

2022 Rate of return review

Appointment of Independent Panel to review draft Instrument

June 2022

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1 Independent Panel

The Australian Energy Regulatory is pleased to announce the Independent Panel to review our draft 2022 Rate of Return Instrument. The panel is

- Pat Duignan (Chair)
- Carol Austin
- Professor Ian Cooper
- Geoff Frankish
- Tony Smith

This is a highly capable group with extensive experience and standing in their fields. We are pleased that the panel collectively possess a range of capabilities including:

- Finance and economics
- Regulatory experience
- Experience in consumer perspectives and
- Institutional investment experience

Full details for each member are set out below.

1.1 What is the Independent Panel?

The objective of the Independent Panel is to support the AER make the best possible instrument by reviewing the draft Instrument and the information available to us in drafting the Instrument. The role of the Independent Panel is not to act as a second decision maker. Rather it is to test that we have exercised our regulatory judgement appropriately. The Independent Panel is in place to check we have:

- undertaken an effective review process
- engaged with the material before us with an open mind
- reached a decision that is supported by our stated reasons and the information available to us.

Following consultation with stakeholders, we developed two questions to be considered by the Independent Panel. The questions we are asking the Panel are:

- In the panel's view, is the draft instrument supported by evidence and reasons, taking into account competing factors such as accuracy, consistency, accessibility and transparency?
- In the panel's view, is the draft Instrument likely to contribute to the achievement of the National Electricity Objective and National Gas Objective?

The panel will run from the publication of the draft Instrument until their report is published approximately six weeks later.

2 Biographies

The following biographies have been provided by the members.

2.1 Pat Duignan

Pat Duignan has wide executive and advisory experience in economic regulation, corporate finance, economic policy decision making and investment management governance.

His experience includes the roles of Finance and Economics Expert Lay Member of the New Zealand High Court under the Commerce Act 1986, Commissioner at the New Zealand Commerce Commission, General Manager Finance for the Telecommunications Corporation of New Zealand, Director in the Investment Banking Division of CS First Boston (NZ), Treasurer of the New Zealand Debt Management Office, Director of Policy Coordination and Development at the New Zealand Treasury, First Secretary Economic at the New Zealand London High Commission and long time membership of the New Zealand Accident Compensation Corporation Board Investment Committee.

Pat served as a Commissioner at the New Zealand Commerce Commission from 2010 to 2015, having earlier been an Associate Commissioner. The Commission is responsible for regulation of utilities (i.e. electricity, gas and telecommunication networks) and the three major airports, in addition to competition regulation and consumer protection regulation. Pat played a major role in implementation of the Building Blocks utility regulation framework ("Part 4 of the Commerce Act") legislated in 2008. Pat also served on divisions determining merger applications and enforcing anti-trust law. As a Commissioner, Pat was responsible for both governance of the Commission and for the decisions of divisions on which he served.

Pat was an expert member of the Accident Compensation Corporation (ACC) Investment Committee for 14 years, during which excellent returns were achieved. The Investment Committee is a sub-Committee of the ACC Board comprising both Board members and two expert members. The Committee is responsible for oversight of the management of the NZ\$35B portfolio that finances the future costs of past accident claims.

Pat formed Taylor Duignan Barry Limited (now TDB Advisory) in 2002 to offer to a wide range of clients his expertise in economic policy, corporate finance, treasury and investment management. Pat has undertaken a wide range of financial and economic analyses in both the public and private sectors. Pat has also provided expert opinions regarding regulatory, taxation and Takeovers Code issues. Pat resigned from TDB in 2013 to avoid conflicts with his Commerce Commission role. He now undertakes advisory mandates through Munro Duignan Limited.

Prior to 2001, Pat managed the corporate finance, treasury and taxation areas as General Manager Finance for Telecom Corporation of New Zealand Ltd ("Telecom"). Pat led the analysis of major corporate finance decisions including Telecom's NZ\$1B share buyback and later issue of equity and quasi-equity (under changed circumstances). His team raised NZ\$3.5B in term debt, maintained commercial paper outstandings of over NZ\$2B and arranged a variety of standby facilities. Working with others, they secured project financing for the US\$1.2B Southern Cross cable project.

Earlier, Pat was responsible for management of New Zealand's public debt (at that time totalling NZ\$46B) as Head of the New Zealand Debt Management Office ("NZDMO"). Pat also has experience as an Investment Banker (with Credit Suisse First Boston NZ) and as Director of Policy Coordination and Development for the Treasury. Pat's service with the Treasury included macroeconomic forecasting, development of the framework for the Reserve Bank's independent management of monetary policy and development of state-owned enterprise and regulatory policy.

Pat played a significant role as a policy adviser in New Zealand's economic reforms from 1984 after returning from serving as First Secretary Economic at the New Zealand High Commission, London, including representing New Zealand at the OECD.

Pat is a chartered member of the New Zealand Institute of Directors.

Positions held

Date	Role
Current	Director of Corporate Finance and Risk Management Advisory Business (Munro Duignan Limited)
Nov 2003 – June 2021	Member ACC Board Investment Committee (Portfolio NZ\$44B)
April 2016 – April 2021	Economic and Finance Expert Lay member of the High Court under Commerce Act 1986 (re Appeals)
June 2009 – Dec 2015	Commerce Commission - Associate Member until 1 June 2010 then Commissioner
Dec 1995 – Sept 2001	General Manager Finance, Telecom Corporation of New Zealand
Jun 1995 – Nov 1995	Corporate Finance Consultancy
1993 – 95	Director, Investment Banking Division, CS First Boston, New Zealand
1989 – 93	Treasurer, New Zealand Debt Management Office
1987 – 89	Manager, Investment Banking Division, Fay Richwhite and Company (Investment Bankers)
1984 – 87	Section Head, then Director, General Economics Branch, (Responsible for Macroeconomic Policy (first period) and for Policy Coordination and Development (later period)), New Zealand Treasury
1983	Senior Investigating Officer, Transport, Communications and Tourism Policy Section, New Zealand Treasury
1980 – 83	First Secretary (Economic) New Zealand High Commission to the United Kingdom, London

1973 – 79	Investigating Officer then Senior Investigating Officer, New Zealand Treasury
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2.2 Carol Austin

Carol is an experienced finance professional and board director. She combines strong commercial judgement with a deep understanding of economics, investment management, superannuation, banking and financial markets. She is a strategic thinker with an excellent grasp of technical matters including financial and non-financial risk.

She is currently a director of State Super, the Grattan Institute and Infoxchange and is chair of the ACT Investment Advisory Board. She previously served on the boards HSBC Bank Australia, the Future Fund and the Tasmanian Public Finance Corporation and was a member of the advisory boards of the Australian Office of Financial Management and the Melbourne Institute of Applied Economic and Social Research. Carol was also a Commissioner with the NSW Independent Planning Commission.

During her executive career, Carol held senior management and Chief Economist roles in the public and private sectors.

Carol has a Bachelor of Economics (Hons) from ANU and a Bachelor of Science from Monash University. She is a Fellow of the Australian Institute of Company Directors and a member of Chief Executive Women and the Australian Institute of Community Directors.

Skills

- Experienced board director with extensive knowledge of corporate governance, financial accounting and business strategy
- Detailed knowledge of investment management across listed and unlisted assets with particular expertise in Australian equities
- Strong analytical and conceptual skills with a deep understanding of domestic and international economics and their impact on asset valuations, corporate earnings, interest rates and currencies
- Experienced adjudicator of complex/controversial planning decisions

Current board roles

Date	Role
2018	State Super (SAS Trustee Corporation) Non-Executive Director and Member of Investment Committee The Board provides advice on the management of the \$40b investment portfolios and oversees the operation and

	administration of three NSW government closed superannuation schemes.
2017	Australian Capital Territory (ACT) Investment Advisory Board Chairman The Board provides investment and governance advice to the ACT Treasury on the management of \$8billion of financial assets.
2016 2018	Grattan Institute Non-Executive Director and Member of Investment Committee Chairman of Investment Committee and Member of Audit Committee Grattan Institute is an independent, public policy think tank. The Board oversees the operation of the Institute. The Investment Committee advises the Board on the management of the endowment while the Audit Committee oversees the financial operations of the Institute.
2016	General Sir John Monash Foundation Member of Audit, Risk & Investment Committee The Foundation provides post-graduate scholarships to assist talented Australians to study abroad. The Audit, Risk & Investment Committee oversees the management of the endowment.

Previous board/advisory roles

Date	Role
2010 – 2022	HSBC Bank Australia Limited Non-Executive Director and Member of Risk & Audit Committee 2014 – 2022: Chairman of Risk Committee and Member of Audit Committee HSBC Australia is a member of the HSBC global banking group and is an APRA regulated Authorised Deposit-taking Institution (ADI). The Board provides guidance on business strategy and operations, approves significant policies and oversees their implementation. The Risk Committee has responsibility for ensuring that all key risks are identified and that risk management systems are established and are working effectively.

Independent Panel

<p>2017 – 2020</p>	<p>Independent Planning Commission (IPC)</p> <p>Commissioner</p> <p>The IPC is the approval authority for large and/or controversial NSW private sector development projects. A panel of 3 to 5 Commissioners is appointed to assess each development proposal. Car sat on a number of panels.</p>
<p>2013 – 2016</p>	<p>Australian Office of Financial Management (AOFM)</p> <p>Member of Advisory Board</p> <p>The AOFM is the Commonwealth Government's debt issuing authority. The Board provides advice on the structuring of the AOFM's debt issuing program.</p>
<p>2011 – 2016</p>	<p>Future Fund</p> <p>Guardian and Member of Audit & Risk Committee</p> <p>2011 – 2015:</p> <p>Chairman of Future Fund Investment Companies</p> <p>2015 – 2016:</p> <p>Chairman of Audit & Risk Committee</p> <p>The Future Fund is Australia's sovereign wealth fund with assets in excess of \$200 billion. The Board approves all investment decisions as well as the business and investment strategies for the Fund.</p>
<p>2004 – 2012</p>	<p>Tasmanian Public Finance Corporation (TASCORP)</p> <p>Non-Executive Director and Member of Audit Committee</p> <p>TASCORP raises debt on behalf of the Tasmanian Government, provides loans to Tasmanian statutory authorities and invests in market securities. The Board oversees the operation of the Corporation.</p>
<p>2003 – 2012</p>	<p>Melbourne University Institute of Applied Economic & Social Research</p> <p>Member of Advisory Board</p> <p>The Institute undertakes externally funded economic and social research. The Board provides advice on the strategy of the Institute.</p>

2003 – 2012	<p>Australian National University (ANU) Endowment Foundation</p> <p>Governor</p> <p>The Foundation raises funds to support academic positions and to provide scholarships to students. The Board oversees the operation of the Foundation.</p>
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Summary of executive experience

Date	Role
1999 – 2016	<p>Investment Services Director and Chief Economist, Contango Asset Management</p> <p>Contango Asset Management is a boutique funds management business specialising in niche segments of the Australian equities market.</p> <p>Carol was an equity owner and member of the Executive Committee. She was responsible for managing the company's research program, analyzing macroeconomic and market conditions and determining the company's investment strategies as well as assisting with product development and marketing. She helped to build a multi-billion dollar asset management business spanning institutional clients and listed investment companies.</p>
1996 – 1999	Director, Institutional Business, Rothschild Australia Asset Management
1994 – 1996	Executive General Manager, Business Development Commonwealth Funds Management (CFM) Ltd
1989 – 1994	General Manager, Public and Government Affairs, BHP
1983 – 1989	Chief Economist, Australian Industry Development Corporation (AIDC)
1980 – 1983	Deputy Section Head/Research Economist, Research Department, Reserve Bank of Australia

2.3 Professor Ian Cooper

Employment

Date	Role
1995 – present	London Business School: Professor of Finance
1984 – 1994	London Business School: Associate Professor (equivalent)
1978 – 1984	London Business School: Assistant Professor (equivalent)
1988 – 1989	Australian Graduate School of Management: Visiting Fellow
1982 – 1983	University of Chicago: Visiting Assistant Professor

Education

Date	Role
1977	University of North Carolina at Chapel Hill: PhD Finance
1974	University of North Carolina at Chapel Hill: MBA
1975	Cambridge University: MA Economics
1972	Cambridge University: BA Part I Natural Sciences (First Class) Part II Economics (First Class)

Publications

Category	Publication
Current working papers	<p>Martijn Boermans, Ian Cooper, Piet Sercu, Rosanne Vanpee, <i>Foreign bias in equity portfolios: Informational advantage or familiarity bias?</i></p> <p>Ian Cooper, Neophytos Lambertides, and Arkodipta Sarkar, <i>Which measure of aggregate implied cost of capital predicts equity market returns?</i></p> <p>Ian Cooper, <i>Estimating sustainable normalized operating free cash flow: Teaching note</i></p> <p>Ian Cooper, <i>Setting the horizon value using DCF-based methods: Teaching note</i></p> <p>Ian Cooper and Neophytos Lambertides, <i>Is there a limit to the accuracy of equity valuation using multiples?</i></p>

	<p>Ian Cooper, <i>Using Hotelling depreciation to diagnose excess returns earned by R&D-intensive firms.</i></p> <p>Ian Cooper, <i>Valuing real options with estimation error: DCF versus no-arbitrage.</i></p> <p>Ian Cooper and Andrey Kuzmenko, <i>Optimal passive currency holdings: Equilibrium currency hedging revisited.</i></p>
Articles	<p>Richard A. Brealey, Ian A. Cooper, and Michel A. Habib, 2020, Valuation in the Public and Private Sectors: Tax, Risk, Debt Capacity, and the Cost of Capital, <i>Journal of Business Finance and Accounting</i>, 47 (1-2), 163-187.</p> <p>Richard Brealey, Ian Cooper, and Evi Kaplanis, 2019, The effect of mergers on US bank risk in the short run and in the long run, <i>Journal of Banking and Finance</i> 108, 105660.</p> <p>Ian Cooper and Antonio Mello, 2019, The Default Risk of Swaps, reprinted in: Michel Crouhy, Dan Galai and Zvi Wiener (eds): <i>Contingency Approaches to Corporate Finance and Banking : A World Scientific Reference</i> World Scientific Publishing Co.</p> <p>Ian Cooper, Piet Sercu, and Rosanne Vanpée, 2018, A measure of pure home bias, <i>Review of Finance</i> 22:4, 1469-1514.</p> <p>Ian Cooper and Neophytos Lambertides, 2018, Large dividend changes and leverage, <i>Journal of Corporate Finance</i> 48, 17-33.</p> <p>Ian Cooper and Kjell Nyborg, 2018, Consistent valuation of project finance and LBO's using the flows-to-equity method, <i>European Financial Management</i> 24:1 p 34-52.</p> <p>Panayiotis C. Andreou, Ian Cooper, Christodoulos Louca, and Dennis Philip, 2017, Bank loan loss accounting treatments, credit cycles and crash risk, <i>The British Accounting Review</i> Vol 49:5 p 474-492.</p> <p>Richard Brealey, Ian Cooper, and Evi Kaplanis, 2016, The behaviour of sentiment-induced share returns: Measurement when fundamentals are observable, in <i>Portfolio construction, measurement, and efficiency: Essays in Honour of Jack Treynor</i>, ed. John B Guerard Jr. Springer.</p> <p>Ian Cooper, Piet Sercu, and Rosanne Vanpee, 2013, The equity home bias: Survey and synthesis, <i>Foundations and Trends in Finance</i> 7.4, 289-416.</p> <p>Richard Brealey, Ian Cooper, and Evi Kaplanis, 2012, International propagation of the credit crisis: Implications for bank regulation, <i>Journal of Applied Corporate Finance</i> 24.4, 36-45.</p> <p>Richard Brealey, Ian Cooper, and Evi Kaplanis, 2010, Excess comovement in international equity markets: A test using cross-border mergers, <i>Review of Financial Studies</i> 23.4, 1718-1740.</p> <p>Ian Cooper, On tests of the conditional relationship between beta and returns, 2009, <i>Applied Financial Economics</i> 19.6, 427-432.</p>

	<p>Ian Cooper and Kjell Nyborg, Tax-adjusted discount rates with investor taxes and risky debt, <i>Financial Management</i>, Summer 2008, 365-379.</p> <p>Ian Cooper and Sergei Davydenko, Estimating the cost of risky debt, <i>Journal of Applied Corporate Finance</i> 19.3, Summer 2007, 81-86.</p> <p>Ian Cooper, 2008, Optimal equity valuation using multiples: The number of comparable firms, working paper.</p> <p>Ian Cooper and Kjell Nyborg, 2007, Valuing the debt tax shield, <i>Journal of Applied Corporate Finance</i> 19.2, 50-59.</p> <p>Ian Cooper and Kjell Nyborg, 2006, The value of tax shields IS equal to the present value of tax shields, <i>Journal of Financial Economics</i> 81, 215-225.</p> <p>Ian Cooper and Sergei Davydenko, 2004, Using yield spreads to estimate expected returns on debt and equity, working paper.</p> <p>Ian Cooper and Kjell Nyborg, 2004, Discount Rates and Tax, working paper. Should companies hold surplus cash? <i>Institute of Chartered Financial Analysts of India Reader</i>, 2003, reprinted in <i>The Analyst</i>, 2003.</p> <p>Ian Cooper and Sergei Davydenko, 2001, The cost of debt, working paper. The case for global investing, in Mastering Investment, <i>The Financial Times</i>, 2001.</p> <p>Ian Cooper and Evi Kaplanis, 2000, Home Bias in Equity Portfolios: Causes and Consequences for Investment Policy, in <i>The Advisor's Guide to Financial Research</i>, ed. D J S Brean and J Hull, Rogers Publishing, Toronto.</p> <p>Ian Cooper and Evi Kaplanis, Partially Segmented International Capital Markets and International Capital Budgeting, <i>Journal of International Money and Finance</i> 19, June 2000, 309-329.</p> <p>Financing Large Scale Engineering Projects, (with R A Brealey and M Habib) in <i>High Risk, Uncertain Returns: The Game of Project Venturing</i>, ed G. Bickerstaffe, MIT Press, 2000.</p> <p>Ian Cooper, Discussion of Models of Securities versus Banks, <i>Economic Notes</i>, No. 3, November 2000, 75-78.</p> <p>Ian Cooper, Discussion of: Control of Credit Risk Collateralization using Quasi-variational Inequalities, <i>Chicago Board of Trade Research Symposium Proceedings</i>, 1999, CBOT.</p> <p>The Cost of Capital of the UK Water Sector (with D Currie) London Business School Regulation Initiative Working Paper 28, 1999.</p> <p>Richard Brealey, Ian Cooper, and Evi Kaplanis, What is the International Dimension of International Finance? <i>European Finance Review</i> 3, 1999, 103-119.</p> <p>Ian Cooper and Antonio Mello, Corporate Hedging: The Relevance of Contract Specifications and Banking Relationships, <i>European Finance Review</i>, 2.2, 1999, 1-29.</p>
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Riccardo Rebonato and Ian Cooper, Coupling Backward Induction with Monte Carlo Simulations: A Fast Fourier Transform (FFT) Approach, *Applied Mathematical Finance*, 5, 1998, 1-11.

Richard Brealey, Ian Cooper, and Michel Habib, Investment Appraisal in the Public Sector, *Oxford Review of Economic Policy*, 13.4, 1997, 12-18. Reprinted in *Management Accounting – Financial Strategy*, CIMA publishing, 2000.

Ian Cooper and Marcel Martin, Default Risk and Derivative Products, *Applied Mathematical Finance*, March 1996, Vol 3:1, 53-74.

Ian Cooper and Riccardo Rebonato, The Limitations of Simple Two-Factor Interest Rate Models, *Journal of Financial Engineering*, March 1996, Vol 5:1, 1-16, Reprinted in *Treasury Management International*, April 1996.

Ian Cooper, Arithmetic versus Geometric Mean Estimators: Setting Discount Rates for Capital Budgeting, *European Financial Management*, July 1996, Vol 2:2, 157-167.

Richard Brealey, Ian Cooper, and Michel Habib, Using Project Finance to Fund Infrastructure Investments, *Journal of Applied Corporate Finance*, Fall 1996, Vol 9:3, pp 25-38. Reprinted in *The New Corporate Finance* edited D H Chew, McGraw-Hill, 2001(3rd Ed). Reprinted in *The Revolution in Corporate Finance* edited J M Stern and D H Chew, Blackwell, 2003 (4th Ed).

Buddy Can You Swap a Dime? *Financial Times*, 9th February 1996. Reprinted in *Mastering Management*, ed T Dickson, Pitman, 1997.

Ian Cooper and Evi Kaplanis, Home Bias in Equity Portfolios and the Cost of Capital for Multinational Firms, *Journal of Applied Corporate Finance*, Fall 1995, Vol 8.3, 95-102.

Ian Cooper and Antonio Mello, 1995, Netting and the Design of Financial Contracts with Default Risk (with A S Mello), working paper.

Ian Cooper and Evi Kaplanis, Home Bias in Equity Portfolios, Inflation Hedging and International Capital Market Equilibrium, *Review of Financial Studies*, 1994, Vol 7 No 1, pp 45-60. Reprinted in *International Capital Markets*, ed. R Stulz and GA Karolyi, Edward Elgar, 2002.

Ian Cooper and Evi Kaplanis, The Implications of the Home Bias in Equity Portfolios, *Business Strategy Review*, Summer 1994, Vol 5, Issue 2, pp 41-53. Reprinted in *International Financial Management*, edited M. Glover, CGA, Canada, 1997.

The Cost of Capital in the Electricity Industry, (with P. Grout), working paper, London Business School, 1993.

Ian Cooper and Antonio Mello, The Default Risk of Swaps, *Journal of Finance*, June 1991, 46.2, pp 597-620, reprinted in *Advanced Topics in Risk Management* edited by R Schwartz and C Smith, Prentice Hall, 1993.

	<p>Ian Cooper, Determinant of Successful Instruments, in <i>Options, Recent Advances in Theory and Practice</i>, edited by S Hodges, Manchester University Press, 1990, pp 33-46</p> <p>Ian Cooper and Antonio Mello, Stock Index Futures: The Case for Markets in Baskets of Securities, <i>Advances in Futures and Options Research</i>, 1989, Vol 4, pp 23-38.</p> <p>The Financial Revolution, in <i>The Handbook of International Financial Management</i>, edited by R Aliber, Dow-Jones Irwin, 1989, pp 661-690.</p> <p>Corporate Liabilities and Options, <i>The Australian Corporate Treasurer</i>, August 1989.</p> <p>Ian Cooper and Antonio Mello, Default Spreads in the Fixed and Floating Interest Rate Markets: A Contingent Claims Approach, <i>Advances in Futures and Options Research</i>, 1988, Vol 3, pp 269-289.</p> <p>Ian Cooper and Julian Franks, Treasury Performance Measurement, <i>Midland Corporate Finance Journal</i>, Vol 4, No 4, Winter 1987, pp 29-43. Reprinted in <i>New Developments in International Finance</i>, edited by J Stern and D Chew, Blackwell, 1988, pp 147-161. Reprinted in <i>The Treasurer</i>, February 1988 and March 1988.</p> <p>Ian Cooper, Repackaging Perpetual FRN's, <i>Journal of International Securities Markets</i>, Spring 1988, pp 55-60.</p> <p>Ian Cooper, Innovations: New Market Instruments, <i>Oxford Review of Economic Policy</i>, November 1986, Vol 2 No 4, pp 1-17. Reprinted in <i>Innovations in Corporate Finance and Financial Markets</i>, Oxford University Press, 1988.</p> <p>The Relationship Between Two Methods of Valuing Convertible Bonds in <i>Optimum Users Manual</i>, London Business School Financial Services, 1988.</p> <p>The Mechanics of Interest Rate Options, in <i>Management of Interest Rate Risk</i>, edited by B. Antl, Euromoney, 1988, pp 179-188.</p> <p>New Financial Instruments: An Overview, in <i>New Financial Instruments</i>, ed. I Cooper, The Chartered Institute of Bankers, 1987 (The Gilbert Lectures on Banking), pp 1-29.</p> <p>Ian Cooper and Evi Kaplanis, Costs to Crossborder Investment and International Equity Market Equilibrium, <i>Recent developments in corporate finance</i>, edited by J Edwards, J Franks, C Mayer and S Schaefer, Cambridge University Press, 1986, pp 209-240.</p> <p>Option Hedging (with C Kaplanis, A Neuberger and S Schaefer) working paper, London Business School, 1986.</p> <p>Relative Price Changes and Financial Decisions, in <i>Gower Financial Management Handbook 3rd Edition</i> ed. P. Vale, Gower Press, 1986, pp 67-78.</p> <p>Currency Option Prices, <i>The Treasurer</i>, May 1985, pp 9-14.</p>
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	<p>Ian Cooper and Julian Franks, The Interaction of Financing and Investment Decisions when the Firm has Unused Tax Credits, <i>Journal of Finance</i>, May 1983, 38.2, pp 571-583.</p> <p>Inflation and Financial Decisions, in <i>Financial Management Handbook</i>, Gower Press, 1983, Part III, pp 49-65.</p> <p>Capital Project Planning (with T Runton and J Broyles) in <i>Financial Management Handbook</i>, Gower Press, 1983, Part II, pp 21-47.</p> <p>New Ideas in Investment Philosophy: The Asset Mix Decision (with R.A. Brealey), in <i>Pension Funds and their Advisors</i>, A P Financial Registers, 1982, pp 85-92.</p> <p>Asset Mix and Future Performance, <i>ISIS Bulletin</i>, Laurie Millbank and Co, April 1982, pp 55-57.</p> <p>Venture Capital Investment (with W.T. Carleton), <i>Readings in Strategy for Corporate Investment</i>, edited by F Derkindern and R Crum, 1981, Pitman Publishing, Marshfield, Mass.</p> <p>Venture Capital Investment, <i>LBS Journal</i>, 1979. Reprinted in <i>La Revue de Financier</i>, 1981, pp 32-34.</p> <p>Growth Opportunities and Real Investment Decisions (with J Broyles), <i>Risk, Capital Costs and Project Financing Decisions</i>, edited by F Derkindern and R Crum, Martinus Nijhoff, 1980, pp 107-118.</p> <p>Willard Carleton and Ian Cooper, Dynamics of Borrower Lender Interaction: Partitioning the Payoff in Venture Capital Investment, <i>Journal of Finance</i>, May 1979, 34.2, pp 517-529.</p> <p>Steadman Realty Company (with R. Levin) in <i>Business Policy</i> edited by A. Strickland, 1978, pp 240-256.</p> <p>Ian Cooper, Asset Values, Interest Rate Changes and Duration, <i>Journal of Financial and Quantitative Analysis</i>, December 1977, pp 701-723.</p> <p>Willard Carleton and Ian Cooper, Estimation and Uses of the Term Structure of Interest Rates, <i>Journal of Finance</i>, September 1976, 31.4, pp 1067-1083.</p>
Books and monographs	<p><i>New Financial Instruments</i>, The Chartered Institute of Bankers, 1987, (The Gilbert Lectures on Banking).</p> <p><i>Financial Management Handbook</i> (2nd Ed) (with J Broyles and S Archer), J Broyles and I Cooper principal editors, Gower Press, 1983.</p> <p><i>A Model of Venture Capital Investment</i> (PhD Thesis) University of North Carolina at Chapel Hill, University Microfilms International, 1977.</p>

Published consulting reports	<p><i>Comment on the split cost of capital</i>, 2012, Civil Aviation Authority.</p> <p><i>Adjusting Heathrow's cost of capital for skewness: Methodological and qualitative issues</i>, 2012, Civil Aviation Authority.</p> <p><i>Comment on responses to the report: The effect of defined benefit pension plans on measurement of the cost of capital for UK regulated companies</i>, 2010, Ofcom.</p> <p><i>The effect of defined benefit pension plans on measurement of the cost of capital for UK regulated companies</i>, 2009, Ofcom.</p> <p><i>Consistent methods of valuing companies by DCF: Methods and assumptions</i>, with K Nyborg, report for Norwegian Future Generations Fund, 2006.</p> <p>Comments on the Brattle document: Beta analysis of British Telecommunications: Update, Annex 1 to <i>BT's response to the Ofcom consultation document Ofcom's approach to risk in the assessment of the cost of capital, Second consultation in relation to BT's equity beta</i>, 22 July 2005.</p> <p>Comments on the PwC document: Disaggregating BT's beta, Annex 1 to <i>BT's response to the Ofcom consultation document Ofcom's approach to risk in the assessment of the cost of capital, Second consultation in relation to BT's equity beta</i>, 22 July 2005.</p> <p>The risk of the copper access network, Annex 2 to <i>BT's response to Ofcom's consultation document: Ofcom's approach to risk in the assessment of the cost of capital</i>, 5 April 2005.</p> <p>The equity market risk premium, Annex 1 to <i>BT's response to Ofcom's consultation document: Ofcom's approach to risk in the assessment of the cost of capital</i>, 5 April 2005.</p> <p>Estimation of beta for UK mobile telecommunications, in <i>BT's response to Oftel's review of the mobile sector</i>, British Telecommunications, 2001.</p> <p>Futures and Swaps: The World's Fastest Growing Markets, <i>Financial Times</i>, 30 July 1997. Reprinted in <i>Mastering Finance</i>, Pitman Publishing, 1997.</p> <p>The Impact of Global Orientation on the Cost of Capital, in <i>Network Charges from 1997</i>, British Telecommunications plc, 1997.</p> <p>Estimation of the Market Risk Premium, in <i>Pricing of Telecommunications Services from 1997</i>, British Telecommunications plc, 1996.</p> <p>Consistent treatment of imputation tax in the weighted average cost of capital, in <i>Pricing of Telecommunications Services from 1997</i>, British Telecommunications plc, 1996.</p> <p>Alternative Estimates of BT's Beta and a Comparison with the Estimate used by Oftel, in <i>Pricing of Telecommunications Services from 1997</i>, British Telecommunications plc, 1996.</p> <p>The Inflation Risk Adjustment to the Gilt Rate used by Oftel, in <i>Pricing of Telecommunications Services from 1997</i>, British Telecommunications plc, 1996.</p>
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Teaching

Category	Description
Courses taught (*indicates new course development)	MBA Corporate Valuation*, EMBA Core Corporate Finance, Valuation (executive)*, MBA Advanced Corporate Finance*, MBA Options and Futures*, MBA International Finance*, Continuous time finance (PhD)*, MBA Finance 3*, MBA Core Corporate Finance, Forwards, futures, and swaps (executive)*, MBA Investments.
PHD theses supervised	Essays in Risky Debt (S Davydenko) 2005, Dynamic Models in Finance (A Sbuelz) 1999, Default Risk and Derivative Products (M Martin) 1997, Options Hedging with Transactions Costs (H Neuhaus) 1990, Contingent Claims Pricing and Stochastic Processes for EMS Exchange Rates (A Roma) 1990, Causes and Effects of Innovation of Financial Instruments (A S Mello) 1987.
Honours	London Business School EMBA Best Teacher, 2020-21 Runner up London Business School EMBA Best Teacher, 2019-20 London Business School EMBA Best Teacher, 2018-19 London Business School EMBA Best Teacher, 2017-18 London Business School EMBA Best Teacher, 2016-17 Most popular course at London Business School: <i>Business Week</i> , 2002 London Business School Masters in Finance teaching prize, 1999 London Business School Senior Executive Program Inaugural Teaching Prize, 1988 Gilbart Lectures on Banking, 1986 Board Member, European Finance Association, 1984-87 London Business School MBA Teaching Prize, 1982 Beta Gamma Sigma, UNC-Chapel Hill, 1974 Dean's List, UNC-Chapel Hill MBA, 1974

	<p>Morehead Scholar, UNC-Chapel Hill, 1972-74</p> <p>Double First, Natural Sciences and Economics, Cambridge University, 1972</p> <p>Open Scholarship, Churchill College Cambridge University, 1969-72</p>
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Selected other activities

Other activity	Description
London Business School major administrative positions	<p>2005 – 2014: Course Director, Corporate Finance: Valuation</p> <p>1999 – 2002: Chairman, Finance Faculty</p> <p>1999 – 2002: Director, Institute of Finance and Accounting</p> <p>1990 – 94: Director, PhD Programme</p> <p>1986 – 89: Director, Finance PhD Programme</p> <p>1980 – 88: Director, Corporate Finance Evening Programme</p>
Editorial Boards (current)	<p>Advisory Editor: Review of Development Finance</p> <p>Editorial Board: European Financial Management, Finance India</p> <p>Associate Editor: Journal of Economics and Business, Journal of Multinational Financial Management</p>
Assessor	<p>London School of Economics: Departmental Assessor senior positions, Department of Finance (2003-2016)</p> <p>External Evaluation Committee of the Department of Public and Business Administration, University of Cyprus (2012)</p> <p><i>Ad hoc assessor for research grants:</i> University of Cyprus, Swiss National Science Foundation, Research Council of Norway, UK Higher Education Funding Council, UK ESRC, Israel Science Foundation.</p>
Ad Hoc Referee	<p>Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Review of Finance, Management Science, Journal of Financial and Quantitative Analysis, Journal of Corporate Finance, Journal of Banking and Finance, Financial Analysts Journal, Financial Management, European Financial Management, Journal of Money Credit and Banking, Journal of International Money and Finance, National Tax Journal, Journal of Empirical Finance, Journal of International Economics, Journal of Economics and Business.</p>

Corporate Boards	2007-2015, Leo Capital Growth SPC, Director 1998-2002, Mutant Technology, Director
Consulting	Extensive international experience over 40 years consulting on valuation, cost of capital, and financial regulation for private firms, government agencies, and financial institutions. Experience of written expert evidence and expert witness court appearances. Currently consultant to a large media firm, a telecommunications firm, and a transport infrastructure firm.

2.4 Geoff Frankish

Financial markets and public policy professional with over 40 years experience in private and public sectors. An extensive view of the financial world from a number of different vantage points. Experience in a range of industry sectors, including transport, energy, water and communications and embracing both competitive markets and regulated assets. This involved working as a portfolio manager for two separate infrastructure funds, investing in both Australian and offshore assets. More recently, activities have focused on acting in a number of non-executive director roles.

Key Skills and Experience

- Financial Markets – extensive experience in Australian and global markets, both equity and debt.
- Corporate Relationships – high level interaction with boards and senior management of a wide range of corporates, both listed and unlisted. Hands-on involvement with corporate governance issues.
- Public Policy – detailed interaction with Governments and regulators in corporatisation, privatisation, pricing policy and economic regulation covering a range of industry sectors.
- Areas of expertise: Equity Research, Portfolio Management, Financial Modelling and Valuation, Negotiation, Asset Sales, Economic Forecasting and Analysis, Strategic Planning, Regulation Policy and Practice, Price Determination, Energy Policy, Corporate Governance, Debt Markets, Mentoring, Business Development

Career Summary

Date	Role
2016 to date	Company director
2003 – 2016	Head of Infrastructure/Portfolio Manager - Goldman Sachs Asset Management
1996 – 2003	Director Infrastructure, Utilities and Energy Group - Credit Suisse Aust Equities

1991 – 1996	Deputy Director, Office of State Owned Enterprises (Vic Treasury)
1990 – 1991	Director Docklands Taskforce (Vic Govt)
1987 – 1990	Director General Resources Department (Vic Govt)
1983 – 1987	Public Authorities and Major Capital Projects (Vic Govt)
1977 – 1983	Chief Economist, Telstra
1981 – 1982	Visiting Research Fellow, University of Melbourne
1972 – 1977	Economist, Econometrician CSR

Qualifications

- BA (Ec) (Hons), Macquarie University, Sydney, Australia

Skills

- Extensive background and practical experience in investment, valuation and public policy
- Strong analytical, quantitative and interpersonal skills
- Ability to engage and communicate with boards and senior management
- Strategic analysis and high level decision-making expertise
- Clarity of thought: ability to analyse and articulate complex issues
- Well-developed communication skills including public presentations

Personal and Professional Attributes

- A committed team player and achiever with a highly ethical framework based on personal and professional integrity and dedication.
- A respectful, collegiate approach to decision making, an ability to work as part of a team and a recognized builder of teamwork and cooperation.
- A broadly-based reputation for being able to constructively challenge and question information, raise and discuss issues, form independent judgments and articulate alternative views when appropriate.
- A thorough appreciation of the role and legal and fiduciary responsibilities of company boards and a firm belief in good governance and the principle that Boards must be accountable and transparent in their processes to those whose interests they represent.

- A commitment to technical excellence and strong analytical skills ensuring an ability to understand new and complex issues and the application of commercial and policy judgment to strategic decision-making.
- Excellent communication and presentation skills with the ability to articulate complex concepts in a clear and concise manner to a range of audiences and to participate in industry or policy debates.

Achievements

- Establishment and successful portfolio management of two key Infrastructure Funds, one domestically focused and the other global. Impressive fund performance, even in difficult equity markets.
- Established strong and constructive relationships with boards and senior management teams in a wide range of corporates, both listed and unlisted.
- Significant role in restructuring, commercialisation and privatisation of Victorian public authorities and the establishment of the associated regulatory regimes.
- Led significant transactions, including assets sales and complex negotiations, including Resource Rent Tax (tri-partite), electricity and gas supply agreements and transmission tariffs.
- Mentoring roles, both internal and external.

Employment History

Date	Role
2003 – 2016	<p>Head of Infrastructure/Portfolio Manager - Goldman Sachs Asset Management</p> <ul style="list-style-type: none"> • Buy side coverage of Infrastructure, Utilities and Energy sectors • Portfolio Manager Australian and Global Infrastructure Funds • Sector coverage <ul style="list-style-type: none"> – Tollroads, Airports – Energy Retail, Transmission & Distribution (Electricity and Gas) – Water Utilities – Ports, Rail and Logistics – Electricity Generation (conventional and renewables) – Oil and Gas • Strong relationships with senior management and directors • Deep insights into industry dynamics • Detailed understanding of Australian regulatory regimes <ul style="list-style-type: none"> – frequent contact with regulators - AER, IPART, ESC, QCA

	<ul style="list-style-type: none"> • Company coverage/contact <ul style="list-style-type: none"> – Utilities: AGL, Origin, DUET, Spark Infrastructure, APA Group – Infra/logistics: Transurban, Sydney Airport, Aurizon, Asciano, Qube, DP World, Ports of Melbourne, Brisbane and Botany, Auckland Airport – A wide range of similar offshore companies
1996 – 2003	<p>Director Infrastructure, Utilities and Energy Group - Credit Suisse Australia Equities</p> <ul style="list-style-type: none"> • Sell side research coverage of Utilities, Infrastructure, Energy and Resources • Coverage included BHP, AGL, Origin, Transurban, Sydney Airport, regulated utilities, Tollroads, airports, ports
1983 – 1996	<p>Victorian Government</p> <p>Various roles, including:</p> <ul style="list-style-type: none"> • Office of State Owned Enterprises (Deputy Director) <ul style="list-style-type: none"> – Corporatizing, restructuring and privatising SECV and Gas and Fuel – Led enabling negotiations with private sector, including BHP and Esso and Commonwealth Treasury – Numerous smaller privatisations and asset sales (power station, ports, grain, aluminium, oil and gas) – Regulatory framework for Essential Services Commission • Docklands Task Force (Director) <ul style="list-style-type: none"> – Developed strategic plan for Docklands • Resources Department (Director General) <ul style="list-style-type: none"> – Oil and gas policy development and negotiations • Public Authorities and Major Capital Projects (DDG) <ul style="list-style-type: none"> – Pricing, financial and investment policies for SOEs.
1977 – 1983	Chief Economist, Telstra
1981 – 1982	Visiting Research Fellow, University of Melbourne
1972 – 1977	Economist, Econometrician CSR

2.5 Tony Smith

Tony has 30 years senior experience of regulation in utilities, as a consumer advocate, regulator and as a company director. He recently retired as Chief Executive of the Consumer Council for Water (the statutory water consumer body in England and Wales), where he led the transformation of the water sector and regulation to improve its focus on customers and value for money and produce a 70% reduction in customer complaints. During the 14 years in this job, Tony advised governments and regulators in the UK and overseas on consumer issues and regulation and played a central part on behalf of customers in three regulatory price reviews using his knowledge of regulation to help regulatory authorities deliver credible results with high customer acceptance.

Before his role with the Consumer Council for Water, he was Director responsible for consumer issues at water regulator Ofwat, playing a full part in the 2004 price review and prior to that was heavily involved in regulation as a Director of a water utility in Scotland and with a UK electricity utility. In 2020 he was chosen for a prestigious UK Utility Industry Champion award for his “outstanding commitment and passion” and “having made a unique and positive impact on the utilities industry and those it serves.”

He is currently working part time with an independent Customer Engagement Group of a UK electricity company as part of energy regulator Ofgem’s distribution price review. Tony’s early career was in strategy and marketing, implementing turnarounds in oil, aerospace, automotive and fast moving consumer goods businesses. He has a first class degree and an MBA.

Experience

- Consistently successful in driving consumer focused improvement in several industries over more than 35 years. Most recently at the heart of a fundamental shift of the water industry for consumers in England and Wales. Viewed in the UK and overseas as an authority on improving regulation for existing and future utility consumers.
- Very good knowledge of economic regulation and regulatory finance from business, regulator and consumer perspectives based on 30 years of senior experience.
- Vast experience of effective and clear communication - on national media (frequently on BBC TV’s Breakfast, BBC Radio 5 Live, BBC Radio 4, etc); directly with the public; with Ministers; providing strong evidence to many Parliamentary committees; with regulatory and competition authorities; presenting at conferences in the UK and overseas.
- Significant experience of chairing and influencing groups, panels and Boards, particularly to ensure decisions and policies focus on consumers. For example a recent member of:- the National Water Resources Steering Group; the Government led water industry response to Covid 19; Secretary of State’s Regulators’ Group which focused on improving performance of the water companies.
- Underpinned by strong commercial experience and an early career in strategy and marketing in the oil, aerospace, automotive and consumer goods sectors.

Achievements

- Set up new national statutory consumer representative, the Consumer Council for Water. Led organisation to deliver huge benefits to consumers and a strong media profile. Negotiated with water companies, regulators and government to make major consumer focused changes to regulation, price setting and complaint handling. Strongly endorsed by government's review of water regulation. Advised government and regulators in UK and overseas on regulation for consumers.
- For water regulator Ofwat, played key part in 2004 periodic price review, increasing the focus on consumers and improving stakeholder relationships.
- For Scottish water utility NOSWA, played key role in successful start up and regulatory strategy. Directed step change in consumer perception and service and delivery of NOSWA's >£750m investment programme.
- For electricity company Manweb, developed/implemented strategy that refocused organisation for success in privatised, regulated and new competitive environment.

Employment Summary

Date	Role
2020-Present	Consultant and Consumer Advocate. Involved in current Ofgem price review
2005-2020	Consumer Council for Water. Water consumer watchdog Chief Executive
2003-2005	Ofwat. Water regulator Director of Competition and Consumer Affairs
1995-2002	North of Scotland Water. Water and sewerage utility Director of Development (previously Director of Investment and Director of Customer Service/Corporate Affairs).
1990-1995	Manweb plc. Electricity utility Head of Strategy and New Business Development
1978-1981, 1985-1987, 1987-1990, 2002-2003.	Other Experience Management consultancy and business turnarounds with Lucas Industries and Avon Cosmetics. Interim director with Strategic Rail Authority.

Education and Qualifications

Date	Description
Oct 1999	Cabinet Office one month "Top Management Programme".
1984-1985	University of Aston Management Centre Master of Business Administration (MBA). (Won Ford scholarship).
1981-1984	University of Birmingham BSoc Sc International Studies (First Class Honours).

Key Qualities and Skills.

- Very strong strategy, financial, customer research, benchmarking and change management skills. Able to identify actions to produce step change in performance.
- Very good at working with people and groups and making the case for change that will deliver good, credible results for consumers.
- Strong communication and persuasion skills, being able to engage different audiences. Very effective on national broadcast, newspapers, conferences, parliamentary committees etc, as well as talking directly to consumers. Able to simplify complex issues and deliver clear messages.