

FACULTY OF BUSINESS AND PUBLIC MANAGEMENT
SCHOOL OF FINANCE AND BUSINESS ECONOMICS
FICAMREG
RESEARCH REPORT 2000

The Finance and Capital Markets Research Group (FICAMREG) is based within the School of Finance and Business Economics in the Faculty of Business and Public Management. The group was established in 1997 to support and encourage research into Finance and Capital Markets in Australia and within the Asia-Pacific.

FICAMREG has excellent research facilities, links with other research units (see App2) and the projects have so far generated a large amount of research output (see App1) in numerous publications in international refereed journals as well as winning best paper prizes and a succession of ANBAR citations of excellence. The findings of the projects have been presented at national and international conferences and working papers are produced regularly (see App1).

RESEARCH DEVELOPMENTS

The Funds Management Research Centre at SIRCA is still in the process of establishing its activities. These are spread across a number of locations which include Sirca's offices in Sydney, where Professor Tim Brailsford (ANU) is located, Edith Cowan University in Perth, where the Director, Professor Dave Allen is based, as well as RMIT, Melbourne which is the venue for Professor Robert Faff, and UTS Sydney, home for Professor Ron Bird. There are a total of eight Ph.D students working on funds management topics across these locations. From this total, one, Mr Victor Soucik, is funded by an Australian Postgraduate Award which was attached to a Spirit Grant obtained in 1999 by Professors Allen, Brailsford and Faff and which is being undertaken with Assirt, the funds rating agency as the industry partner. Mr Victor Soucik is working on fine-tuning Assirt's Benchmarking processes. Two other Ph.D students at ECU are working on funds management topics. One is looking at the value of qualitative ratings provided by rating agencies in addition to quantitative ratings, the other is examining the impact of acquisitions and foreign competition on three individual country's managed funds markets.

Work continued throughout the latter part of the year on the search for potential research sponsors and various members of the Centre have been having meetings with potential industry research sponsors.

All these potential collaborations are still in the developmental stages. Two meetings with Assirt, our Spirt partners took place in November and December 2000. At the first, Mr Victor Soucik presented the results from his latest work and at the second in late December, Professor Allen discussed the possibility of a second Spirt research application for 2002 aimed at continuing the research collaboration and the access to Assirt's library of data. Assirt have responded positively both to the research results emanating from the current project and to the possibility of extending the co-operation. There is a very large output from the Funds Management Research Centre and regular seminars are organised (see end of doc).

RESEARCH PROJECTS:

Research grant funded projects:

- ?? Managed Fund Performance
- ?? An analysis of the linkage between accounting earnings, dividends and share prices
- ?? The Hedging Effectiveness of the Sydney Futures Exchange, London International Futures Exchange and the Singapore Futures Exchange.

Other projects (for full description see Appendix 3):

- ?? The comparative analysis of company financial policy decisions
- ?? Rationality in equity markets
- ?? The determinants of returns in the Malaysian and Thai Stock Markets
- ?? Purchasing Power Parity in the Asia-Pacific
- ?? The equity premium in Australia
- ?? Making Superannuation choices: an analysis of SSAU Investor choices
- ?? An Analysis of the Speed of Australian Interest Rate Adjustment to Reserve Bank Base Rate Changes.
- ?? A Hidden Markov Chain Model of the Term Structure of Bond Credit Risk Spreads.
- ?? A Test of Interest Rate Option Pricing Models in an Australian Context.
- ?? The analysis of high frequency share price data
- ?? International Portfolio diversification

GRANTS AND GRANT APPLICATIONS:

?? **Managed fund performance**

A project on the measurement of managed fund performance is being developed with Professor T. Brailsford of Australian National University, Professor Robert 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. Total support of \$120,000.

?? **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, a Masters of Finance student is working 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 is being undertaken with Dr. G. MacDonald of Curtin University, Professor A.M. Masih of Edith Cowan and Mr. R. Masih of Goldman Sachs.

?? **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 are working on funds management topics using ASSIRT'S library of data (see below).

INDUSTRY COLLABORATION

SIRCA

SIRCA is a university based, industry sponsored, financial markets research centre that conducts applied research into the design of equities, futures, OTC markets and the market impacts of financial information. By improving financial market design and efficiency it assists in the supply of cost effective capital to support product innovation and development. SIRCA brings together the resources of industry, universities and government in applied research aimed at improving the efficiency of national and regional financial markets. SIRCA is the

research and consulting arm of Asia Pacific Capital Markets Limited (ACM), a company limited by guarantee.

SIRCA's key assets are its research infrastructure (e.g. super-computers, software, detailed financial market data) and personnel skilled in applying the infrastructure to determine the effects of changes to market inputs (e.g. technology, market deregulation and tax reform). It consists of five research centres (equities, futures, OTC, accounting and funds management) comprising teams of expert researchers to deliver targeted outcomes to industry bodies, regulators, government and other participants in the financial markets.

FUNDS MANAGEMENT RESEARCH CENTRE

The Centre's objective 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. Research involves 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

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 fund industries.

The Funds Management Research Centre has established a strong working partnership with ASSIRT ratings agency, a subsidiary of Bourse Data Limited.

ASSIRT

ASSIRT is a leading provider of quality research and innovations software for the Australian investment market place. Uniquely qualified to support financial advisers, investment managers and other providers of investment information, ASSIRT has delivered objective research analysis and tools since 1986.

As part of a significant move in Australia's investment services market, on 30 September 2000 ASSIRT became a wholly owned subsidiary of Bourse Data Limited, now known as Wealthpoint Limited.

Already, a number of highly complementary businesses are operating under the Wealthpoint umbrella. These specialise in the provision of on-

line and traditional share trading, financial planning practice management software, managed funds research, equity research, asset allocation advice, share market information, moderated investment forums and clearing services.

ASSIRT consists of several companies: ASSIRT Software Pty Ltd., the most comprehensive Practice Management Solutions for Financial Advisers and Dealer groups. ASSIRT Research Pty Ltd., the most timely and comprehensive information available on managed funds, and ASSIRT Equities Research, the most comprehensive research on publicly listed equities.

ASSIRT Library is a powerful information and research solution that utilises the resources of ASSIRT Infobank, ASSIRT Ratings and the ASSIRT Quantitative Research team. Combining this with powerful search, filtering and analysis tools, ASSIRT Library is Australia's most up-to-date, comprehensive and powerful managed investment solution.

PERSONNEL

The research in the Finance and Capital Markets area is led by Professor D.E. Allen and supported by a number of internal academic staff, local researchers (App4) and a very strong group of visiting scholars (App5). Numerous collaborative research projects are in place involving work with university researchers at UWA, Curtin University, ANU, Monash, Griffith, Southampton, Cambridge and personnel at Goldman Sachs.

Adjunct Professorship

Professor Lyn Thomas of the Department of Management, University of Southampton accepted an offer of an adjunct Professor ship with the School of Finance and Business Economics and FICAMREG. He will continue collaborative work on a number of projects. Risk Spreads and Bond Pricing.

New Personnel

Dr Steven Li, Dr. Edward Lin and Dr. Lee Kian Lim joined the School in April 2000 (see under researchers in App4) and are working on different projects for FICAMREG.

PH.D STUDENTS AND RESEARCH ASSISTANTS

Ph.D. students:

Mr Paul Gerrans: Paul is a lecturer in Finance and has just switched his Ph.D. topic from applications of real option pricing to investment in the Water Industry to one involving a study of managed fund performance.

Mr Victor Soucik: APA funded Ph.D. student on a SPIRT scholarship working on managed fund performance (see above). He has co-authored a number of working papers that have been presented at international conferences.

Mr Jerry Parwada: Ph.D. student. Jerry is employed part-time as research assistant funded by a SPIRT grant and is currently working on managed fund competitiveness and mergers and takeovers in the financial industry.

Mr Heazry Salim: submitted his Honours thesis on "Purchasing Power Parity in South East Asian Nations: A Monetary Approach to Long-Run Exchange Rate Modelling" and just started his post-graduate studies. He also took up a position as part-time research assistant, replacing Stuart Cruickshank, helping with access to the Datastream database.

Ms Wenling Yang: Wenling has been awarded a School funded post-graduate scholarship. She is also working as a part-time research assistant on a Small ARC funded project on relationships between accounting earnings, stock prices and dividends and the application of GARCH volatility modelling.

Mr. Tatang Gumanti: has graduated beginning of this year with a Ph.D. thesis on "Accounting Information and the Underpricing of Indonesian Initial Public Offerings". He has now returned to his home country in Indonesia where he is employed as lecturer in Finance.

Other Ph.D. students include *Mr. Robert Maurich* and *Mrs Valli Boobal-Batchelor* (p/t).

Masters and Honours students:

Mr Lurion DeMello: Masters student in Finance and full-time research assistant. Lurion graduated from Curtin University of Technology with an honours degree in economics. His education also includes a major in marketing undertaken before completion of the honours program. Lurion is working with various econometric software packages and is investigating some of the more useful economics and finance web sites. He will be assisting the faculty staff and students in obtaining data from Datastream. His research topic features an analysis of methods for forecasting the equity premium in Australia.

Ms Joseline Chimhini: full-time Masters student in Finance working on a topic involving the study of international portfolio diversification and asset pricing.

Mr Gift Chirozva: full-time Masters student in Finance working on a topic featuring an analysis of the linkage between economic indicators and stock market development in developing nations.

Appendix 1

PUBLICATIONS, WORKINGPAPERS, CONFERENCE PRESENTATIONS

Recent Journal Publications

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

D.E. Allen, N. Morkel-Kingsbury and W. Piboonthankiat, "The Long-Run Performance of Initial Public Offerings in Thailand", *Applied Financial Economics*, (1999) No 9, pp.215-232..

D.E. Allen, 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>

J. Hill, L.C. Thomas, and D.E. Allen, "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", *Journal of Fixed Income*, (2000) Vol 10, No 2, pp. 80-87.

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

Working Papers

D.E. Allen, M.H. Manzur and N.Morkel-Kingsbury, "The Term Structure of Interest Rates: A Multi-Country Study", Working Paper, School of Finance and Business Economics, (January 1999).

L. C. Thomas, D.E. Allen, N. Morkel-Kingsbury, "A Hidden Markov Chain Model for the Term Structure of Bond Credit Risk Spreads", Working Paper, School of Finance and Business Economics, (March 1999).

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", Working Paper, School of Finance and Business Economics, (May 1999).

D.E. Allen, S. Cruickshank and N. Morkel-Kingsbury, "A Comment on 'The Information Content of Earnings and Prices: A Simultaneous Equations Approach' by W.H. Beaver, M.L. McAnally and C.H. Stinson (1997)", Working Paper, School of Finance and Business Economics, (September 1999).

D.E. Allen and L. De Mello, "Forecasting the Equity Premium in the Australian Market", Working Paper, School of Finance and Business Economics, (February 2000).

D.E. Allen, L.C. Thomas and H. Zheng, "Stripping Coupons with Linear Programming", Working Paper, School of Finance and Business Economics (forthcoming)

D.E. Allen and V. Soucik, "In Search of True Performance: Testing Benchmark-Model Validity in Managed Funds Context", Working Paper, School of Finance (forthcoming).

D.E. Allen and V. Soucik, "Long Run Underperformance fo Seasoned Equity Offerings: Fact or an Illusion?", Working Paper, School of Finance and Business Economics, (February 2000).

D.E. Allen and V. Soucik, "Performance of Seasoned Equity Offerings in a Risk Adjusted Environment", Working Paper, School of Finance and Business Economics (February 2000).

D.E. Allen and Wenling Yang, "Variation of share prices due to fundamental and non-fundamental innovations", Working Paper, School of Finance and Business Economics, (April 2000).

D.E. Allen, S. Cruickshank, N. Morkel-Kingsbury and N. Souness, "Backward to the future: a test of three futures markets", Working Paper, School of Finance and Business Economics (April 2000).

D.E. Allen and Wenling Yang, "A Time-Series Analysis of Stock Prices and Accounting Earnings Dynamics", Working Paper, School of Finance and Business Economics, (May 2000).

D.E. Allen and S. Cruickshank, "Empirical Testing of the Samuelson Hypothesis: An Application to Futures Markets in Australia, Singapore and the UK", Working Paper, School of Finance and Business Economics (August 2000).

D.E. Allen, S. Cruickshank, G. MacDonald, "Purchasing Power Parity – Evidence From a New Panel Test", Working Paper, School of Finance and Business Economics (September 2000).

D.E. Allen and J. Parwada, "Investors' Response to Mutual Fund Company Mergers", Working Paper, School of Finance and Business Economics (forthcoming).

D.E. Allen, S. Cruickshank and G. MacDonald, "Purchasing Power Parity -Evidence From a New Panel Test", Working Paper, School of Finance and Business Economics (forthcoming)

D.E. Allen and Wenling Yang, "What moves stock markets? Evidence that UK stock prices deviate from fundamentals", Working Paper, School of Finance and Business Economics (March 2001).

D.E. Allen and Wenling Yang, "M-Garch Hedge Ratios and Hedging Effectiveness in Australian Future Markets", Working Paper, School of Finance and Business Economics, (March 2001).

Recent Conference Presentations:

European Financial Management Association EFMA 1999 Annual Meeting, Paris, France, (June 23-26 1999).

ESAM99, Australasian Meeting of the Econometric Society, University of Technology, Sydney, "Using regression techniques to estimate futures hedge ratios, some results from alternative approaches applied to Australian 10 year treasury bond futures", (7 July 1999).

Eleventh Annual PACAP/FMA Finance Conference, Pacific Basin Financial Management Society Annual Meeting, Pan Pacific Hotel, Singapore, "Using regression techniques to estimate futures hedge ratios, some results from alternative approaches applied to Australian 10 year treasury bond futures", (8-10 July 1999).

Eleventh Annual PACAP/FMA Finance Conference, Pacific Basin Financial Management Society Annual Meeting, Pan Pacific Hotel,

Singapore, "The term structure of interest rates: a multi-country study", (8-10 July 1999).

Asia Pacific Finance Association 1999 Conference, Melbourne Convention Centre, "Using regression techniques to estimate futures hedge ratios, some results from alternative approaches applied to Australian 10 year treasury bond futures", (11-14 July 1999).

Financial Management Association Annual Conference Meeting, The Marriott Hotel, Orlando, Florida, USA, "Interest Rate Term Premia and Purchasing Power Parity: the Missing Link?", (8 October 1999).

12th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "A Comment on 'The Information Content of Earnings and Prices: A Simultaneous Equations Approach' by W.H. Beaver, M.L. McAnally, and C.H. Stinson (1997)", (16 December 1999).

12th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "Long Run Underperformance of Seasoned Equity Offerings: Fact or an Illusion?", (16 December 1999).

12th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "Backward to the Futures: A Test of Three Futures Markets", (16 December 1999).

12th Annual Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "Performance of Seasoned Equity Offerings in a Risk Adjusted Environment" (17 December 1999).

Fourth Annual European Meeting of the FMA, Crown Plaza Hotel, Edinburgh, Scotland, "Empirical Testing of the Samuelson Hypothesis: An Application to Futures Markets in Australia, Singapore and the UK" (May 25&26, 2000).

AAANZ 2000 Conference, Hamilton Island, Qld, "Variation of Share Prices Due to Fundamental and Non-fundamental Innovations" (2-4 July, 2000).

12th Annual PACAP/FMA Finance Conference, The University of Melbourne, Melbourne, "Empirical Testing of the Samuelson Hypothesis: An Application to Futures Markets in Australia, Singapore and the UK" (6-8 July, 2000).

12th Annual PACAP/FMA Finance Conference, The University of Melbourne, Melbourne, "In Search of True Performance: Testing Benchmark-Model Validity in Managed Funds Context" (6-8 July, 2000).

7th APFA Annual Conference, The Hong Kong Polytechnic University, Grand Hyatt Shanghai, "Empirical Testing of the Samuelson Hypothesis: An Application to Futures Markets in Australia, Singapore and the UK" (24-26 July 2000).

7th APFA Annual Conference, The Hong Kong Polytechnic University, Grand Hyatt Shanghai, "In Search of True Performance: Testing Benchmark-Model Validity in Managed Funds Context " (24-26 July 2000).

7th APFA Annual Conference, The Hong Kong Polytechnic University, Grand Hyatt Shanghai, "Variation of Share Prices Due to Fundamental and Non-fundamental Innovations " (24-26 July 2000).

13th Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "Interest Rate Term Premia and Purchasing Power Parity Deviations: The Missing Link?" (18-20 December 2000).

13th Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "Forecasting the Equity Premium: Evidence from the Australian Market." (18-20 December 2000).

13th Australasian Finance and Banking Conference, The University of New South Wales, Sydney, "In Search of True Performance: Testing Benchmark-Model Validity." (18-20 December 2000).

A. MANSUR M. MASIH

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

A.M. Masih, Propagative Causal Price Transmission Among Major International Stock Exchanges: Evidence from the Pre- and Post-Globalisation Period, *Global Finance Journal* (with R. Masih) (forthcoming).

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

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

A.M. 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 (with R. Masih).

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

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

A.M. 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 (with R. Masih).

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 (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 (with R. Masih).

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

A.M. 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 (with R. Masih).

Recent Presentations of Invited Papers in International Refereed Conferences (13 papers)

A.M. Masih, (2000a, Oct), Financial Management Association International (FMA) Annual Meeting, Seattle, U.S.A.

?? *Paper*: "Price Discovery between Informationally Linked Markets during Different Trading Phases: Evidence from Australia" (with R. Masih).

A.M. Masih, (2000b, Oct), Financial Management Association International (FMA) Annual Meeting, Seattle, U.S.A.

?? *Paper*: "Fractional Cointegration, Low Frequency Dynamics and Long-Run Purchasing Power Parity: An Analysis of the Australian Dollar" (with R.Masih).

A.M. Masih, (2000c, July), 7th Asia Pacific Finance Association (APFA) Annual Conference, Shanghai, China.

?? *Paper*: "Lead-Lag Relations in Bull and Bear Phases among Large, Medium and Small Stocks", (with R.Masih).

A.M. Masih, (2000d, July), 12th Annual PACAP/FMA International Finance Conference, Melbourne, Australia

?? *Paper*: "Fractional Cointegration and Purchasing Power Parity: Another look", (with R.Masih)

A.M. Masih, (2000e, June), 8th Pacific Basin Finance, Economics, and Accounting International Conference, Bangkok, Thailand

?? *Paper*: "Stock Market Dynamics :Evidence from Emerging Stock Markets", (with R.Masih).

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"(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, 2000).*

A.M. Masih, (2000g, March), Southwestern Finance Association Annual Meeting, San Antonio, U.S.A.

?? *Paper*: "Capital Market Dynamics: Evidence from the Pre- and Post-Globalization period", (with R. Masih).

CURRENT RESEARCH PROJECTS and RESEARCH in PROGRESS

Modeling Exchange Rates and Interest Rates:

Historical patterns of movement and relationships with macroeconomic variables; determinants of exchange rates: analysis and review of alternative models and approaches, purchasing power parity, balance of payments, monetary and asset market models; exchange-rate dynamics, overshooting, role of expectations, speculative attacks and currency crises; determinants of interest rates: rational expectations and term structure models, macroeconomic models over the business cycle, policy modelling and Taylor rules.

Linkages Between Spot and Forward Rates:

Analysis and empirical evidence on the relationship between spot and forward rates; analysis and empirical evidence on pricing efficiency and profit opportunities in these markets; empirical evidence on the size, variability and source of exchange-rate risk premia for major currencies.

Announcements of Economic Information:

Analysis and empirical evidence of the effects of macroeconomic and financial news on exchange rates and interest rates; empirical evidence on the relationships between news concerning the money supply, current account, trade balance, fiscal budget balance, international reserves, economic activity, and inflation on exchange rates and interest rates.

Exchange-Rate Forecasts and Currency Crises:

Types of forecasts and methods of evaluating forecasting performance; application of econometric and time series techniques to forecasts of major Asian currencies for 1998/1999 and beyond; evaluation of forecasting performance of alternative methods for the floating rate period; evaluation of professional forecasters; leading indicators of currency crises, analysis of recent European, Latin American and Asian currency crises.

Exchange-Rate Forecasts and Portfolio Management:

Use of exchange-rate forecasts in global portfolio management, analysis and empirical evidence on unhedged versus currency-hedged returns.

Other projects:

Collaborative project with *A/Prof. Ron Ripple* on investigating regional and international linkages in crude oil and product markets. Some papers that are about to be realised in the very near future are listed below.

1. Investigating Short and Long-Run Causal Price Linkages in Asia-Pacific Rim Crude Oil and Refined Products Markets, (with R. Masih and R. Ripple).
2. Investigating Short-and Long-Run Causal Price Linkages in Asia-Pacific Rim Petroleum Products Markets, (with R. Masih and R. Ripple).
3. International Price Linkages in Crude Oil Markets, (with R. Masih and R. Ripple).

Collaboration with *Professor D.E. Allen*: Over the past decade there have been important advances in the development of new linear and non-linear forecasting techniques that are directly applicable to forecasting returns and their volatility in financial markets. Projects with Professor Allen will aim to use recent developments in the financial econometric field and evaluate their potential for the analysis and prediction of stock returns, exchange rates and interest rates in the Australia, U.S., Japan and various South-East Asian economies. Projects have been planned but are still in their preliminary phases. These projects include the application of modern time series techniques in the context of panel data sets to investigate such phenomena as mean reversion in stock prices, bond and asset yields, as well as dynamics between dividends, earnings and share prices.

4. Low Frequency Persistence, Mean Reversion, and the Dynamics Between Stock Prices and Dividends: Evidence from Thailand, (with D.E. Allen and R. Masih).
5. Low Frequency Dynamics, Mean Reversion and Fractional Cointegration in a System of Daily Stock Prices, (with D.E. Allen and R. Masih).
6. Mean Reversion in Interest Rates: An Application of Testing for Unit Roots in a Heterogenous Panel, (with D.E. Allen and R. Masih).
7. Dynamics Among Dividends, Earnings and Stock Prices, (with D.E. Allen and R. Masih).

Other staff members

Clark-Murphy, M., 1999, "Beryl Beaurepaire" by Michael McKernan: A book Review", *International Review of Women and Leadership* 5(2), 60-61.

Clark-Murphy, M., 1999, "How and why do individuals choose investment?" Western Exposure: Official bulletin of the Perth City Chapter of the Financial Planning Association of Australia Limited, 1 September.

Clark-Murphy, M., 1999. The Changing Role of the Financial Advisor. 11th Annual Australasian Finance and Banking Conference, Sydney.

Gerrans, P., & Clark-Murphy, M. (2000). Gender differences in information resource usage in superannuation decisions. Annual Meeting of the Academy of Financial Services, Seattle, USA.

Gerrans, P., & Clark-Murphy, M. (2000). Making superannuation investment choices: Some preliminary results on member decisions. PACAP, (6-8 July 2000). Melbourne.

Li, S., "A valuation model for firms with stochastic earnings", 2000, submitted.

Li, S., "An empirical study of Australian short-term interest rates: a comparison of single factor model", 2000, submitted.

Lim, L., "Is There an ASEAN Convergence Club?", *Proceedings of the International Congress on Modelling and Simulation*, Vol. 2, edited by L. Oxley, M. McAleer and F. Scrimgeour, University of Waikato, Hamilton, New Zealand, 1999, pp. 375-380 (with M. McAleer).

Lim, L., "Is Singapore Catching Up Technologically to the USA?", *Proceedings of the International Congress on Modelling and Simulation*, Vol. 2, edited by L. Oxley, M. McAleer and F. Scrimgeour, University of Waikato, Hamilton, New Zealand, 1999, pp. 381-386 (with M. McAleer).

Ripple, R., "Is the West Coast Petroleum Industry Integrated with the World Market?", August 2000.

Ripple, R. and Imad A. Moosa, "The Effect of Seasonal Adjustment on the Accuracy of Forecasting U.S. West Coast Oil Imports", June 2000.

Ripple, R., "Privatized Public Utility Pricing, Efficiency and the Implications of Subsidies and Uncertainty", June 1999, with Y.H. Cheung.

Ripple, R., "Alaska North Slope Crude Oil Price and the Behaviour of Diesel Prices in California", forthcoming in *Energy Economics*, with B. Adrangi, A. Chatrath, and K. Raffiee.

Ripple, R., "Income and Energy in the East Indian Ocean Basin", *International Journal of Business Studies*, June 2000.

Research output with SIRCA

Professor Robert Faff:

1. Hallahan, T. and Faff, R., "Induced Persistence or Reversals in Fund Performance?: The Effect of Survivorship Bias".
2. Holmes, K. and Faff, R., "Cross-sectional Determinants of Managed Fund Risk and Performance: Evidence for Australian Equity Trusts".
3. Benson, K., Pope, P. and Faff, R., "The Relevance of Investor Risk Classes in Ranking Fund Performance: An Application of the Extended Mean-Gini CAPM".
4. Benson, K., Pope, P. and Faff, R., "An Investigation of the Relationship between Stated Fund Management Policy and Market Timing Ability".
5. Davidson, S., Faff, R.W. and Mitchell H., "Are Returns in the International Economy Explained by a Single or Multi-factor Structure"?
6. Faff, R., "? – You can Bear it, no Bull! A Multivariate Test of a Dual-Beta CAPM: Australian Evidence".
7. Faff, R., "Creating Fama and French Factors with Style".
8. Faff, R., "An Examination of the Fama And French Three Factor Model using Commercially Available Factors".
9. Faff, R., Brooks, R. and Fan, T., "A Test of a New Dynamic CAPM".
10. Faff, R.W., Hillier, D. and Wood, J., "Beta and Return - Implications of Australia's Dividend Imputation Tax System".
11. Faff, R. and Mittoo, U., "Capital Market Integration and Industrial Structure: The Case of Australia, Canada and the United States".

12. Josev, T., Brooks, R. and Faff, R.W., “Testing a Two Factor APT Model on Australian Industry Equity Portfolios: The Effect of Intervaling”.
13. Lie, F., Brooks, R. and Faff, R., “Modeling the Equity Beta Risk of Australian Financial Sector Companies”.
14. Di Iorio, A. and Faff, R., “A Test of the Stability of Exchange Rate Risk: Evidence from the Australian Equities Market”.
15. Di Iorio, A. and Faff, R., “The Effect of Intervaling on the Foreign Exchange Exposure of Australian Stock Returns”.

Appendix 2

INFRASTRUCTURE

FICAMREG has access to excellent data-sources for research into finance and financial markets that probably more than match those available at other universities in Australia.

We have access to the DATASTREAM service, probably the most comprehensive set of databases commercially available. This is accessed via an internet link with the host database in London. It covers over 65 countries and has a vast range of economics information, plus price series from the various national stockmarkets, futures markets, and derivatives markets around the globe plus a vast range of company financial statement information. A number of other data sources are accessed for individual research projects. These include IBES US broker company earnings forecasts, data on futures from the US Futures Research Institute. One project funded by a SPIRT grant is investigating managed fund performance using BOURSE DATA LTD/ASSIRT's confidential Library of fund related information.

FICAMREG also has access to FPG group's fund management database which is secured at an annual cost of \$7500 p.a. This is part of its support for its comprehensive research program into managed fund performance.

There is limited access to the MEMLAB facility - a DEC8400 Supercomputer, based at Sydney University, which is required to analyse the tetrabytes of data involved in these databases. The group has rented access to the Initial Public Offerings on-line securities database from IFR financial services which provides comprehensive information about world-wide IPO's.

The School has joined the SECURITIES RESEARCH CENTRE OF THE ASIA PACIFIC (SIRCA), a collaborative research grouping of 26 universities from Australia and New Zealand. Membership provides access to very detailed market microstructure databases drawn initially from the Australian Stock Exchange and the Sydney Futures Exchange. FICAMREG has access to these high-frequency databases via SIRCA. The databases are soon to be augmented by additional datasets from other Stock Exchanges around the world.

A wide library of software suitable for finance and financial econometric work is available. This includes Excel, SPSSPC, plus a suite of programs for time series analysis including MICROFIT, RATS and CATS, EVIEWSs, PCGIVE, PCFIML, GAUSS and SHAZAM.

Appendix 3

DETAILS OF PROJECTS (D.E. ALLEN)

?? 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

This work undertaken with Dr Gary MacDonald of the School of Economics and Finance, Curtin University, involves tests of market efficiency and analysis of whether price overreaction phenomena occur in equity markets in the Asia-Pacific Region. The pricing efficiency of equity markets has also been analysed using applications of the theory of cointegrated vector autoregressive models. A Var approach is applied to tests of the present value relationship between prices and dividends in various markets. Related work on the efficiency of key markets is underway and includes tests of contrarian investment strategies and the long-run performance of initial public offerings (IPOs).

?? The determinants of returns in the Malaysian and Thai Stock Markets

This work involves tests of the efficacy of the Capital Asset Pricing Model in the Malaysian and Thai Markets 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.

?? Tests of Purchasing Power Parity relationships

This research project is being undertaken with Heazry Salim, Stuart Cruickshank and [Dr. G. MacDonald](#). It features a wide range of tests of purchasing power parity across a sample of 21 industrialised countries using panel based techniques in an attempt to achieve greater power in the statistical tests of the relationships.

?? The equity premium in Australia

Mr Lurien Demello joined the activities of FICAMREG during the year. He works in a variety of capacities within the School of Finance and Business Economics. He has been busy work on a project using Datastream data to model and predict the size of the equity premium in Australia.

?? Making Superannuation choices: an analysis of SSAU Investor choices

The project undertaken by Paul Gerrans, Marilyn Clark-Murphy and Brian Ducie is examining the choice offered to SSAU members to choose between a defined benefit scheme and a range of investment accumulation funds. This choice that faced SSAU members was arguably one of the more important financial decisions they would have faced. The motives and influencing factors in making this decision is one of considerable interest to academics, practitioners and fund members. A survey of 10000 members is currently under way.

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

This project undertaken with Nigel Morkel-Kingsbury involves an analysis of the speed of transmission of base rate changes to commercial lending rates by Australian Banks. Cointegration techniques and VAR analysis are being applied in an exploration of whether the Australian banks react more rapidly and competitively to interest rate changes. This project is also in its preliminary stages.

?? A Hidden Markov Chain Model of the Term Structure of Bond Credit Risk Spreads.

Recently models have been developed using credit ratings as a way of estimating the credit risk associated with commercial bond prices. This work continues this research by providing a Markov chain model for the term structure and credit risk spreads of bond process. It allows dependency between the stochastic process modelling the interest rate and the Markov chain process describing changes in the credit rating of the bonds by their mutual dependency on a hidden Markov chain. This Markov chain can be thought of as the underlying economic conditions. The calculations of the parameters of the model are based on historical information on the changes in credit rating of bonds and time series of economic indicators. These are fitted using U.S. data and the prices of bonds for U.S. industrial and financial organisation estimated.

The model also allows a new definition of risk premia which allows an interpretation of the risk premia used in previous approaches. The idea is that the risk premia is when the market's view of the future is more extreme than historical evidence suggests.

Finally as part of the calculations we address the problem that previous attempts to strip the coupons from the price data on real bonds leads to zero-coupon prices that do not reflect the risk structure of the bonds. By using a linear programming approach to strip the bonds of their coupons we are able to guarantee there is no such mis-pricing. This work is being undertaken by D.E. Allen and Professor Lyn Thomas, of the Department of Business Studies, the University of Edinburgh.

?? A Test of Interest Rate Option Pricing Models in an Australian Context.

This project involves a test of the efficacy of various option pricing models which are applied to price options on Australian interest rate futures. The Black, Asay, Extended Vasicek and the Heath, Jarrow, Morton model are featured in the tests.

?? International Portfolio Diversification

This work undertaken with [Dr Garry MacDonald](#) of the [School of Economics and Finance, Curtin University of Technology](#), involves applications of the theory of cointegrated vector autoregressive models to analyse the potential long-term benefits of international portfolio diversification across 17 international stock markets. We are extending this research by modelling the common trend in international stock prices.

?? A Test of the Factors Influencing Managed Fund performance

This research work is funded by a SPIRT grant for the period 1999 to 2001 and is undertaken collaboratively with Assirt, the Fund Rating Agency and [Professor Tim Brailsford](#), of the Department of Finance, ANU and [Professor Robert Faff](#) of the Department of Economics and Finance, RMIT. Victor Soucik is working on the analysis of Assirt's Library funded by an APA Ph.D scholarship. Various analyses are being developed including an exploration of the consistency of performance measures. Mr Jerry Parwada has recently started research work examining the factors stimulating fund mergers and fund births and deaths.

?? A Test of the Time Series Relationships between stock prices, earnings per share series and stock dividends.

This research work explores the relationship between the above series at an individual company level in USA and Australian markets within a VAR framework. Attempts are made to capture endogeneity and to explore causality and the existence of cointegrating relationships. The work is being undertaken with Stuart Cruikshank, Wenling Yang, [Dr. G. MacDonald](#), [Associate Professor A.M.M. Masih](#), and [Mr. R. Masih](#),

?? Time-Series Tests of the Hedging Effectiveness of the Sydney Futures Exchange, LIFFE and SIMEX exchanges.

This project features a set of time-series tests of the hedging effectiveness of the [Sydney](#), [London](#) and [Singapore](#) 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. Other research work features contracts from the other futures exchanges and includes tests of whether backwardation exists in the various markets and whether the Samuelson hypothesis holds.

RESEARCHERS

PROFESSOR D. E. ALLEN, Professor of Finance

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. His education includes an Honours degree in economics undertaken at St. Andrews University in Scotland, and an M.Phil on a topic in the history of Economic thought completed at Leicester University in England. His Ph.D in Finance was completed at the University of Western Australia and featured an analysis of company financial policy decisions in a sample of companies drawn from Australia, Britain and Japan. Other previous 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.

DR. ABUL MASIH, Associate Professor

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:

Money, finance and trade in developing Asian countries, international finance, financial econometrics, and economic and managerial forecasting.

PAUL GERRANS, Lecturer in Finance

Research Interests:

- Investment Evaluation - Capital budgeting technique usage
Techniques employed by business in making capital investment decisions, with a particular emphasis on the adoption of real option methodologies.
- Valuation of water resources
- ISO 14000 adoption by SMEs

Paul has just switched his Ph.D topic and is currently working on a new topic involving the assessment of the usefulness of qualitative and quantitative ratings provided by Fund Rating agencies for the Funds Management Industry. He is utilising data provided by the fund rating agency MorningStar. He is also working with Marilyn Clark-Murphy on a study of superannuation choice within the context of the UniSuper scheme. His previous work has included studies of the usage and usefulness of derivative instrument employed by Australian business, as well as option pricing mechanisms for various option instruments and a survey (with Mahendra Chandra) of techniques employed by business in making capital investment decisions.

MARILYN CLARK-MURPHY, Lecturer in Capital Markets

Research interests:

The way in which individual investors and their advisers evaluate investment products; the applicability of consumer behaviour research methodology to individual investor decision making; the implications of behavioural issues such as mental accounting, framing, regret etc. for the investment decision.

Title of Ph.D (submitted):

?? The attributes of investment products - what do investors value and what do their advisers believe they will value?

The aim of this study is to establish what attributes of an investment product are attractive to clients and whether investment advisers can predict accurately the attributes their clients value. It applies conjoint analysis - a research technique which comes from the consumer behaviour field and has been widely used in 'traditional' product choice situations.

STEVEN LI, Lecturer in Finance

(Ph.D. in Applied Mathematics at Delft University of Technology, The Netherlands, MBA in Finance at University of Melbourne, Business Analyst for News Lts, A/Prof'ship in Department of Applied Mathematics at Tsinghua University)

Research Interests:

Asset Pricing, Financial Risk Management, Capital Markets, Quantitative Finance.

Steven is currently working on fitting interest rate model parameters and other applications of continuous time modelling techniques.

LEE LIM, Lecturer in Finance

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

Research Interest:

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

Research Projects

Quantitative Analysis of the Impact of Imports on the Domestic Pig and Pigmear Industries, for Productivity Commission (1999).

A Statistical Relationship Between Housing Prices and the Consumer Price Index, for Ernst and Young (1999).

Economic Assessment of the Impact of Table Grape Imports from United States, for the Department of Agriculture, Fisheries and Forestry (1999/2000)

EDWARD LIN, Lecturer in Finance

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

Research Interests:

Investment and Corporate Finance, Asset Pricing

Edward has done work in corporate pay-out policy and is currently investigating the popularity in share buy-backs vs dividends in the current environment. He is knowledgeable in numerous statistical methods including non-parametric time-series and multi-variate analysis.

STUART CRUICKSHANK, Graduate Research Assistant

Stuart graduated from Curtin University of Technology with a first class honours degree in Economics. He was awarded the 'Money and Capital Markets 200' prize and invited to be a member of the Golden Key National Honour Society. Previously, Stuart worked for 2 years with J. B. Were and Son Stockbrokers and has been teaching at Curtin University of Technology. Stuart is working on various research projects and manages access for the Datastream database.

Stuart's area of interest include time-series econometrics and exchange rate determination. He was involved in a number of research projects which included work in futures markets, time-series linkages between accounting income, dividend and stock price series, the determinants of the terms structure of interest rates and purchasing power parity.

Stuart resigned in June 2000 from his position as research assistant to travel in Europe.

Appendix 5

ASSOCIATED RESEARCHERS

In addition to the internal research staff there is extensive collaborative work with local researchers in Western Australian Universities including *Dr. Garry MacDonald* and *Dr. M. Manzur* of the School of Economics and Finance at Curtin University of Technology who are working on the futures hedging and term structure projects.

Professor Tim Brailsford, Dean of Economics and Commerce, ANU and *Professor Robert Faff*, of the Department of Economics and Finance RMIT are involved in the SPIRT funded project on managed fund performance.

Professor Lyn Thomas from the Department of Business Studies, University of Edinburgh, has been visiting the School for four months from January 1998 and also has an outstanding research and publishing record. He has been involved in work on analysis bond pricing spreads applying Markov modelling and the application of management science techniques to bond pricing and the analysis of duration.

Mr Rumi Masih Consultant, Emerging Markets Economics Research, Goldman, Sachs & Co. (Head Office), New York, U.S.A.. This team has twice been voted the top advisory team by clients. Rumi Masih has over sixty publications and is the youngest fellow of the Royal Statistical Society in the UK. He is about to submit 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.

Mr Nigel Morkel-Kingsbury of the Department of Accounting and Finance, Monash University, 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 now involved in various projects on the term structure of interest rates, bond pricing and bank interest rate behaviour.