructure project which involved modelling undisclosed order flows on the Australian Stock Exchange. This has become a component of

Wenling's PhD topic which features a study of the "Market Impact" of trading activity on the Australian Stock Exchange. Dr Peris, who is co-supervisor of Wenling's PhD, enhances the project by virtue of his training in mathematics and statistics. This is a good example of the interdisciplinary work pursued by FIMARC. Other components of this research collaboration include attempts to generalise Engle's ACD modelling techniques.

2.3 Research collaboration with the University of Southampton and Imperial College, London

An on going research collaboration for the past four years has been with Professor Lyn Thomas, formally Professor of Management Science at Edinburgh University, and now Professor in the Department of Management at Southampton University. Professor Thomas has been appointed to an adjunct professorship at Edith Cowan University. Also collaborating on this project is Dr Harry Zheng in the School of Mathematics of Imperial College, London. This work involves a number of application of linear programming, applied probability theory and Markov modelling to a number of topics in applied finance, which include the analysis of risky bond default spreads, and the development of new methods for measuring bond portfolio sensitivity to interest rate changes (duration measures). A number of published and conference papers have resulted from this collaboration, including publication in leading US journals such as the Journal of Fixed Income.

2.4 Work in applied financial econometrics

Another research node has featured applications of applied financial econometrics. This has been supported by a full suite of appropriate computer programs including Microfit, Eviews, Rats and Cats, PC Give and PC Fiml, Shazam and Gauss. Access to the Data Stream database has meant that work can be done in economics or finance on any of the world's markets. The interest in applied financial econometrics was greatly enhanced by the appointment of Associate Professor AM Masih in 1997. Dr Masih introduced an advanced course in econometrics for the postgraduate students, which has meant that a number of the honours and masters students have been able to tackle research topics involving very sophisticated financial econometrics techniques. Good examples of these are provided by a succession of AUSAID funded scholarship masters students from Zimbabwe.

Examples, of these students include Jocelyn Chihimini, who undertook a project which features tests of asset pricing models across the world's merging financial markets, the statistical analysis of which was done in a GMM (Generalised Methods of Moments) framework. Gift Chirozhva undertook an analysis of linkages between economic development and financial markets in the

context of Zimbabwe using a time series cointegration based framework. (Gift has a senior position with the Reserve Bank of Zimbabwe). A third student Fidelia Ghandiya undertook a test of PPP (the purchasing power parity theorem) in the context of Southern African Development Region Countries, using an advanced time series econometrics technique, developed in 1997 by Professor H Pesaran called "Long Run Structural Modelling" (a contract has been signed with Ashgate Publishing, a specialist academic publisher in the UK to produce a research monograph based on this thesis).

There have also been numerous conference and honours papers which have drawn on the use of these time series econometric techniques. Mr Mahendra Chandra (a SAFE staff member) is undertaking a PhD at the University of Western Australia which involves the analysis of stock market linkages utilising these techniques. Dr Lee Lim, another member of the department, is an ex-PhD student of Professor McAleer, and has been active in Honours supervision and in pursuing a research agenda using her econometrics skills.

The linkage with Professor McAleer, via Dr Lim has been particularly fruitful for FIMARC. Members of FIMARC have been involved by Professor McAleer in the 2001 MODSIM (Modelling and Simulation Conference), which was held at ANU and were active in organising sessions, presenting papers, and in publishing activities both via the conference proceedings and in subsequent refereed journal publications. FIMARC members will be further participating in the 2003 MODSIM which is to be held in Queensland.

Professor Allen has undertaken numerous collaborative research projects which feature applications of time series econometrics, many with Dr Garry McDonald of Curtin University of Technology. FIMARC has a very strong track record in applications of financial econometrics to various finance research topics.

2.5 Research work on superannuation

Mr P Gerrans and Dr. Marilyn Clark-Murphy, members of the School, are working on a project which involves a long term study of factors influencing the retirement savings decisions of public and private sector superannuation members. The research team is working with UniSuper, Superannuation Trust of Australia, Government Employees Superannuation Board of Western Australia and others to investigate the choices made and the factors which influence these decisions. A number of publications and a research grant application have resulted from this work. Mr Ray Boffey, another member of the School, is commencing on a Ph.D which involves the study of

mandated superannuation choice using data which is to be made available by BT. This is another example of a very significant node of research which is being developed within the Centre over the past few years.

2.6 Research work on risk, uncertainty and gambling

There are certain difficulties with the study of financial markets under uncertainty when there are no definite cut-off dates. Gambling markets provide a viable proxy because gambling games have definite termination points; lessons learned from gambling markets can shed light on investment decisions. Dr Cheung is interested in three issues: First, why economic agents participate in unfair gambles? Examples of unfair gambles abound in 'investment' in junior mining shares. Second, what is the optimal design of gambling games? This is related to the first issue and provides insight to why economic agents participate in unfair gambles. Third, will economic agents learn from their investment or gambling mistakes? One of the reasons of participation in unfair gambles is cognition bias, which turns an unfair gamble into a 'fair' one. This issue is related to the study of winners' curse in auction and bidding. A number of conference and published articles have resulted from this research.

2.7 Recognition

Researchers in FIMARC have received a number of best paper awards in recent years. A.M. Masih and R.Masih have received two which include: The Global Finance Conference 'best paper' prize sponsored by Chicago Stock Exchange was awarded at their annual conference held at Chicago in April, 2000 organised by the Global Finance Association to a paper "Propagative Causal Price Transmission Among Major International Stock Exchanges: Evidence from the Pre- and Post-Globalization Period".

Another award was the PACAP/FMA International Finance Conference 'best paper' prize sponsored by Kuala Lumpur Stock Exchange was awarded to the following at their annual conference held at Kuala Lumpur in October, 1998 organised by the Pacific Basin Financial Management Society (based in the PACAP Research Center, University of Rhode Island, U.S.A.): Masih, A.M.M.(1999) " Are Asian Stock Market Fluctuations Due Mainly to Intra-Regional Contagion Effects? Evidence Based on Asian Emerging Stock Markets", Pacific-Basin Finance Journal 7(3-4), 251-282 (with R. Masih).

D.E.Allen, L. Thomas and H. Zheng were given an award for the best paper on the topic of Hedging and Derivatives by the Sydney Futures Exchange at the (December, 2001) 14th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney, for a paper titled: "The Duration Derby: A comparison of Duration based Strategies in Asset Liability Management".

Five papers have been given ANBAR International Awards for the highest quality rating on the basis of citations and by an international panel of judges, one by D.E Allen and V. Rachim and four by A.M. Masih and R. Masih. (Visible at their website www.anbar.co.uk/anbar/excellence/authors.htm).

Professor Allen lodges most of his working papers on the Social Science Research web site www.ssrn.com. This site ranks all contributing authors by the number of down-loads of their papers, Professor Allen is currently ranked in the top 300 from a total of 25,000 plus authors. View the web site at http://papers.ssrn.com/sol3/cf_dev/TopAuthors.cfm?RowStart=251.

3. DESCRIPTION OF FIMARC'S RESEARCH PROJECTS.

A description of FIMARC's current research projects follows:

An Analysis of the Speed of Australian Interest Rate Adjustment to Reserve Bank Base Rate Changes.

This project being undertaken with Nigel Morkel-Kingsbury features an analysis of the speed with which the Australian banks pass on base rate changes to commercial and retail rates using a time-series framework of analysis.

A Hidden Markov Chain Model of the Term Structure of Bond Credit Risk Spreads and Applications of Linear Programming to Bond Pricing.

This project being undertaken with Professor Lyn Thomas of the University of Southampton involves using US Standard and Poor's credit rating data to build a Markov model which allows for dependency between the stochastic process modelling the interest rate and the Markov chain process describing credit rating changes in the bonds. A second stage of this project involves applying linear programming to strip the coupons from bonds to prevent mispricing in the spread structure and to estimate the default probabilities of risky bonds without relying on interest rate models. Another section of the project features applications of linear programming to calculate portfolio durations for non-parallel shifts of the yield curve. Dr H. Zheng is involved in this work.

The comparative analysis of company financial policy decisions

Research involving a comparative evaluation of the determinants of the financial policies of Australian, British and Japanese companies. This involves comparative analysis of financing, capital structure and dividend policies.

Rationality in equity markets

A research project with Gary Macdonald of the School of Economics and Finance Curtin University, involving an investigation of equilibrium and efficiency in Australian and South East Asian Financial markets. The first stage of the project involved the application of co-integration and unit roots tests to time series return data for stock exchange accumulation indices for 19 countries. An analysis of the potential for portfolio diversification across these countries' respective markets was undertaken. The second stage involves a test of the dividend-share price relationship and the present value model in a number of these markets. This second project with Gary MacDonald

involves tests of market efficiency, market rationality, and analysis of whether price over-reaction phenomena occur in equity markets in the Asia-Pacific region. The pricing efficiency of equity markets in the Asia Pacific Region has also been analysed using applications of the theory of co-integrated vector autoregressive models. This permits an approach to modelling rational expectations of the present value relationship between prices and dividends. A VAR approach is applied to tests of the present value relationship in the various markets.

The determinants of returns in the Malaysian Stock Market

This work involves tests of the efficacy of the Capital Asset Pricing Model in the Malaysian Market and examines whether there is a linear relationship between return and beta. Tests for the existence of various anomalies in price behaviour such as the 'small firm' effect, the impact of book equity to market equity values, own variance etc., will be undertaken.

Time-Series Tests of the Hedging Effectiveness of the Sydney Futures Exchange

This project features a set of time-series tests of the hedging effectiveness of the Sydney Futures Markets analysing the All Ordinaries Share Price Index, 90 Day Bank Bills, 10 Year Treasury Bonds, 3 Year Treasury Bonds and Wool Contracts plus corresponding cash series. The tests will use daily data for the maximum time periods. Research into the hedging effectiveness of the Sydney Futures. The second stage involves a panel data approach to the time series tests of whether hedge ratios are constant.

A Study of the Linkages between Accounting Earnings, Dividends and Stock Prices

A time-series analysis of linkages between accounting earnings, dividends and stock prices undertaken with Dr. G. MacDonald of Curtin University.

Managed Fund Performance

A project on the measurement of managed fund performance is being developed with Professor T. Brailsford of ANU, Professor R. Faff of RMIT and Assirt, the fund rating agency using data provided by Assirt. The work is supported by a SPIRT grant in 1999, 2000 and funding for an APA until 2001.

This work provides the cornerstone of FIMARC's association with SIRCA's Fund Management Centre.

The Retirement Savings Decisions of Australian Workers: A Long-Term Study of Public Sector and Industry Fund Members

The project undertaken by Paul Gerrans and Marilyn Clark-Murphy is examining the fund and investment choices made by employees for their employer-sponsored superannuation. The research team is working with - UniSuper, Superannuation Trust of Australia, Government Employees Superannuation Board of Western Australia and others to investigate the choices made and the factors which influence their decisions. Australia is at the forefront of OECD nations in the use of compulsory superannuation to reduce the burden of age pension provision on government but concern has been consistently expressed by the financial services industry that employees may not be in a position to analyse the information available to them and make choices that will maximise their retirement income. This study will offer significant insights into the decision processes of individual fund members.

Purchasing Power Parity in the Asia-Pacific

This project involves the application of time series econometric testing to exchange rate theory of the Asian region. This will include applying standard unit root and co-integration testing as well as panel data procedures to data retrieved from the Datastream International Database and the International Monetary Fund's International Financial Statistics database. Special areas of interest include testing the ability to forecast exchange rates, the differences in adjustment speeds of cross-national and cross-continental PPP, the dynamics of PPP relationships over time and the influence of other variables (eg. interest rates, prices and fiscal balances) on such relationships. This project is being undertaken by D.E. Allen and G. A. MacDonald.

Mergers and Investment flows in the Investment Industry

This project undertaken with Ph.D student Jerry Parwada who is now sponsored by SIRCA and based in their offices in Sydney involves an assessment of how investment flows respond to merger activity within the managed fund industry.

The market impact of trading activity

This project is being undertaken by Wenling Yang who is now a scholarship funded Ph.D student at SIRCA who also worked on related issues with Salomon Smith Barney, and Dr Shelton Peiris of the University of Sydney. It involves the application of Engle and Russell's recently developed Auto-Conditional Duration Model (ACD) to study the impact of trading activity using real-time high frequency transactions data provided by SIRCA. Further work on the generalization of the model is being developed.

Mean reversion of Profitability

This project being undertaken with ECU Ph.D student Heazry Salim looks at the rate of mean-reversion of profitability using a sample of just under 1000 UK companies from 1982-2000. The first section of the project mirrors a previous US study by Fama and French (2000) utilising a cross-sectional regression approach. The next section applies time series modelling techniques in the context of recently developed panel unit root and cointegration tests.

Tests of the Conditional CAPM in emerging markets

This project undertaken with Joseline Chimhini, a former Masters student, involves tests of a conditional CAPM in emerging capital markets using a GMM (generalized method of moments) framework. Tests will be undertaken to assess the degree of integration of emerging markets with world capital markets.

Tests of Purchasing Power Parity in South African Development Region (SADC) Countries

This project is being undertaken with former Masters student Fidelia Gandiya. Tests of PPP amongst SADC countries are being undertaken using a recently developed framework by Pesaran and Shin (1997) called long-run structural modelling, which is applied in a cointegrated VAR framework. A monograph based on this work is to be published by Ashgate Publishing in the UK.

4. INTELLECTUAL PROPERTY AND PUBLICATIONS.

FIMARC staff have produced a great many high quality refereed publications in international journals. (Details are provided below and in some of the annual reports attached in the appendices to this document). The research activity index scores, detailed below, are calculated using a combination of weighted multiples of grant research income, weighted higher degree completions, and publications, (200 points per refereed paper, scaled by number of authors).

Research Activity Index Scores for the past 3 years.

Score	Date
5261	1999
2675	2000
5187	2001

The variation in points is attributable to loss of staff over the past few years as the economics segment of the School of Finance and Business Economics shrank. At the end of 1999 the School lost the services of Associate Professor Ron Ripple, who now works for Macquarie University, Ms. Margaret Giles, Mr. S. Cruickshank, and Dr Mei Lai Lim who runs a research centre at Griffith University. At the end of 2000 we lost the services of Associate Professor A.M. Masih, Mr. C. Reynolds, Mr. L. Demello and Mr S. McKay. At the end of 2001 we lost Dr. Steven Li to Queensland University of Technology.

4.1 Publications in the last three years

Forthcoming publications:

D.E.Allen, N. Morkel-Kingsbury and L. Thomas, "A hidden Markov chain model for the term structure of credit risk spreads", forthcoming, *International Review of Financial Analysis*, Elsevier, (2002).

D.E. Allen and W. Yang, "Do UK Stock Prices deviate from fundamentals", Forthcoming *Mathematics and Computers in Simulation*, (2002).

Cullen, L., & Christopher, T. (2002). Governance disclosures and firm characteristics of listed Australian mining companies, *International Journal of Business Studies* - Forthcoming.

Publications:

D.E.Allen, S. Cruickshank and G. MacDonald, "Purchasing Power Parity-Evidence from a new panel test" *Applied Economics* (2002), Vol 34, pp.1319-1324.

D.E. Allen, G. MacDonald, D. Walsh and K. Walsh, *Research in International Business and Finance*, Vol 16, (2002), ISBN 0-7623-0858-3 "Using regression techniques to estimate futures

hedge ratios, some results from alternative approaches applied to Australian 10 Year Treasury Bond Futures", pp.189-214.

Hassan, S., Narasimhan, M.S., & Christopher, T. (2002). Comparative usefulness of statement of cash flows and funds statement: Evidence from Indian mutual fund analysts, *Indian Accounting Review* 6(1), 27-40.

D.E. Allen, "Spare Debt Capacity: Company Practices in Australia, Britain, and Japan", *The Australian Journal of Management*, (2000) Vol 25, No 3, pp.299-326.

D.E. Allen, J. Hill and L.C. Thomas, "Expert's Estimates of Task Durations in Software Development Projects", *International Journal of Project Management*, (2000) Vol 18, No 1, pp.13-21.

D.E. Allen, L.C. Thomas and H. Zheng, "Stripping Coupons with Linear Programming", *The Journal of Fixed Income*, (September, 2000), Vol 10, No 2, pp80-87.

D.E.Allen, M. L. Tan "A Test of the Persistence in Performance of UK Managed Investment Funds", *Journal of Business Finance and Accounting*, (1999), Vol 26, Nos 5&6, pp.559-593.

D.E. Allen, N. Morkel-Kingsbury and W.Piboonthanakit, "The long-run performance of initial public offerings in Thailand", *Applied Financial Economics*, (1999), No 9, pp.215-232.

D.E. Allen, contribution to Commonwealth of Australia, Official Committee Hansard, Senate Foreign Affairs, Defence and Trade References Committee, AGPS Publishing Service, Canberra, reference "Examination of developments in contemporary Japan and the implications for Australia", (1999) FAD&T pp.176-190. Also available on the WWW at <http://www.aph.gov.au/hansard>

M. Clark-Murphy and P. Gerrans, "Consultation and resource usage in retirement savings decisions: Australian evidence of systematic gender differences", *Financial Services Review*, Elsevier, (2001) Vol 10, pp.273-290.

M. Clark-Murphy and P. Gerrans, "Choices and Retirement Savings: Some preliminary results on superannuation Fund Member Decisions", *Economic Papers*, (2000), pp.29-42.

M. Clark-Murphy, and Gerrans, P. (2002). "Matters of choice", *Superfunds*, pp.48-50. (non-refereed professional journal)

P. Gerrans, and Clark-Murphy, M. (2001), "How super in online Super?" 2nd International We-B Conference, pp.90-97. Perth: ECU.

A.M. Masih and R. Masih, (2001,forthcoming) Long and Short-Term Dynamic Causal Transmission Amongst International Stock Markets, *Journal of International Money and Finance*, 20(4).

A.M. Masih, (2001,forthcoming) Propagative Causal Price Transmission Among Major International Stock Exchanges: Evidence from the Pre- and Post-Globalization Period, *Global Finance Journal* (with R. Masih). **(This paper received the Global Finance Conference 'best paper' prize sponsored by Chicago Stock Exchange at their annual conference held at Chicago in April 2000).**

A.M. Masih (2001,forthcoming) Price Discovery between Informationally Linked Markets during Different Trading Phases, *Journal of Financial Research*, (with A. Hodgson and R. Masih).

A.M. Masih, and R. Masih (2001,forthcoming) Common Stochastic Trends and the Dynamic Linkages Driving European Stock Markets: Evidence From Before, After and During the Crash of October 1987, *European Journal of Finance*.

A.M. Masih, and R. Masih "Long and Short-Term Dynamic Causal Transmission Amongst International Stock Markets", *Journal of International Money and Finance* (forthcoming).

A.M. Masih, with A.Hodgson and R. Masih, "Price Discovery between Informationally Linked Markets during Different Trading Phases", *Journal of Financial Research*.

A.M. Masih, with A. Hodgson and R. Masih (2000), Multivariate Information Dynamics Between Prices and Futures Trading Volume, *Review of Quantitative Finance and Accounting*.

A.M. Masih, and R. Masih (2000), "A Reassessment of Long-Run Elasticities of Japanese Import Demand: An Application of Dynamic OLS, *Journal of Policy Modeling*, 22(5), 625-639 .

A.M. Masih, and R. Masih (2000), "Dynamics of Fertility, Family Planning ,and Female Education in a Developing Economy", *Applied Economics*, 32 (12), 1617-1627

A.M. Masih, and R. Masih (2000), "East Asia's Financial Crisis: Lessons for South Asia", *International Journal of Business Studies*, 8(1), 71-86 .

A.M. Masih, and R. Masih (1999), "Are Asian Stock Market Fluctuations Due Mainly to Intra-Regional Contagion Effects? Evidence Based on Asian Emerging Stock Markets", *Pacific-Basin Finance Journal*, 7(3-4), September, 251-282. **This paper was awarded the 'best paper' prize by PACAP/FMA International Conference of Finance held at Kuala Lumpur in October, 1998. The Prize was sponsored by Kuala Lumpur Stock Exchange.**

A.M. Masih and R. Masih (1999), Is a Significant Socio-Economic Structural Change a Pre-Requisite for 'Initial' Fertility Decline in the LDCs? Evidence from Thailand, *Journal of Population Economics*,12(3), 443-466 .

A.M. Masih, A. Hodgson and R. Masih (1999), Dynamic Price Relationships Between Small and Large Stocks, *Accounting Research Journal*, 12,(2), 151-162

A.M. Masih and R. Masih (1999), "Addendum to Does Money Cause Prices or the Other Way Around? Multi-Country Econometric Evidence Including Error-Correction Modelling From South-East Asia", *Journal of Economic Studies*, 26(2), 172-176.

Cheung, Y.H. (2001). Skewness is the name of the game: A note on the design of gambling games. *Economic Papers*, 20, December, pp. 10-17.

Cheung, Y.H. (2001). A Monte Carlo study of the probability weighting function. In F. Ghassemi, M. McAleer, L. Oxley, and M. Scoccimarro (eds.) MODSIM 2001 International Congress on Modelling and Simulation Proceedings, Volume 3 Socioeconomic Systems. Canberra, ACT: The Modelling and Simulation Society of Australia and New Zealand Inc., pp. 1439-1444.

4.2 Edith Cowan University, School of Finance and Business Economics, Working

Paper Series. See <http://www.business.ecu.edu.au/fbe/wps/index.htm>

D.E. Allen and V. Soucik (September 2002) "Performance Benchmarking Managed Funds: Australian Fixed Interest Funds".

C.C. Ho, C.C. Lee and C.T. Lin (August 2002) " Liquidity Enhancement through Seasoned Equity Offerings: Evidence from an Emerging Market".

S. Peiris, D.E.Allen and A Thanvaneswaran, (August 2002) "Generalized Moving Average Models and applications in High Frequency Data".

C.T. Lin (July 2002) "Dividend Policies, Legal Regimes, and Institutional Structures in the Asia Pacific Region".

S. Peiris, D.E. Allen and W. Yang, (May 2002) " Some Statistical Models for Durations and their Applications in Finance".

C.T. Lin and C.C. Ho (April 2002) "Does Bigger Mean Safer for Banks?"

D.E. Allen and J. Parwada (March 2002) "Are Bank Deposits and Bank-Affiliated Managed Funds Close Substitutes?"

S Li, (September 2001) "Optimal Asset Allocation with Value at Risk Constraints: A single period model and some empirical evidence".

C.T. Lin and L.K. Lim (September 2001) "On the disappearance of the Tuesday effect in Australia".
M. Giles (September 2001) "Heckman's methodology for correcting selectivity bias: an application to road crash costs".

V. Fang, C.T. Lin, and C.C. Ho, (September 2001) "Hedging, Financial Distress and Managerial Risk Aversion: Evidence from the Australian Gold Mining Industry".

H. Zheng, L. Thomas & D. Allen, (August 2001) "The Duration Derby: A Comparison of Duration Based Strategies in Asset Liability Management".

M. Clark-Murphy and P. Gerrans (July 2001) "Gender Differences in Information Resource Usage when making Retirement Saving Decisions".

S. Li and Y.H. Cheung, (May 2001) "On the evolution of probability weighting function".

C.T. Lin, (April 2001) "Another Look at the Size and Book to Market Effects on Stock Returns".

Y.H. Cheung, (March 2001) "Skewness is the name of the game".

W. Yang, (March 2001) "M-GARCH Hedge Ratios and Hedging Effectiveness in Australian Futures Markets".

D. Allen and W. Yang, (May 2001) "What moves stock markets? Evidence that UK stock prices deviate from fundamentals".

C. T. Lin and R.S. Sears (February 2001) "Miss-specification of the CAPM: Implications for size and book to market effect".

B. Jones, A.M. Masih and C.T. Lin, (February 2001) "Macroeconomic announcements, volatility and interrelationships: an examination of the UK Stock and Bond Market".

G. Parry and C. Reynoldson, (October 2000) "Economics in the MBA Curriculum: Encouraging Higher level Engagement".

D.E. Allen, S. Cruickshank and G. MacDonald, (September 2000) "Purchasing Power Parity: Evidence from a new panel Test".

R.D. Ripple, (August 2000) "Is the West Coast Petroleum Industry integrated with the Global Market?"

S. Li, (August 2000), "An Empirical Study of Australian Short-Term Interest Rates: A Comparison of Single Factor Models".

D.E. Allen and S. Cruickshank, (August 2000), "Empirical Testing of the Samuelson Hypothesis: an application to Futures Markets in Australia, Singapore and the UK".

Y.H. Cheung, (July 2000) "Economics Efficiency of Public Enterprises and the role of Political Influence".

A.Moosa and R. Ripple, (June 2000), "The effect of seasonal adjustment on the accuracy of forecasting U.S. West Coast Oil Imports".

W. Yang, D.E. Allen and S. Cruickshank, (May 2000), "Time Series Analysis of the stock prices and accounting earnings dynamics".

D.E. Allen, S. Cruickshank, N. Morkel-Kingsbury and N. Souness, (April 2000), "Backward to the Futures: a test of three futures markets".

D. E. Allen and W. Yang, (April 2000), "Variation of share prices due to fundamental and non-fundamental innovations".

B. Adrangi, A. Chatrath, K. Raffiee, and R. Ripple, (March 2000), "Alaska North Slope Crude Oil pRice and the Behaviour of Diesel Prices in California".

D.E. Allen and V. Soucik, (February 2000), "The Performance of Seasoned Equity Offerings in a risk-adjusted Environment".

M. Giles, (February 2000), "Primary and Secondary Data Sources for the Study of Road Crashes in Australia".

V. Soucik and D.E. Allen (February 2000), "Long Run Under-performance of Seasoned Equity: Fact or an Illusion?"

4.3 Conference Presentations

D.E.Allen, Conference Presentation, European Financial Management Association Conference (June 27, 2002) Britannia International Hotel, South Quay, London, "Forecasting Profitability and Earnings: A Study of the UK Stock Market (1982-2000)".

D.E. Allen, Panel Participation, "Hedge Funds", Funds Management Conference organised by the Funds Management Research Centre, SIRCA, Four Seasons Hotel, Sydney (July 23rd, 2002).

D.E.Allen, Conference Presentation, Asia Pacific Finance Association Conference, Keio Plaza Hotel, Tokyo, (July 16, 2002) "The World Price of Covariance Risk with respect to Emerging Markets".

Cullen, L., & Christopher, T. (2002). Governance related information and firm characteristics of listed Australian industrial companies, ANZAM Conference, La Trobe University, Victoria.

D.E. Allen, 14th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney "M-Garch Hedge Ratios and Hedging Effectiveness in Australian Futures Markets", (17-19 December 2001).

D.E. Allen, 14th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney "The Duration Derby: A comparison of Duration based Strategies in Asset Liability Management", (17-19 December 2001). **This paper was awarded a joint first prize for the best paper on the topic of Hedging and Derivatives by the Sydney Futures Exchange.**

D.E.Allen, International Congress on Modelling and Simulation MODSIM 2001, The Australian National University, Canberra "Mutual Fund Company Mergers and Their Impact on Investment Flows", (10-13 December, 2001).

D.E. Allen, International Congress on Modelling and Simulation MODSIM 2001, The Australian National University, Canberra "Do UK Stock Prices Deviate from Fundamentals?", (10-13 December, 2001).

D. E. Allen, Prof. Philip Brown Symposium, Perth, "Variation of Share Prices Due to Fundamental and Non-Fundamental Innovations", (9-10 December, 2001).

H. Salim, Prof. Philip Brown Symposium, Perth, "Forecasting Profitability and Earnings: A Study of the UK Stock Market (1982-2000)", (9-10 December, 2001)

D.E. Allen, 2001 FMA European Conference, Paris, France, "What Moves Stock Markets? Evidence That UK Stock Prices Deviate From Fundamentals" (May 30-June 1, 2001).

W. Yang, EFMA 2001 Annual Meeting, Lugano, Switzerland, "Variation of share prices due to fundamental and non-fundamental innovations", (June 27-30, 2001).

D.E. Allen, 8th Annual APFA Conference, Shangri-La Hotel, Bangkok, Thailand "Purchasing Power Parity: A New Panel Test", (22-25 July, 2001).

W. Yang, 8th Annual APFA Conference, Shangri-La Hotel, Bangkok, Thailand "M-GARCH Hedge Ratios and Hedging Effectiveness in Australian Futures Markets", (22-25 July, 2001).

J. Parwada, 8th Annual APFA Conference, Shangri-La Hotel, Bangkok, Thailand "Investors' Response to Mutual Fund Company Mergers", (22-25 July, 2001).

W. Yang, 8th Annual APFA Conference, Shangri-La Hotel, Bangkok, Thailand "What moves stock markets? Evidence that UK Stock Prices Deviate from Fundamentals", (22-25 July, 2001).

E. Lin, MODSIM 2001 Congress, Centre for Resource and Environmental Studies, The Australian National University, Canberra, "Hedging, Financial Distress and Managerial Risk Aversion: Evidence from Australia Gold Mining Industry" (10-13 December, 2001)

L. Lim, MODSIM 2001 Congress, Centre for Resource and Environmental Studies, The Australian National University, Canberra, "Time-varying Conditional Correlations in Asia-Pacific Equity Markets" (10-13 December, 2001)

E. Lin, MODSIM 2001 Congress, Centre for Resource and Environmental Studies, The Australian National University, Canberra, "Another Look at the Size and Book-to-Market Effects on Stock Returns"

P. Gerrans, (2001). Managed Fund Ratings and Future Performance. Australian Finance and Banking Conference. Sydney.

P. Gerrans, and Clark-Murphy, M. (2001). The Differences Between Boys and Girls: Superannuation Investment Choices. 30th Annual Conference of Economists. Perth: University of Western Australia.

P. Gerrans, and Clark-Murphy, M. (2000). Making Superannuation Investment Choices: Some Preliminary Results on Member Decisions. 12th PACAP/FMA Finance Conference. Melbourne.

P. Gerrans, and Clark-Murphy, M. (2000). Gender Differences in Information Resource Usage in Superannuation Decisions. 14th Academy of Financial Services Conference. Seattle, Washington.

H. Salim, 14th Annual Australasian Finance and Banking Conference, ANA Hotel, Sydney (organised by The University of New South Wales, Sydney), "Forecasting Profitability and Earnings: A Study of the UK Stock Market (1982-2000)", (17-19 December, 2001)

A.M.Masih, (2001a, Oct) Financial Management Association International (FMA) Annual Meeting, Toronto, Canada "Macroeconomic Announcements, Volatility, and Interrelationships: An Examination of the U.K. Bond and Stock Markets".

A.M.Masih, (2001b, July) 8th Asia Pacific Finance Association (APFA) Annual Conference, Bangkok, Thailand, "The Term Structure of Interest Rates in Australia: An Application of Long Run Structural Modelling".

A.M.Masih, (2000a, Oct) Financial Management Association International (FMA) Annual Meeting, Seattle, U.S.A. "Price Discovery between Informationally Linked Markets during Different Trading Phases: Evidence from Australia".

A.M.Masih, (2000b, Oct) Financial Management Association International (FMA) Annual Meeting, Seattle, U.S.A. "Fractional Cointegration, Low Frequency Dynamics and Long-Run Purchasing Power Parity: An Analysis of the Australian Dollar".

A.M.Masih (2000c, July) 7th Asia Pacific Finance Association (APFA) Annual Conference, Shanghai, China "Lead-Lag Relations in Bull and Bear Phases among Large, Medium and Small Stocks".

A.M.Masih (2000d, July) 12th Annual PACAP/FMA International Finance Conference, Melbourne, Australia "Fractional Cointegration and Purchasing Power Parity: Another look".

A.M.Masih, (2000e, June) 8th Pacific Basin Finance, Economics, and Accounting International Conference, Bangkok, Thailand "Stock Market Dynamics :Evidence from Emerging Stock Markets".

A.M.Masih, (2000f, April) 7th Annual Global Finance Conference, Chicago, U.S.A.
Paper: "Propagative Causal Price Transmission Among Major International Stock Exchanges: Evidence from the Pre- and Post-Globalisation Period" (This paper received the Global Finance Conference 'best paper' prize sponsored by Chicago Stock Exchange at their annual conference held at Chicago, 2000).

A.M.Masih, (2000g, Mar) Southwestern Finance Association Annual Meeting, San Antonio, U.S.A. "Capital Market Dynamics: Evidence from the Pre- and Post- Globalization period".

Cheung, Y.H. & Steven Li (2000). On the evolution of probability-weighting function and impact of gambling. In G. Coman (ed.) Lessons of the Past: Proceedings of the Tenth National Association for Gambling Studies Conference, Alphington, Victoria: National Association for Gambling Studies, pp. 65-72.

Cheung, Y.H. (2000). Skewness is the name of the game. In G. Coman (ed.) Lessons of the Past: Proceedings of the Tenth National Association for Gambling Studies Conference, Alphington, Victoria: National Association for Gambling Studies, pp. 57-64.

5 EXTERNAL FINANCIAL SUPPORT - GRANTS

Linkage Grant with the Fund Rating Agency Morningstar

Professor Dave Allen (ECU), Professor Robert Faff (RMIT) and Professor Tim Brailsford (ANU) have received a Linkage Grant of AUD 108,000 (2002-2004) to undertake a project analysing Managed Fund Performance Rating with Industry partner Morningstar, one of the leading Fund Rating Agencies. The Project title is “An evaluation of the Morningstar System of Managed Fund Ratings in Australia and New Zealand”.

Strategic Infrastructure Research Grant:

Lodged by the University of NSW on behalf of SIRCA. This will provide AUD 5.3 million over the next three years commencing in January 2002 and will support the provision of national finance databases.

Linkage Grant in partnership with ASSIRT

The linkage grant in operation with the Fund Rating Agency ASSIRT terminated in March 2002. The work was supported by a ARC SPIRT grant in 1999, 2000 and funding for an APA until 2002, giving total support of \$146,000 in cash and vital access to ASSIRT's proprietary data. An Australian Postgraduate Award attached to this Fund was received by an ECU Ph.D student, Victor Soucik, who has submitted his Ph.D which has been marked and is in the process of being finalized. This project was highly strategic in that it served as the catalyst for the setting up of SIRCA's Funds Management Research Center (FMRC), which Professor Allen directs.

SIRCA scholarships:

Two ECU Finance Ph.D students, Ms WenLing Yang and Mr Jerry Parwada, were recently awarded Ph.D scholarships by SIRCA. There were 15 nation-wide applicants and only four scholarships were awarded with ECU taking two of them. Wen-Ling and Jerry will be based in Sydney at SIRCA headquarters and will work closely with their industry sponsors.

An analysis of the linkage between accounting earning, dividends and share prices

This work was supported by a small ARC grant of \$17,499 in 1999. A first stage of the project has been completed by D.E.Allen, S. Cruikshank and N. Morkel-Kingsbury . This involved a study of the linkages between accounting earnings and stock price movements in a VAR framework of a sample of some US firms drawn from the S&P 500 Index. Ms. Wenling Yang, then a Masters of

Finance student, worked as a part-time Research Assistant on this project. A time series analysis of linkages between accounting earnings, dividends and stock prices in various markets was undertaken with Dr. G. MacDonald of Curtin University.

Research Infrastructure Grant to the value of \$75,000.

This grant was used to top up Mr Victor Soucik's Ph.D. scholarship and to fund a Ph.D. scholarship for Mr Jerry Parwada; both concentrated on funds management topics using ASSIRT's library of data.

6. EXTENT OF CONTRIBUTION TO THE PUBLIC AND TO INDUSTRY.

Members of FIMARC have been active in producing reports for ASIC (The Australian Securities and Investments Commission) and for Senate Select Committees. They have also arranged a series of annual conferences on funds management issues sponsored by Colonial First State. FIMARC has also recently joined the AXISS finance scholars scheme. Details are provided below:

6.1 Submissions to ASIC 2002

FIMARC staff and students provided two reports for ASIC (the Australian Securities Commission) in 2002. ASIC approached the FMRC (Funds Management Research Centre) seeking guidance about an advisory standard they were developing about what is permissible and not permissible in advertising managed fund performance. Professor Allen chaired an advisory panel consisting of the Directors of the FMRC. In-conjunction with them he produced a report which surveyed the academic literature on the prediction of managed fund performance. This report was titled: "A Review of Research on the Past Performance of Managed Funds" was co-authored by Professors D.E.Allen, T. Brailsford, R. Faff and R. Bird (30 September 2002).

A study was also commissioned from Mr Paul Gerrans of FIMARC and Ms. Sheree St. Clair, an ECU Hons student. This report featured the results of a survey of Managed Fund Advertisements and was titled: "Managed Funds Advertising". Both reports are down-loadable from ASIC's website at http://www.asic.gov.au/asic/asic_pub.nsf/byheadline/02%2F359+ASIC+issues+discussion+paper+on+the+use+of+past+performance+information+in+investment+ads?openDocument.

6.2 Senate Select Committee submissions

Professor Allen also submitted a report to the Senate and Foreign Affairs and Defence Committee on matters relating to the current situation of the Japanese economy and its likely implications for Australia. (19 February 1999). This was followed by the presentation of verbal evidence to the Select Committee on for Defence and Foreign Affairs, Australian Senate, Canberra on matters relating to the current state of the Japanese economy and its likely implications for Australia, at Committee hearings held in Perth at 1110 Hay Street (25 February, 1999).

As Director of the FMRC (Funds Management Research Centre) at SIRCA, Professor Allen has been one of the main organizers of a series of annual one-day conferences, sponsored by Colonial First State Investments, which have been held in Sydney in 2000, 2001, and 2002. These have showcased the research work of the FMRC, its researchers and Ph.D students. Each event has

featured contributions from high profile academics, the most recent featured Professor Steven Brown, of Stern Business School, New York University, who gave an address on the topic of “Hedge Funds”. The first conference in 2000 featured a lunch-time address by Senator Joe Hockey, the Minister for Financial Services. Details of the various conference programs are provided in the appendices. These conferences have been well supported by academics and practitioners.

6.3 AXISS Finance student scholarship scheme.

The Axiss Scholar Programme matches exceptional finance students in the final year of an undergraduate or postgraduate degree with a sponsoring organisation for 10 to 14 weeks full-time work placement. The sponsoring organisation provides the Axiss Scholar with invaluable 'on-the-job' experience while at the same time being able to assess the potential of the Scholar for future employment. The Axiss Scholar Programme is supported by the Commonwealth Treasury and leading financial services companies. Axiss Scholars are participants in a year-long program that is building the future of finance. The program includes career workshops, a formal presentation ceremony and networking opportunities. Axiss Scholars receive a scholarship stipend of \$10,000 to assist with study expenses and the additional costs of being in a formal work environment during the placement period. ECU Finance students will be able to participate in 2003.

7. EDUCATION AND TRAINING

The education and training of Hons, Masters and Ph.D students has been an integral part of FIMARC's work. Masters and Ph.D students have been involved as part-time research assistants on a number of projects. This facilitates training in the use of the Datastream database and the various econometric and statistical software used in their research work. Mr Heazry Salim (Ph.D student), Ms Ingebjorg Kristofferson (Masters student) and Ms. Sheree St.Clair (Hons student) have been employed in this capacity in 2002. Other students employed in similar capacity in recent years include Ms Wenling Yang (successively Masters and Ph.D student), Mr Jerry Parwada (Ph.D student), and Mr Lurien Demello (Masters student). The students have been encouraged to co-author papers and to present papers at national and international conferences. Professor Allen has funded many of the conference presentations from personal RAI (research activity index) funds. Details of research students and their topics are provided below.

7.1. Thesis Supervisions:

Chau, "An Empirical Comparison using both the term structure of interest rates and alternative models in pricing options on 90-Day Bab Futures", M.Com Dissertation (1999).

T. Gumanti, "An Analysis of Initial Public Offerings in Indonesia", Ph.D, Passed (November 2000). (Co-supervised with Professor G.Monroe).

Wenling Yang, M.Com, "Futures hedging", M.Com, passed (February 2001).

Heazry Salim, "Purchasing Power Parity in South East Asian Nations: A Monetary Approach to Long-Run Exchange Rate Modeling", Hons Dissertation completed (1999).

T. Perich, "A test of the CAPM in an Australian context", Hons Dissertation completed (1999).

Chun Sing Leong, "Revisiting Real Interest Rate Parity: International Evidence", Hons Dissertation completed (1999).

Trent Winduss, Hons Finance Student "Cointegration and causality between stock prices and international macroeconomic variables: a study of the Pacific Basin." Hons Dissertation completed (2001)

Dianne Adamson, Hons Finance Student, "The determinants of stock price exposures in the Australian Gold Industry". Hons Dissertation completed (2001)

Ingebjorg Kristofferson, Hons Finance Student, "The performance of ethical investment funds" Hons Dissertation completed (2001)

Jocelyn Chimhini M.Com "Conditional asset pricing in developing markets", M.Com, passed (March 2002).

V. Soucik, "Finding the True Performance of Australian Managed Funds " Ph.D , (September, 2002) level 2 pass subject to completion of minor corrections.

Fidelia Ghandiya, "An Investigation into the Validity of the Intra-continental and inter-continental Casselian hypothesis (PPP) and uncovered interest rate parity (UIP) in South African development community (SADC) countries: A long-run structural modelling approach". M.Bus, passed (October 2002).

Auxilia T. Nyangoni, MPF student, project on forecasting the term structure of interest rates: "A Cointegration Approach To Test The Dynamic Linkages Of The Term Structure Of Interest Rates: Evidence From South Africa". Completed (July 2002).

Gift Chirozhva, M.Com,"Stock Market Development and Economic Development in Zimbabwe", M.Com,"Stock Market Development and Economic Development in Zimbabwe", submitted July (2002) two examiner's report received, pass subject to revisions.

Akhmad Syakhroza, Ph.D Accounting, "Influence of politics on the Budgeting Process: a study of the fertiliser manufacturing industry in Indonesia" (September 2002).

7.2 Current Thesis Supervisions:

P. Gerrans, "Qualitative and Quantitative Measures of Managed Fund Performance" Ph.D about to be submitted (November 2002).

L. DeMello, M.Com, "Forecasting the Equity Premium in Australia", in process.

Wenling Yang, undertaking Ph.D on "Modelling Transaction Durations in Financial Markets Using Irregularly Spaced Data". Co-supervisor Dr S. Peiris, University of Sydney.

Jerry Parwada, undertaking Ph.D on factors influencing managed funds investment flows.

Heazry Salim, undertaking Ph.D on modelling and forecasting UK company profitability.

Ray Boffey, developing Ph.D proposal on "Investment Choice and Retirement Savings: the impact of financial education on the mandated investor". Co-supervisor M. Clarke-Murphy.

Ms. Amporn Soonswang, developing Ph.D proposal on the evaluation of mergers on the Thai Stock Exchange using an 'event study' framework.

Ms. Jaime Yong, Hons student, undertaking study of the impact of bank risk management policies in the Asia Pacific Region, credit spreads and their impact on share prices.

Mr Robert Plucinski, Master of Professional Finance Student, undertaking a project which analyses stock market linkages between European transitional markets in a time-series framework.

L. Cullen, M.Bus Acc, Determinants of Corporate Governance Disclosures by Australian Companies Subsequent to ASX Listing Rule 4.10.3

Mr T. Christopher, Ph.D thesis Acc. "Corporate Social Disclosure in the Timber Industry in Western Australia 1989-1998: A Test of Legitimacy Theory", Submitted (October 2002).

Ingebjorg Kristofferson, M.Com finance, Developing proposal on measuring the relative stock market performance of ethical investments.

8. MARKETING

The profile of FIMARC is growing. The links with SIRCA have helped in this respect. The FMRC was approached directly by ASIC for help in preparation of the background research for the release of its recent discussion paper on Managed Fund Advertising: "The use of past performance in investment advertising" ASIC (September 2002). The series of Annual Funds Management Conference sponsored by Colonial First State Investments have raised its profile in the funds management industry nationally.

FIMARC needs to raise its profile locally. Its web site had received 1509 hits at the last count, where as Professor Allen's personal home page had received 8,858 hits over the same period. This is partly a result of the fact that the FIMARC web site tends to be hidden under several layers.

If the budget for FIMARC was not frozen, as it has been during 2002, it would be possible to spend some money on the promotion of consciousness of its activities via posters, brochures etc.,

9. MANAGEMENT EFFECTIVENESS.

FIMARC has been successful in obtaining external research funding in the form of money and in kind support from industry partners, ARC small grants and linkage grant funding, plus some research infrastructure funding. It has played a very active role in the development of database and research support facilities, statistical and econometric packages and the promotion of a research culture within the School. A large number of staff and students have been involved in publications and research theses via its agencies.

Its major current difficulty is the lack of basic infrastructure funding to support secretarial assistance and the day to day running of the centre. This used to be made available via a central faculty funding allocation. In 2002 the policy of research centre funding was switched to the School, the newly formed School of Accounting, Finance and Economics. Given that the new school has a budget deficit no operational funding has been made available to FIMARC in 2002. It had received a budget for 2002 but the Head of School has refused to sanction any operational spending.

Research grant funding is project specific and does not cover secretarial overheads, and day to day expenses such as the maintenance of web sites etc.

This is a major inhibitor of its research activities.

Appendices

Funds Management Research Centre Report 2001
Terms of Reference FIMARC Review

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3 May 2002

Directors annual report 2001

**Professor D.E. Allen¹ Funds Management Research Centre (FMRC)
SIRCA**



Contents:

- 1. Executive summary**
- 2. The original objectives of the FMRC**
- 3. Core work**
- 4. Conferences**
- 5. Other industry sponsors**
- 6. The newsletter**
- 7. The accounts**
- 8. Publications, working papers and conference papers**

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1. Executive summary

The year 2001 was again a year of successes and progress on some fronts and frustration on others for the Funds Management research Centre. A second attempt to secure funding for a linkage grant lead by Professor Robert Faff involving the fund rating agency Morningstar as a partner, was successful. The project will be based at Monash under the leadership of Professor Robert Faff. Project Title: "An Evaluation of the Morningstar System of Managed Fund Ratings in Australia and New Zealand" [\$108,000 (2002-2004)].

The core research work with various Ph.D students on the various university sites involved at ANU, ECU, RMIT, Sydney, SIRCA and UTS, proceeded very effectively. At the time of writing David Gallagher, a University of Sydney Ph.D student, has just been awarded his Ph.D and Victor Soucik, an Edith Cowan University Ph.D student is in the process of having his thesis examined. This linkage grant funded project, which was the catalyst for the setting up of the FMRC is moving towards completion and has served as a spring board for the development of other Ph.D student's topics in the Funds Management area. A number of other students associated with the FMRC will also be moving to completion of their Ph.Ds in 2002. There was also very extensive research output in the form of refereed publications, conference papers and working papers as can be seen from the appendix.

Colonial First State sponsored a conference held at Le Meridien hotel, Sydney on Friday 22nd June 2001 on the theme "Investment Management in Context". This conference featured six academic papers plus an industry panel discussion on the topic of the "Equity Premium", chaired by Professor Tim Brailsford, one of the FMRC's research Directors, another research Director, Professor Ron Bird was also featured on the panel, together with contributions from Professor Peter Swan of the University of Sydney and two industry representatives. A pleasing feature of the academic contributions was that they featured the work of three of the FMRC's Ph.D students.

Another important development was the establishment of links with the Australian Securities and Investments Commission (ASIC). As a result of the meeting with the representatives of ASIC on 19th December 2001, the Directors became involved in an industry advisory panel. ASIC commissioned a report titled "A Review of Research on the Past Performance of Managed Funds". This report, co-authored by the FMRC Directors, is being finalised at the time of writing. ASIC are interested in developing some industry guidelines about appropriate information to be included when managed funds advertise their performance record and promote their products.

A monograph on Funds Management was prepared for the McGraw-Hill Series in Advanced Finance edited by Professors T.J. Brailsford and R.W. Faff. The monograph will be titled MEASURING AND EVALUATING MANAGED FUND PERFORMANCE, forthcoming McGraw-Hill 2002, by Tim Brailsford, Ruttachai Seelajaroen, Dave Allen, Robert Faff, and Victor Soucik. However, management changes at McGraw-Hill delayed publication and negotiations with alternative publishers are taking place at the time of writing.

In summary it was a mixed year. The research output is impressive and a great deal of progress was made on core projects and with Ph.D students. One linkage grant was successful. It was hoped that further sponsorship from ASSIRT for another Ph.D student

would be secured. However, a succession of senior management changes and new structures imposed by the owners, St. George Bank, have delayed this process. Further research alliances envisioned with other industry partners have not rapidly materialised.

2. The original objectives of the FMRC

The Funds Management Research Centre (FMRC) was set up at the end of 1999 constructed around an existing SPIRT grant-funded research program into Fund Performance Benchmarking involving Professor David Allen of ECU, Professor Tim Brailsford of ANU and Professor Robert Faff of RMIT. Professor Ron Bird of UTS was added to the team and a structure involving Professor Allen as Director and the other three Professors as Research Directors was adopted.

The FMRC's aim was stated as being "to assist Australia's global financial centre aspirations and the efficient management of its savings flows by facilitating more and better research aimed at monitoring the performance, effectiveness and efficiency of the Insurance and Managed Funds Industry". The Centre's objectives, as set out on the web site at SIRCA, were focussed on improving the efficiency, performance and security of the Superannuation and Managed Funds industry through research involving analysis of:

- Benchmarking and Asset Pricing Models
- Impact of Performance Reporting and Financial Reporting
- Performance Ratings
- Risk Management Procedures
- Market Transparency and the Flow of Information

The intention was to achieve these objectives in association with numerous industry partners. A further stated intention was to be an improvement in the quality and the detail of research data in this area.

3. Core work

2001 marked a year of steady progress for the Funds Management Research Centre. One of the major achievements was the securing of a second linkage grant with industry partner Morningstar Downunder. The project, which will be based at RMIT under the leadership of Professor Robert Faff, is titled: "An Evaluation of the Morningstar System of Managed Fund Ratings in Australia and New Zealand". It secured funding of \$108,000 over the period 2002-2004). The chief investigators: Professor Robert Faff (RMIT); Professor Dave Allen (Edith Cowan University); Professor Tim Brailsford (Australian National University). This success means that the FMRC now has research relationships funded by linkage grants with the two major ratings agencies in Australia ASSIRT and Morningstar. (However, there have been some further delays encountered in the progress of this grant following the recent summary dismissal of the founder of Morningstar Downunder, Mr Graham Rich, the original research partner on the grant. Steps are being taken to re-establish the project.)

The Spirt Funded project with ASSIRT is conducted at ECU by Professor David Allen in collaboration with Professors Brailsford and Faff. Mr Victor Soucik worked as a funded Ph.D student with an APA scholarship and researched the efficacy of various fund performance benchmarking models. Mr Soucik completed the write up of his Ph.D in April 2002 and his Ph.D is in the examination process at the time of writing. His thesis was titled "Finding the True Performance of Australian Managed Funds". He used ASSIRT's 'library'

of data for his empirical work. ASSIRT are happy with the progress of work and two meetings were held with them towards the end of 2001 to explore the possibility of extending the collaboration and putting forward a second industry collaborative linkage grant application. However, there have been a number of personnel changes at ASSIRT which have slowed the process down. Patrick Bennett and Michael Este who were the original contact partners left ASSIRT at Xmas 2001. The new CEO Krystyna Weston left last week and so the whole process of re-establishing contacts has to proceed again.

The availability of access to the database has led to a second Ph.D student, Mr Jerry Parwada beginning work on funds management research issues. Jerry has re-located to SIRCA in Sydney after being awarded a SIRCA scholarship. At the time of writing this report negotiations are continuing with ASSIRT to secure sponsorship for his Ph.D studies. He is examining the influence of investor discipline on managed fund performance mainly using ASSIRT data. He has completed four working papers to date. Mr Paul Gerrans, another Ph.D student at ECU, is looking at the value of qualitative ratings provided by rating agencies in addition to quantitative ratings and will be submitting his thesis in 2002.

The research work of the FMRC is spread across a number of locations: Edith Cowan University, Australian National University, RMIT, UTS as well as SIRCA's Sydney offices. A number of Ph.D students are working on funds management related topics across the various locations.

At ANU Tim Brailsford is supervising two students. One is looking at Style Analysis and Classification of Australian Retail Superannuation Funds. A second is looking at Fund Performance and Risk Management in Extreme Market Conditions. One of these students, Ruttachai Seelajoroen is expected to submit by June 2002.

Plus, Professor Robert Faff at RMIT has a number of projects underway.

David Gallagher who was supervised by Peter Swan with assistance from one of the Centre's Directors, Ron Bird, has passed his Ph.D thesis. David's Ph.D. was entitled 'Investment Manager Characteristics, Strategy and Fund Performance' and involved an empirical examination of the performance of asset managers, with respect to the investment strategies and unique attributes exhibited by fund managers. This included an evaluation of both active and index-oriented investment managers. In the course of his Ph.D studies he has published prolifically in numerous high quality refereed Australian and UK outlets as well as in the Journal of Portfolio Management in the USA. He has also published in industry Journals and received best paper awards from JASSA. He was sponsored in this work by William M. Mercers.

At UTS Professor Ron Bird has been working with GMO and Simon Smiles, their sponsored Ph.D student.

4. Conferences.

Colonial First State sponsored a conference held at Le Meridien hotel, Sydney on Friday 22nd June 2001 on the theme "Investment Management in Context". This conference featured six academic papers plus an industry panel discussion on the topic of the "Equity Premium", chaired by Professor Tim Brailsford, one of the FMRC's research Directors, another research Director, Professor Ron Bird was also featured on the panel, together with contributions from Professor Peter Swan of the University of Sydney and two industry representatives. A pleasing feature of the academic contributions was that they featured the work of three of the FMRC's Ph.D students.

A further conference to be held on July 23rd 2002 is also being sponsored by Colonial First State.. Professor Ron Bird and Ms. Sharon Murray are pushing these developments forward. Professor Steven Brown of New York University has agreed to participate and to present a keynote speech on hedge funds.

(See Appendix 1 for full details of the 2001 conference).

5. Projects and industry sponsorships.

William M Mercer has agreed to a Ph.D sponsorship of \$40K p.a over the next two years. This breaks down to the 30K for the research work and 10K for a senior academic to present research at scheduled meetings with clients/others from time to time. Now David Gallagher has completed his Ph.D the agreement has been rolled over to support another Ph.D student. Professor Ron Bird negotiated a Ph.D sponsorship deal with GMO who are funding Simon Smiles' work.

6. Newsletter

A newsletter was developed to draft stage by three of the centre's Directors to promote the activities of the centre and provide an accessible summary of recent research developments and findings likely to be of interest to the industry. At the end of 2001 it had still not reached the production stage. The motivator of the project, Professor Ron Bird, decided to relocate the newsletter to UTS given the extensive delays already experienced.

7. Accounts

The Centre's budget allocation comes from three sources – the 1999 SPIRT grant (the budget for which is being operated through Edith Cowan University – see 5 above and attached accounts in pdf format); the successful 2001 SPIRT grant which will be administered via Monash which has yet to commence. The industry Ph.D sponsorship money is submitted via SIRCA and is not administered by the FMRC.

Appendix 1.

Table of Contents for Funds Management Research Conference

1. 8.30 am - Registration

2. 9.00 am - Introduction representative? Colonial First State Investments.

3. 9.10 am - Session 1.

Mr. David Gallagher and Professor Peter Swan

'Investment Manager Characteristics and Managed Fund Performance'.

- Investment manager strategy and process.
- Investment manager qualifications and investment management experience.
- Investment manager staff turnover.
- Satisfaction of performance objectives.
- Remuneration/compensation policies for investment staff.

4. 9.50 am - Session 2.

Professor Phillip Brown, Dr. Raymond da Silva Rosa, Mr Mathew Newton and Professor Terry Walter,

'Informed Trading and Corporate Ownership around Earnings Announcements'.

- Abnormal changes in equity ownership of firms before and after the announcement of an earnings report.
- Investigation of the relationship between returns and ownership changes.
- Do ownership changes lead or lag changes in returns?

5. 10.30 am Morning Tea

6. 10.50 am - Session 3.

Professor David Allen and Mr Jerry Parwada

'Investors Response to Mutual Fund Company Mergers'.

- How do mergers affect the cash inflows to funds?
- Do mergers lead to positive reactions from investors?

7. 11.30 am - Session 4.

Dr Thomas Josev

'It Takes Time to Time: Evidence from Australian Equity Funds'.

- Do managers try to time market movements?
- What are the investment response intervals?
- Is the timing signal forward or backward looking?
- What are the results of this?

8. 12.10 pm - Pre-lunch drinks

9. 12.30 pm - Lunch

10. 2.00 pm - Panel discussion "The equity premium".

- Chair Professor Tim Brailsford
Panel Members:
Professor Peter Swan.
Plus one other academic participant and two industry participants.

11. 2.40pm - Session 5.

Professor Ron Bird, Mr Jason Darling and Mr David Allen

‘Value and Momentum Investing in Australia: Evidence from 1972-to 1999’.

- What do value and momentum strategies look like in Australia from 1972 to 1992.
- What are the investment results from these strategies?

12. 3.20pm pm - Session 6.

Mr Victor Soucik

‘Searching for True Performance of Managed Fixed Interest Funds’.

- Can we set up a benchmark for the performance of Australian fixed interest funds?
- Which benchmark performs best?
- How do we measure timing and selectivity?

13. 4.00 pm - Wrap-up.

Publications and Working Papers beginning 2001

D.E. Allen and J. Parwada, "Investors Response to Mutual Fund Company Mergers" (June 2001) School of Finance and Business Economics, Edith Cowan University, and SIRCA, Sydney.

D.E. Allen, G. MacDonald, D. Walsh and K. Walsh, "Using regression techniques to estimate futures hedge ratios, some results from alternative approaches applied to Australian 10 Year Treasury Bond Futures", (September 2001) School of Finance and Business Economics, Edith Cowan University.

D.E. Allen and J. Chimhini (January 2002) "The World Price of Covariance Risk with Respect to Emerging Markets", School of Accounting, Finance and Economics, Edith Cowan University.

D.E. Allen and H. Salim, (March, 2002), "Forecasting Profitability and Earnings: A study of the UK Stock Market (1982-2000)". School of Accounting, Finance and Economics, Edith Cowan University.

S. Peiris, D.E. Allen, and W. Yang, (March 2002) "Some Statistical Models for Durations and their Applications in Finance", Department of Mathematics, University of Sydney, School of Accounting, Finance and Economics, Edith Cowan University and SIRCA, Sydney.

D.E. Allen and J. Parwada, (February 2002) "Are bank deposits and bank-affiliated managed funds close substitutes?" School of Accounting, Finance and Economics, Edith Cowan University and the FMRC, SIRCA, Sydney.

J. Parwarda, (November 2001), "Australian mutual fund transaction costs 1995-2001", FMRC, SIRCA, Sydney.

J. Parwada, (November 2001), "Investors' Reaction to Managed Fund Ratings", FMRC, SIRCA, Sydney.

Backward To The Future: A Test Of Three Futures Markets	David Allen S Cruickshank Nigel Morkel - Kingsbury
In Search of True Performance: Testing Benchmark-Model Validity in Managed Funds Context	David Allen Victor Soucik
A Test of a New Dynamic CAPM	Robert Faff Robert Brooks Tan Pooi Fan
Induced Persistence or Reversals in Fund Performance?: The Effect of Survivorship Bias	Terrance Hallanan Robert W Faff
Active Australian Bond Fund Performance and Investor Flows	
Beta and Return - Implications of Australia's Dividend Imputation Tax System	Robert Faff Justin Wood
Cross-sectional Determinants of Managed fund Risk and Performance: Evidence for Australian Equity Trusts	Kathryn A Holms Robert Faff
Attribution of investment performance: an empirical analysis of the market timing & security selection abilities of australian pooled superannuation funds	David Gallagher

<u>Capital Market Integration and Industrial Structure: The Case of Australia, Canada and the United States</u>	Robert Faff Usha Mittoo
<u>The Relevance of Investor Risk Classes in Ranking Fund Performance: An Application of the Extended Mean-Gini CAPM</u>	Karen Benson Peter Pope Robert Faff
<u>An Investigation of the Relationship between Stated Fund management Policy and market Timing Ability</u>	Karen Benson Peter Benson Robert Faff
<u>Performance of Seasoned Equity Offerings in a risk adjusted environment</u>	David Allen Victor Soucik
<u>Testing a Two Factor APT Model on Australian Industry Equity Portfolios: The Effect of Intervaling</u>	Thomas Josev Robert D Brooks Robert Faff
<u>Are Returns in the International Economy Explained by a Single or Multi-factor Structure?</u>	Sinclair Davidson Robert Faff Heather Mitchell
<u>A Comment on 'The Information Content of Earnings and Prices: A Simultaneous Equations Approach'</u>	David Allen S Cruickshank Nigel Morkel - Kingsbury
<u>Modelling the Equity Beta Risk of Australian Financial Sector Companies</u>	Frida Lie Robert Brooks Robert Faff

27 September 2002

Professor D.E.Allen
School of Accounting, Finance and Economics
Edith Cowan University

Review of the Finance, Markets and Accounting Research Centre (FIMARC)

The Faculty of Business and Public Management at Edith Cowan University has requested that a panel be constituted to undertake a review of FIMARC. (Formerly, the Finance and Capital Markets Research Group FICAMREG, previously located in the School of Finance and Business Economics and now located within the recently constituted School of Accounting, Finance and Economics). A panel has been duly formed consisting of a Professor from another institution, an industry representative, and another Professor from within the Faculty of Business at Edith Cowan University. The membership of the review panel will consist of: Professor Philip Maxwell, the Metana Professor of Minerals Economics, of Curtin University of Technology, who has kindly agreed to take the role of external Professor and to act as the Chair of this Panel; Mr Mark Barnaba, Managing Director and co-founder of Poynton and Partners and Gem Consulting who has generously agreed to donate some of his valuable time to be the industry representative; and Professor Janice Burn, of the School of Management and Information Systems, Edith Cowan. (Brief biographical sketches of the participants are provided in Appendix 1).

The members of the panel will be provided with a summary document addressing the requirements of the review plus copies of FIMARC's annual reports and the annual reports of the Funds Management Research Centre which is based at SIRCA² but which involves Fimarc's Director, Professor Allen, plus a number of ECU Ph.D. students. The FMRC has received a number of ARC linkage grants, one of which has been based at Edith Cowan University. A number of other documents including copies of a recently submitted report to the Australian Securities and Investment Commission and copies of some recent publications and working papers will be included.

The formal review will take place at a date to be determined at the convenience of the panel, ideally within the next 6 weeks. The review will take place on the Joondalup campus and the panel members will be given an opportunity to interview the Director and staff members involved with FIMARC plus on-campus postgraduate students. (Two Ph.D students involved with FIMARC are based in Sydney with SIRCA where they are both in receipt of Scholarships). It is expected that the interviews will last for about one and a half to two hours, after which the panel members will be invited for lunch. They will be requested to submit a short report detailing their findings and recommendations.

The review will take place under the terms of the University's policy title "University Research Groups, Research Centres and Research Institutes" which is available from the University Research Office and their website at the following address:

<http://www.ecu.edu.au/secretariat/policy/ac/ac020.html>. Rather than burden the panel with the full document, some relevant features of the policy are set out in the remainder of this document. They follow, in sequence, below³:

² The Securities Industries Research Centre of the Asia Pacific, a finance research consortium involving members drawn from 25 Universities across Australia and New Zealand.

³ This sequence differs from that adopted in the original policy.

- 1) The review guidelines.
- 2) Definition of a level 1 Research Centre (FIMARC is a level 1 centre).
- 3) General policy vis-a-vis research centres.
- 4) Definition of typical Research Centre Activities.
- 5) Some measures of performance

1. The Review Guidelines (Drawn from Appendix 7 - Research Units: Review Requirements)

A review of a Research Unit will at a minimum consider the following points:

1. its activities and achievements in relation to its own statement of aims, objectives and functions;
2. its strategic plan and its congruence with the Faculty and University's strategic plan;
3. an evaluation of its performance in relation to the indicators stated in the establishment proposal; any funding and other resources received from the public and private sectors; progress it has made towards achievement of financial self sufficiency;
4. role of the Research Unit Director and effectiveness of its governance and management structure;
5. links with the private sector, other academic and research institutions, government bodies and the wider community; and visibility of the Research Unit and its reputation locally, nationally and overseas.

2. Definition of a Level I Research Unit (Research Groups/Centres)

A research unit may seek formal designation within its Faculty as a Research Group or Centre.

A Level I Research Group or Centre is a formally recognised group of researchers who share common or complementary research interests and operate primarily, but not necessary entirely, within a single Faculty. The research group's growth, focus, orientation, track record, interest and other factors will influence when (and whether) it later seeks recognition as a Level II Research Unit.

Approval for the establishment of a Research Group or Centre may be granted by the responsible Executive Dean on the recommendation of the Head(s) of School, the Faculty Research Committee, and Faculty Board concerned. The Executive Dean will advise the Office of Research Services of such approvals.

The Office of Research Services will maintain the official list of Research Groups and Centres operating across the University.

An application for designation as a Group or Centre may be made to the Executive Dean at a time and in a form specified by the relevant Faculty.

A Group or Centre will be established by the Faculty for a designated period, normally an initial period of three years.

Each Faculty will establish guidelines for the operation and review of its Research Groups and Centres which will specify any performance criteria and reporting requirements. Responsibility for monitoring compliance shall rest with the relevant Executive Dean/s.

Research Groups or Centres may apply to change their name by writing to the appropriate Executive Dean who will seek endorsement from the Head of School, Faculty Research Committee and Faculty Board. The Office of Research Services should be advised of any such approvals.

Research Groups and Centres are entitled to use the term 'Research' and 'Centre' within their title. Continuation of permission to use these terms will be subject to their compliance with any reporting and review requirements established by the Executive Dean.

A Research Group or Centre aspiring to University designated Research Centre status may choose to adopt the operation, reporting and review requirements which attend such status.

A Research Group or Centre may apply for formal designation as a Research Centre in accordance with this policy.

3. General Policy vis-à-vis Research Centres.

Policy Framework

1. General Principles

Research units are expected to fulfil a range of functions aimed at strengthening, extending and promoting their research and research training activities and linkages, nationally and internationally (see Appendix 2). Research units are encouraged to seek external recognition (eg, designation as a Commonwealth funded centre) at an appropriate time in their development.

The following general principles should apply to the establishment of research units:

- Research units should be concerned primarily with basic and applied research, and where appropriate, of an interdisciplinary nature;
- Where appropriate Research units should contribute to the dissemination and application of their research outcomes. This may be accomplished through incorporating the research outcomes into the University's teaching program, or through refereed publications, research reports, workshops, and community focussed seminars. In addition, research units may focus on research-related entrepreneurial activities involving skills, expertise and personnel, to provide additional external research income for the research unit;
- At the postgraduate level, research training may be undertaken within research units as part of their general research function, but without breaching the principle that final academic responsibility resides with schools and faculties and the Academic Board; and
- Research units may play an active role in the promotion, organisation and support of postgraduate teaching activities and collaborative research projects.

4. Definition of Research Centre Activities.

(Drawn from Appendix 2 - Research Units: Activities and Functions)

Research Units are expected to fulfil a range of functions aimed at strengthening, extending and promoting their research and research training activities and linkages, nationally and internationally.

They would normally be expected to:

1. support high quality research which contributes to regional and national objectives, including those of advancement of knowledge, economic and social development, and that which promotes national and international collaboration in achieving these objectives;
2. focus the research activities of University staff and students and, in so doing, use available resources more efficiently;
3. foster collaborative research efforts between individuals and research teams within and outside the Research Unit;
4. encourage inter-disciplinary approaches to address a particular set of research problems;
5. establish and maintain regional, national and international links with individuals and teams conducting research in similar or complementary fields;
6. complement and enrich the higher degree/research training programs of the University;
7. where possible, strengthen the links between research activities and teaching within the various Faculties and Schools of the University;
8. enhance the status of the University by raising the level and public profile of research activity;
9. seek to attract, through the Office of Research Services or the relevant commercial arm as appropriate, funds from the public and private sectors to help support the University's research program;
10. provide opportunities for the professional development of staff, particularly new and early career researchers; and
11. undertake research and consultancy activities on behalf of industry, Government, the community and the region.

5. Performance measures

(Drawn from Appendix 5 - Research Units: Measures of Performance)

Each Research Unit is expected to identify performance indicators by which it proposes to measure progress towards achieving its aims and the vision of ECU. While the indicators used by each Research Unit will vary according to its scope, mission, relationships and other factors, they will normally address the following headings:

1. Collaboration, Recognition and Linkages
2. Intellectual Property (i.e. publications etc)
3. External Financial Support (i.e. grants)

4. Extent of Contribution to the Public and to Industry (i.e. seminars, policy input, etc).
5. Education and Training (i.e. postgraduate and research training).
6. Marketing (i.e. participation in industry for a, public awareness
7. Management Effectiveness.

REPORTING

The panel will report to the Head of School who will prepare recommendations for consideration by Executive Dean and Faculty Board.

Appendix 1 Panel Participants.

Professor Philip Maxwell.

Philip is the Metana Minerals Professor of Mineral Economics and Mine Management. He coordinates the graduate program in Mineral Economics offered by the Western Australian School of Mines. In the mineral economics area, Professor Maxwell has a particular interest in the regional economic impacts of mining and in mineral commodity markets. His other areas of research activity are in income distribution, regional economic development and economics and management education. One of his recent areas of sustained activity is in postgraduate student supervision. He is the co-author of a well-known principles textbook, which has appeared in three editions, and coeditor of two successful readings books. He has authored (or co-authored) three research monographs, eight book chapters and approximately thirty articles in refereed journals. These journals include The Economic Record, Finnish Journal of Business Economics, Review of Regional Studies, Urban Studies, Australian Economic Papers, The Australian Journal of Regional Studies, Growth and Change, Resources Policy, Raw Materials Report and the Journal of Economic and Social Policy.

Mr Mark Barnaba

As a management consultant and corporate adviser, Mark Barnaba's own business credentials offer as much comfort to corporate clients as the Harvard MBA he gained more than a decade ago, long before such studies became fashionable in Australia.

In 1996, Mr Barnaba co-founded Poynton and Partners and its sister company, GEM Consulting.

As inaugural and incumbent managing director and CEO, he has overseen the group's involvement in transactions amounting to \$500 million during that period.

From a start-up staff of five people, the group now has grown to 40 staff covering a wide variety of corporate advisory specialties.

Mr Barnaba takes pride in the high quality staff the firm has been able to attract to, or keep in, WA and the fact that 20 per cent of the group's work is from overseas.

He has chosen to base his career in WA, despite an academic and professional record that would place him at the top of the tree in any part of the world.

In 1988, as the youngest member of his class and one of just three students accepted straight from undergraduate studies, he ranked in the top 1 per cent of Harvard Business School graduates.

He is a board member of the West Coast Eagles and the University of Western Australia's Graduate School of Management.

Professor Janice Burn

Janice is Foundation Professor IS, School of Management Information Systems at Edith Cowan University. She has a variety of previous academic positions including: Associate Professor, Hong Kong Polytechnic, Director, Information Technology Systems, UK, Visiting Lecturer, Dawson College, Montreal, Canada, and Principal Lecturer, Coventry (Chester) Polytechnic, UK

Janice is a member of ARC Expert Advisory Panel on Mathematics, Information and Communication Sciences. Past World President & Fellow, Information Resources Management Association.

Areas of interest: information systems strategies and organisational alignment, e-business and small-to-medium enterprises, information technology (IT) in globalised environments, transfer, diffusion and implementation, knowledge and IT resources management.