

CURRICULUM VITAE

September 2017

FRANKLIN ALLEN

Imperial College Business School
Imperial College London
Tanaka Building
South Kensington Campus
London SW7 2AZ, UK

DATE OF BIRTH: March 6, 1956

EDUCATION:

1977: B.A. in Economics and Computing Studies, First Class Honors, University of East Anglia, U.K.

1979: M. Phil. in Economics (Adviser: Joseph E. Stiglitz)

1980: D. Phil. in Economics (Adviser: James A. Mirrlees)
Nuffield College, Oxford University, U.K.

HONORARY DEGREES AND HONORS:

2006: FMA Fellow

2007: Honorary Doctorate, Stockholm School of Economics

2010: Fellow of the Econometric Society

2016: Lifetime Achievement Award, Financial Intermediation Research Society

2017: Fellow of the British Academy

POSITIONS:

July 2014-present: Professor of Finance and Economics and Executive Director, Brevan Howard Centre, Imperial College London.

July 2016-present: Emeritus Nippon Life Professor of Finance and Economics

July 2000-June 2016: Co-Director, Wharton Financial Institutions Center.

January 1994-July 2016: Nippon Life Professor of Finance and Economics

July 1990-January 1994: Professor of Finance and Economics.

July 1990-June 1993: Vice Dean and Director, Wharton Doctoral Programs.

July 1987-June 1990: Associate Professor of Finance and Economics (with tenure)

July 1986-June 1987: Associate Professor of Finance (with tenure)

September 1980-June 1986: Assistant Professor of Finance

The Wharton School, University of Pennsylvania, Philadelphia, U.S.A.

VISITING:

October 2011: Gaston Eyskens Chair, University of Leuven, Leuven, Belgium

April-July 2006: Metzler Visiting Professor
Faculty of Business Administration
Johann Wolfgang Goethe-Universität Frankfurt
Frankfurt, Germany

February-March 2006: Bertil Danielsson Visiting Scholar
Stockholm School of Economics and Gothenberg University, Sweden

August 2005: Academic Fellow
Centre for Analytic Finance
Indian School of Business
Hyderabad, India

July 2003-December 2013: Scientific Adviser to Sveriges Riksbank (Central Bank of Sweden)

September 2001-June 2004: Adjunct Professor of Finance
Stern School of Business
New York University

September 2002-June 2003: Visiting Professor
Bendheim Center for Finance
Economics Department
Princeton University

April-June 2001: Metzler Visiting Professor
Faculty of Business Administration
Johann Wolfgang Goethe-Universität Frankfurt
Frankfurt, Germany

September 2000-August 2005: Visiting Scholar
New York Federal Reserve Bank

September 1994-May 1995: Visiting Scholar
Federal Reserve Bank of Philadelphia

April-July 1993: Yamaichi Visiting Professor of Finance

Faculty of Economics
University of Tokyo
Tokyo, Japan

July 1989: Summer Visitor
Financial Markets Group
London School of Economics
London, U.K.

August 1988: Summer Visitor
Faculty of Commerce,
University of British Columbia
Vancouver, Canada.

September 1982-August 1983: Research Fellow
Nuffield College,
Oxford University, U.K.

Directorships

1991-present: The Glenmede Fund and the Glenmede Portfolios

TEACHING EXPERIENCE:

Ph. D. Introductory Finance
Ph. D. Corporate Finance
Ph. D. Public Policy
MBA Financial Analysis
MBA Microeconomics
Undergraduate Corporate Finance
Undergraduate Microeconomics
Undergraduate Public Policy
Executive Education Mergers and Acquisitions
Executive Education Financial Management
Supervision of Ph.D. Theses
Supervision of MBA Advanced Study Projects

TEACHING AWARDS:

Lindback Teaching Award 2000-2001 (University Teaching Award)
Anvil Teaching Award 1992-93, 1998-1999 (“Best Professor” award determined by MBA student votes)
Class of 1984 Award 1995-96, 1996-97 (presented to the person with the highest teaching evaluations in the MBA program).
Whatever It Takes Award 1995-96 (presented by Wharton Graduate Association)
“Above and Beyond the Call of Duty Award” 2001-2002, 2005-2006, 2008-2009.
MBA Excellence in Teaching Award 1989-90, 1992-93, 1995-96, 1996-97, 1997-98, 1998-99, 1999-2000, 2000-2001, 2001-2002, 2008-2009.
MBA Teaching Excellence in the Core Award 1991-92, 1992-93, 1995-96, 1996-97, 1998-99, 1999-2000, 2000-2001, 2001-2002, 2003-2004, 2005-2006, 2006-2007, 2009-2010.

MBA Core Curriculum Award 1995-1996, 1996-97, 1997-98, 1998-99, 1999-2000, 2000-2001.
The Wharton Award 2004.
Wharton Undergraduate Teaching Award 1990-91.
Imperial College Business School MBA Core Teaching Award 2015-16, 2016-17.

PROFESSIONAL ACTIVITIES:

Editorial Positions: Managing Editor of Review of Finance 2012-2017
Executive Editor of Review of Financial Studies 1993-1996
Editor of Journal of Financial Intermediation 1992-1993
Co-editor of the Review of Finance 2003-2009
Advisory Editor of Journal of Financial Markets 1997-
Advisory Editor of Journal of Financial Services Research 2000-
Advisory Editor of Multinational Finance Journal 2001-2003
Advisory Editor of Journal of Financial Stability 2003-
Associate Editor of Financial Management 1991-2005
Associate Editor of European Financial Management 2008-
Associate Editor of Journal of Financial Intermediation 1989-1992, 1996-2005
Associate Editor of Review of Financial Studies 1989-1992
Co-editor of the Journal of Economics and Management Strategy 1991-1993

Positions in Academic Associations:

American Finance Association:

Director, 1996-1997
Vice President, 1998
President-elect, 1999
President, 2000

Financial Intermediation Research Society

President, 2003-2005

Financial Management Association

Vice President-Program for the 2010 Annual Meeting of the FMA
President Elect 2011-12
President 2012-13

International Atlantic Economic Society

Vice President, 2006-2007
President, 2007-2008

Society for Financial Studies:

Vice President 1996-Jan 1997

Acting President Jan-June 1997
President June 1997-1999

Western Finance Association:

Director 1991-1994
Vice President 1996-1997
President-elect 1997-1998
President 1998-1999

AREAS OF INTEREST: Corporate Finance, Asset Pricing, Comparing Financial Systems, Financial Crises.

RESEARCH GRANTS:

NSF - Capital Structure and Imperfect Competition in Product Markets (SES-8420171): 1985-1987.

NSF - Studies in the Microstructure of Financial Markets (SES-8813719): 1988-1990.

NSF - Further Studies in the Microstructure of Financial Markets (SES-8920048): 1990-1992.

NSF - Studies in Intermediation and Financial Markets (SES-9121807): 1992-1994.

Awards:

Economic Theory Fellow 2013

Distinguished Scholar 2006, Eastern Finance Association

Distinguished Associate 2005, International Atlantic Economic Society

Donald P. Jacobs Award for the best paper in Volume 1 of the *Journal of Financial Intermediation*.

Salomon-Smith Barney Prize for the best paper at the 1998 AFA meetings.

Robert C. Witt Research Award for Outstanding Feature Article in the *Journal of Risk and Insurance*, 1998 .

REFEREED PUBLICATIONS:

1. "Optimal Linear Income Taxation with General Equilibrium Effects on Wages," *Journal of Public Economics*, 1982, 17, 135-143.
2. "The Relationship Between Unemployment and Vacancies in The United Kingdom: A Mimic Approach," (with A. Parikh) *Oxford Economic Papers*, 1982, 34(1), 98-107.

3. "On Share Contracts and Screening," *Bell Journal of Economics*, 1982, 13(2), 541-547.
4. "Admissible Mean Standard Deviation Indifference Curves," *Economics Letters*, 1983, 12, 11-17.
5. "Credit Rationing and Payment Incentives," *Review of Economic Studies*, 1983, 50(4), 639-646.
6. "Rational Expectations and the Measurement of a Stock's Elasticity of Demand," (with A. Postlewaite), *Journal of Finance*, 1984, 39(4), 1119-1126.
7. "Reputation and Product Quality," *Rand Journal of Economics*, 1984, Autumn, 311-327.
8. "Mixed Wage and Rent Contracts as Reinterpretations of Share Contracts," *Journal of Development Economics*, 1984, 16, 313-317.
9. "Repeated Principal-Agent Relationships with Lending and Borrowing," *Economics Letters*, 1985, 17, 27-31.
10. "On the Fixed Nature of Sharecropping Contracts," *Economic Journal*, 1985, 95, 30-48.
11. "Achieving the First Best in Small Economies," *Journal of Public Economics*, 1985, 27, 255-260.
12. "Discovering Personal Probabilities When Utility Functions are Unknown," *Management Science*, 1987, 33, 542-544.
13. "A Theory of Pricing Rigidities When Quality is Unobservable," *Review of Economic Studies*, 1988, 55, 139-151.
14. "Optimism Invites Deception," (with G. Faulhaber), *Quarterly Journal of Economics*, 1988, 103, 397-407.
15. "Optimal Security Design," (with D. Gale), *Review of Financial Studies*, 1988, 1, 229-263.
16. "Signalling by Underpricing in the IPO Market," (with G. Faulhaber), *Journal of Financial Economics*, 1989, 23, 303-323.
17. "The Market for Information and the Origin of Financial Intermediation," *Journal of Financial Intermediation*, 1990, 1, 3-30.
18. "Rational Rationing," (with G. Faulhaber), *Economica*, 1991, 58, 189-98.
19. "Arbitrage, Short Sales and Financial Innovation," (with D. Gale), *Econometrica*, 1991, 59, 1041-1068.
20. "Measurement Distortion and Missing Contingencies in Optimal Contracts," (with D. Gale), *Economic Theory*, 1992, 2, 1-26.

21. "Stock Price Manipulation" (with D. Gale), *Review of Financial Studies*, 1992, 5, 503-529.
22. "Churning Bubbles" (with G. Gorton), *Review of Economic Studies* 1993, 60, 813-836.
23. "Finite Bubbles with Short Sale Constraints and Asymmetric Information" (with S. Morris and A. Postlewaite), *Journal of Economic Theory* 1993, 61, 206-229.
24. "Limited Market Participation and Volatility of Asset Prices" (with D. Gale), *American Economic Review* 1994, 84, 933-955.
25. "A Welfare Comparison of Intermediaries and Financial Markets in Germany and the U.S." (with D. Gale), *European Economic Review* 1995, 39, 179-209.
26. "Financial Markets, Intermediaries, and Intertemporal Smoothing," (with D. Gale), *Journal of Political Economy* 1997, 105, 523-546.
27. "Financial Pricing of Insurance in the Multiple Line Insurance Company," (joint with R. D. Phillips, J. D. Cummins), *Journal of Risk and Insurance*, 1998, 65, 597-636.
28. "Using Genetic Algorithms to Find Technical Trading Rules," (joint with R. Karjalainen), *Journal of Financial Economics*, 1999, 51, 245-271.
29. "Diversity of Opinion and Financing of New Technologies," (joint with D. Gale), *Journal of Financial Intermediation*, 1999, 8, 68-89.
30. "Innovations in Financial Services, Relationships and Risk Sharing," (joint with D. Gale), *Management Science*, 1999, 45, 1239-1253.
31. "Bubbles and Crises," (joint with D. Gale), *Economic Journal*, 2000, 110, 236-255.
32. "Financial Contagion," (joint with D. Gale), *Journal of Political Economy*, 2000, 108, 1-33.
33. "A Theory of Dividends Based on Tax Clienteles," (joint with Antonio Bernardo and Ivo Welch), *Journal of Finance*, 2000, 55, 2499-2536.
34. "Financial Intermediaries and Markets" (with D. Gale) *Econometrica*, 2004, 72, 1023-1061.
35. "Financial Fragility, Liquidity and Asset Prices" (with D. Gale), *Journal of the European Economic Association*, 2004, 2, 1015-1048.
36. "Competition and Financial Stability" (with D. Gale), *Journal of Money, Credit and Banking*, 2004, 36, 433-480.
37. "Law, Finance and Economic Growth in China," (with J. Qian and M. Qian), *Journal of Financial Economics*, 2005, 77, 57-116.

38. “Credit Risk Transfer and Contagion,” (with E. Carletti), *Journal of Monetary Economics*, 2006, 53, 89-111.
39. “Beauty Contests, Bubbles and Iterated Expectations in Asset Prices,” (with S. Morris and H. Shin), *Review of Financial Studies*, 2006, 19, 719-752.
40. “Large Investors, Price Manipulation, and Limits to Arbitrage: An Anatomy of Market Corners,” (with L. Litov and J. Mei), *Review of Finance*, 2006, 10, 645-693.
41. “Mark-to-Market Accounting and Liquidity Pricing,” (with E. Carletti), *Journal of Accounting and Economics*, 2008, 45, 358-378.
42. “Interbank Market Liquidity and Central Bank Intervention,” (with E. Carletti and D. Gale), *Journal of Monetary Economics*, 2009, 56, 639-652.
43. “Credit Market Competition and Capital Regulation” (with E. Carletti and R. Marquez), *Review of Financial Studies* 24, 2011, 983-1018.
44. "Why are there Large Foreign Exchange Reserves? The Case of South Korea" (with J. Y. Hong), *Korean Social Science Research Council* 38(2), 2011, 1-33.
45. “Financing Firms in India,” (with R. Chakrabarti, S. De, J. Qian, and M. Qian), *Journal of Financial Intermediation*, 2012, 21, 409-445.
46. “Asset Commonality, Debt Maturity and Systemic Risk” (with A. Babus and E. Carletti), *Journal of Financial Economics*, 2012, 104, 519-534.
47. “Financial Crisis, Structure and Reform,” (with X. Gu and O. Kowalewski), *Journal of Banking and Finance* 36, 2012, 2960–2973.
48. “Money, Financial Stability, and Efficiency,” (with E. Carletti and D. Gale), *Journal of Economic Theory* 149, 2014, 100-127.
49. “The IPO of Industrial and Commercial Bank of China and the ‘Chinese Model’ of Privatizing Large Financial Institutions” (with J. Qian, S. Chan and M. Zhao), *European Journal of Finance* 20, 2014, 599-624.
50. “The African Financial Development and Financial Inclusion Gaps, (with E. Carletti, R. Cull, J. Qian and P. Valenzuela), *Journal of African Economies* 23, 2014, 614-642.
51. “Transmission of Financial Shocks in Loan and Deposit Markets: Role of Interbank Borrowing and Market Monitoring, (with A. Hryckiewicz, O. Kowalewski and G. Tümer-Alkan), *Journal of Financial Stability* 15, 2014, 112-126.
52. “Moral Hazard and Government Guarantees in the Banking Industry” (with E. Carletti, I. Goldstein and A. Leonello), *Journal of Financial Regulation* 1, 2015, 30-50.
53. “Stakeholder Governance, Competition and Firm Value,” (with E. Carletti and R.

- Marquez), *Review of Finance* 19, 2015, 1315-1346.
54. “Deposits and Bank Capital Structure,” (with E. Carletti and R. Marquez), *Journal of Financial Economics* 118, 2015, 601-619.
 55. “The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts,” (with A. Demircuc-Kunt, L. Klapper, and M. S. Martinez Peria), *Journal of Financial Intermediation* 27, 2016, 1-30.
 56. “Bank Lending, Crises and Changing Ownership Structure in Central and Eastern European Countries,” (with K. Jackowicz, O. Kowalewski and L. Kozlowski), *Journal of Corporate Finance* 42. 2017, 494-515.

BOOKS

57. *Financial Innovation and Risk Sharing* (with D. Gale), MIT Press, 1994.
58. *Comparing Financial Systems* (with D. Gale), MIT Press, 2000.
59. Eighth, through Twelfth Editions of *Principles of Corporate Finance* (with R. Brealey and S. Myers), New York: McGraw Hill-Irwin, 2005, 2009, 2010, 2013, 2016.
60. *Understanding Financial Crises*, (with D. Gale), Clarendon Lectures in Finance, Oxford University Press, 2007.
61. *Financial Crises* (edited with D. Gale), The International Library of Critical Writings in Economics 218, Edward Elgar, 2008.
62. *Financing The Future: Market-Based Innovations for Growth*, (with G. Yago), Wharton School Publishing/Pearson, 2010.
63. *Liquidity and Crises* (edited with E. Carletti, J. Krahnem, and M. Tyrell), Oxford University Press, 2010.
64. *Life in the Eurozone With or Without Sovereign Default?* (edited with E. Carletti and G. Corsetti), FIC Press, 2011.
65. *Fixing the Housing Market: Financial Innovations for the Future*, (with J. Barth, and G. Yago), Wharton School Publishing/Pearson, 2012.
66. *Governance for the Eurozone – Integration or Disintegration?* (edited with E. Carletti, and S. Simonelli), FIC Press, 2012.
67. *Is U.S. Government Debt Different?* (edited with A. Gelpern, C. Mooney and D. Skeel), FIC Press, 2012.
68. *Political, Fiscal and Banking Union in the Eurozone*, edited with E. Carletti and J. Gray, FIC Press, 2013.

69. *Bearing the Losses from Bank and Sovereign Default in the Eurozone*, edited volume, with E. Carletti and J. Gray, FIC Press, 2014.
70. *The New Financial Architecture in the Eurozone*, edited volume, with E. Carletti and J. Gray, European University Institute – Robert Schumann Centre, 2015.
71. *Filling the Gaps in Governance: The Case of Europe*, edited volume, with E. Carletti, J. Gray and M. Gulati, European University Institute – Robert Schumann Centre, 2016.
72. *The Changing Geography of Finance and Regulation in Europe*, edited volume, with E. Carletti, J. Gray and M. Gulati, European University Institute – Robert Schumann Centre, 2017.

CHAPTERS IN BOOKS:

73. "Information-Contracting in Financial Markets," in *Financial Markets and Incomplete Information-Frontiers of Modern Financial Theory, Volume 2*, edited by S. Bhattacharya and G. M. Constantinides, 1989, 188-197, Rowman and Littlefield.
74. "The Changing Nature of Debt and Equity: A Financial Perspective," in *Are the Differences between Equity and Debt Disappearing?* Conference Series No. 33, 1989, Federal Reserve Bank of Boston, 12-38.
75. "Quality Control in the Service Firm and Consumer Learning," (with G. Faulhaber) in *Service Quality: Multidisciplinary and Multinational Perspectives* edited by Stephen W. Brown, Evert Gummesson, Bo Edvardsson and Bengt Gustavsson, Lexington Books, 1991, 289-302.
76. "Stock Markets and Resource Allocation," in *Capital Markets and Financial Intermediation*, edited by C. Mayer and X. Vives, Cambridge, U.K.: Cambridge University Press, 1993, 81-108.
77. "Stock Markets and Resource Allocation," Japanese Translation in *Financial Review* published by the Japanese Ministry of Finance, June 1993, 34-55.
78. "Estimating Divisional Cost of Capital for Insurance Companies" in *Financial Management of Life Insurance Companies*, edited by J. D. Cummins and J. Lamm-Tennant, Boston, MA: Kluwer, 1993, 101-123.
79. "The Design and Redesign of Organizational Form," (with Peter Sherer) in *Redesigning the Firm*, edited by E. H. Bowman and B. Kogut, New York: Oxford University Press, 1995, 183-196.
80. "Corporate Financial Structure, Incentives and Optimal Contracting" (with A. Winton), Chapter 22 in *North-Holland Handbooks of Operations Research and Management Science: Finance* (Volume 9) edited by R. A. Jarrow, V. Maksimovic and W. T. Ziemba, New York: Elsevier, 1995, 693-720.

81. "Dividend Policy" (with R. Michaely), Chapter 25 in *North-Holland Handbooks of Operations Research and Management Science: Finance* (Volume 9) edited by R. A. Jarrow, V. Maksimovic and W. T. Ziemba, New York: Elsevier, 1995, 793-837.
82. "Universal Banking, Intertemporal Risk Smoothing, and European Financial Integration," Chapter 16 in *Universal Banking* edited by A. Saunders and I. Walter, Chicago: Irwin, 1996, 528-542.
83. "The Impact of Institutional Structure on Financial Innovation and Risk Sharing: A Comparison of the U.S., Germany and Japan," in *Policy Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean* edited by K. B. Staking, Inter-American Development Bank, Washington, D.C., 1997, 87-103.
84. "The Role of Information in Financial and Capital Markets" (in Japanese) Chapter 6 in *Change in Financial Capital Markets and the State* edited by Kenmei Kaizuka, Ministry of Finance, Tokyo, Japan, 1999, 113-141.
85. "Financing Strategies," (joint with J. Percival), in *Wharton on Managing Emerging Technologies* edited by George Day and Paul Schoemaker, New York: John Wiley & Sons, 2000, 289-306.
86. "Corporate Governance and Competition" (joint with D. Gale), *Corporate Governance: Theoretical and Empirical Perspectives* edited by X. Vives, 2000, Cambridge University Press, 23-94.
87. "Capital Structure and Imperfect Competition in Product Markets," *Incentives, Organization, and Public Economics: Papers in Honour of Sir James Mirrlees* edited by Peter J. Hammond and Gareth D. Myles, 2000, Oxford University Press, 281-301.
88. "Finance Applications of Game Theory," (with S. Morris), in *Advances in Business Applications of Game Theory* edited by K. Chatterjee and W. Samuelson, Kluwer Academic Publishers, Boston, 2001, 17-48.
89. "Asset Price Bubbles and Stock Market Interlinkages" (with D. Gale) in *Asset Price Bubbles: The Implications for Monetary, Regulatory, and International Policies* edited by William C. Hunter, George G. Kaufman, and Michael Pomerleano, Cambridge: MIT Press, 2003, 323-336.
90. "Capital Adequacy Regulation: In Search of a Rationale" (with D. Gale), in *Economics for an Imperfect World: Essays in Honor of Joseph Stiglitz* edited by R. Arnott, B. Greenwald, R. Kanbur and B. Nalebuff, Cambridge, MA: MIT Press 2003, 83-109.
91. "Venture Capital and Corporate Governance" (with W. Song) in *Corporate Governance and Capital Flows in a Global Economy* edited by P. Cornelius and B. Kogut, New York: Oxford University Press, 2003, Chapter 6, 133-156.
92. "Payout Policy" (with R. Michaely) in *North-Holland Handbook of Economics* edited by

- G. Constantinides, M. Harris, and R. Stulz, 2003, Amsterdam: Elsevier – North Holland, Chapter 7, 337-429.
93. “Comparative Financial Systems: A Discussion” (with D. Gale) in *Credit, Intermediation, and the Macroeconomy: Models and Perspectives*, 2004, 699-770, edited by A. Boot, S. Bhattacharya and A. Thakor, New York: Oxford University Press.
 94. “Asset Price Bubbles and Monetary Policy” (with D. Gale) in *Global Governance and Financial Crises*, 2004, edited by M. Desai and Y. Said, New York and London: Routledge, Chapter 3, 19-42.
 95. “Will China’s Financial System Stimulate or Impede the Growth of Its Economy,” (with J. Qian and M. Qian), in *China’s Economy: Retrospect and Prospect* edited by L. Brandt, T. Rawski, and G. Lin, July 2005, Asia Program Special Report No. 129, Woodrow Wilson International Center for Scholars, Washington, D.C., 33-41.
 96. “Systemic Risk and Regulation,” (with D. Gale), in *The Risks of Financial Institutions* edited by Mark Carey and Rene Stulz, University of Chicago Press, 2006, 341-375.
 97. “The Financial System of the EU 25,” (with L. Bartiloro and O. Kowalewski) in K. Liebscher, J. Christl, P. Mooslechner (eds.), *Financial Development, Integration and Stability in Central, Eastern and South-Eastern Europe*, Edward Elgar, Cheltenham, 2006.
 98. “Banks, Markets and Liquidity,” (with E. Carletti) in *The Structure and Resilience of the Financial System*, edited by C. Kent and J. Lawson, Sydney: Reserve Bank of Australia, 201-218, 2007.
 99. “Financial Structure and Corporate Governance in Europe, the USA, and Asia,” (with M. Chui, and A. Maddaloni) in *European Financial Markets and Institutions*, edited by X. Freixas, P. Hartmann, and C. Mayer, New York: Oxford University Press, 29-67, 2008.
 100. “An Introduction to Financial Crises” (with D. Gale), Chapter 1 in *Financial Crises* edited by F. Allen and D. Gale, The International Library of Critical Writings in Economics 218, Edward Elgar, 2008.
 101. “China's Financial System: Past, Present and Future” (with J. Qian and M. Qian), in *China's Economic Transition: Origins, Mechanism, and Consequences* edited by L. Brandt and T. Rawski, Cambridge University Press, 2008, 506-568.
 102. “Design of Contracts and Securities” in *Handbook of Financial Intermediaries and Banking*, edited by A. Thakor and A. Boot, Elsevier, 1-4.
 103. “Networks in Finance,” (with A. Babus), in *Network-based Strategies and Competencies* edited by P. Kleindorfer and J. Wind, Wharton School Publishing, 2008.
 104. “The Roles of Banks in Financial Systems” (with E. Carletti), in *The Oxford Handbook of Banking*, edited by A. Berger, P. Molyneux, and J. Wilson, Oxford University Press,

- 2009, Chapter 2, 37-57.
105. “A Review of China’s Financial System and Initiatives for the Future,” (with J. Qian, M. Qian, and M. Zhao), in *China’s Emerging Financial Markets: Challenges and Opportunities*, edited by J. Barth, J. Tatom, and G. Yago, Volume 8 in the The Milken Institute Series on Financial Innovation and Economic Growth, Springer, 2009, 3-72.
 106. “Comparing Legal and Alternative Institutions in Finance and Commerce” (with J. Qian) in *Global Perspectives of Rule of Law*, edited by J. Heckman and R. Nelson, Routledge, 2010, 118-144.
 107. “Law, Institutions and Finance in China and India,” (with R. Chakrabarti, S. De, J. Qian, and M. Qian), in *Emerging Giants: China and India in the World Economy* edited by B. Eichengreen, P. Gupta, and R. Kumar, 2010, 125-183.
 108. “Introduction to Liquidity and Crises,” in F. Allen, E. Carletti, J.P. Krahenen and M. Tyrell (eds.), *Liquidity and Crises*, Oxford University Press, 2011, 3–32.
 109. “Cross-Border Banking in Europe after the Crisis” (T. Beck, E. Carletti, P. Lane, D. Schoenmaker, and W. Wagner), *CEPR Policy Report*, 2011.
 110. “Financial Regulation Going Forward” (with E. Carletti), in Conference Proceedings of the 38th Oesterreichische Nationalbank Economics Conference on “Central Banking after the Crisis: Responsibilities, Strategies and Instruments,” 137-156.
 111. “The Global Financial Crisis” (with E. Carletti), in Conference Proceedings of the 13th Annual Bank of Chile Conference on *Monetary Policy under Financial Turbulence*, 2011, vol. 16.
 112. “Systemic Risk and Macroprudential Regulation” (with E. Carletti) in *The Global Macro Economy and Finance* edited by F. Allen, M. Aoki, J. Fitoussi, N. Kiyotaki, R. Gordon and J. Stiglitz, IEA Conference Volume No. 150-III, 191-210, 2012.
 113. “The Initial Public Offering of the Industrial and Commercial Bank of China (ICBC),” (with D. Huang, J. Qian and M. Zhao) in *The Chinese Economy: A New Transition* edited by M. Aoki and J. Wu, IEA Conference Volume No. 150-IV, 199-228, 2012
 114. “Structural Changes in European Financial Systems: The Impact of the Regulatory Framework on Investment in the European Union,” (with T. Beck and E. Carletti), Chapter 8 in *Investment and Investment Finance in Europe*, European Investment Bank, 243-275, 2013.
 115. “Corporate Governance and Intra-Group Transactions in European Bank Holding Companies During the Crisis,” (with O. Kowalewski and X. Gu) in Volume 14 of *International Finance Review, Global Banking, Financial Markets and Crises*, edited by B. Jeon and M. Oliveiro, Emerald, 365-431, 2013.
 116. “Restructuring the U.S. Housing Market,” (with James R. Barth and Glenn Yago),

Chapter 2 in *Financial Restructuring to Sustain Recovery* edited by M. Baily, R. Herring and Y. Seki, Brookings Institution, 25-95, 2013.

117. "China's Financial System: Opportunities and Challenges," (with J. "QJ" Qian, C. Zhang, and M. Zhao) Chapter 2 in *Capitalizing China*, edited by J. P. H. Fan and R. Morck, National Bureau of Economic Research, 63-143, 2013.
118. "Financial Markets, Institutions and Liquidity," (with E. Carletti), Reserve Bank of Australia, 2013 Conference Volume, *Liquidity and Funding Markets*, edited by A. Heath, M. Lilley and M. Manning, 77-107, 2013.
119. "Does Finance Accelerate or Retard Growth? Theory and Evidence," (with E. Carletti, J. "QJ" Qian, and P. Valenzuela), Chapter 5 in *Towards a Better Global Economy: Policy Implications for Global Citizens in the 21st Century*, edited by J. Behrman and S. Fardoust, Oxford University Press, 2014, 289-360.
120. "Resolving the African Financial Development Gap: Cross-Country Comparisons and a Within-Country Study of Kenya," (with E. Carletti, R. Cull, J. Qian, L. Senbet and P. Valenzuela), in *African Successes: Modernization and Development*, edited by S. Edwards, S. Johnson, and D. Weil, NBER and University of Chicago Press, forthcoming.
121. "Financial Structure, Economic Growth and Development," in *Handbook of Finance and Development*, edited by T. Beck and R. Levine, Edward Elgar, forthcoming.

INVITED AND PROCEEDINGS PAPERS:

122. "The Prevention of Default," *Journal of Finance*, 1981, 36(2), 271-276.
123. "Incomplete Markets and Incentives to Set Up an Options Exchange," (with D. Gale), *Geneva Papers on Risk and Insurance Theory* special issue entitled "The Allocation of Risk with Incomplete Asset Markets," edited by H. Polemarchakis, 1990, 15, 17-46.
124. "Stock Price Manipulation, Market Microstructure and Asymmetric Information," (with G. Gorton), *European Economic Review*, 1992, 36, 624-630.
125. "Introduction to Special Issue on Security Design," *Financial Management*, 1993, 22(2), 32-33.
126. "Strategic Management and Financial Markets," *Strategic Management Journal* Winter 1993 Special Issue, 1993, 14, 11-22.
127. "The Future of the Japanese Financial System," *Gendai Finance* 1997, No 2, 3-22. (In Japanese).
128. "The Theory of Financial Intermediation," (with A. M. Santomero), *Journal of Banking and Finance*, 1997, 21, 1461-1486.
129. "Optimal Financial Crises," (with D. Gale), *Journal of Finance*, 1998, Papers and

- Proceedings Issue, 53(4), 1245-1284.
130. "Guest Editor's Introduction: The Design of Financial Systems and Markets," *Journal of Financial Intermediation*, 1999, 8, 5-7.
 131. "The Asian Crisis and the Process of Financial Contagion," (with D. Gale), *Journal of Financial Regulation and Compliance*, 1999, 7, 243-249.
 132. "Bubbles, Crises and Policy," (with D. Gale) *Oxford Review of Economic Policy*, 1999, 15(3), 9-18.
 133. "Selection Editor's Introduction," *Journal of Finance*, 2000, 55, 1477.
 134. "Optimal Currency Crises," (with D. Gale), *Carnegie Rochester Series on Public Policy*, 2000, 53, 177-230.
 135. "What Do Financial Intermediaries Do?" (with A. M. Santomero), *Journal of Banking and Finance*, 2001, 25, 271-294.
 136. "Do Financial Institutions Matter?," (AFA Presidential Address), *Journal of Finance*, 2001, 56, 1165-1175.
 137. "Competition Among Banks: Introduction and Conference Overview," (with H. Gersbach, J. Krahen, and A. M. Santomero), *European Finance Review*, 2001, 5, 1-11.
 138. "Financial Structure and Financial Crises," *International Review of Finance*, 2001, 2, 1-19.
 139. "E-Finance: An Introduction," (with J. McAndrews and P. Strahan), *Journal of Financial Services Research*, 2002, August, 5-27.
 140. "Liquidity, Asset Prices and Systemic Risk," Proceedings of the 3rd Central Bank Conference on *Risk Measurement and Systemic Risk*, Bank for International Settlements, Basel, Switzerland, 2002, 27-37.
 141. "Comparing China's Financial System," (with J. Qian and M. Qian), *China Journal of Finance*, 2003, 1, 1-28. (In Chinese.)
 142. "Building China's Financial System in the 21st Century" (with J. Qian and M. Qian), 2003, *Harvard China Review IV* (1), 36-41
 143. "Financial Systems in Europe, the USA, and Asia" (with M. Chui and A. Maddaloni), *Oxford Review of Economic Policy*, 2004, 20, 490-508.
 144. "Sustained Economic Growth and the Financial System," (with H. Oura), *Monetary and Economic Studies, Bank of Japan*, 2004, 22 S-1, 95-119.
 145. "Liquidity and Financial Instability," (with P. Bolton), *Journal of the European Economic Association*, 2004, 2, 925-928.

146. “Financial Integration and EMU” (with W. Song), *European Financial Management*, 2005, 11, 7-24.
147. “Modeling Financial Instability,” *National Institute Economic Review No. 192*, April 2005.
148. “Corporate Governance in Emerging Markets,” *Oxford Review of Economic Policy*, 2005, 21(2), 164-177.
149. “From Cash-in-the-Market Pricing to Financial Fragility” (with D. Gale), *Journal of the European Economic Association*, 2005, 3(2-3), 535-546.
150. “The Corporate Governance Model of Japan: Shareholders are Not Rulers” (with M. Zhao), *Peking University Business Review*, July 2007. (In Chinese.)
151. “What is the Rationale for Regulating Banks?” (with E. Carletti), *Banking and Finance Monitor*, 2, December 2007, 40-43.
152. “The Role of Liquidity in Financial Crises” (with E. Carletti), 2008 Jackson Hole Conference Proceedings, Federal Reserve Bank of Kansas City, 379-412.
153. “India's Financial System” (with R. Chakrabarti and S. De), Nomura Institute of Capital Markets Research, Tokyo, Special Paper Number 3, October 2008. (In Japanese.)
154. “Should Financial Institutions Mark to Market?” (with E. Carletti), *Banque de France Financial Stability Review*, 12, October 2008, 1-6. (In French.)
155. “The Contributions of Stewart Myers to the Theory and Practice of Corporate Finance,” (with S. Bhattacharya, R. Rajan and A. Schoar), *Journal of Applied Corporate Finance*, 20, Fall 2008, 8-19.
156. “Brealey, Myers and Allen on Valuation, Capital Structure and Agency Issues” (with R. Brealey and S. Myers), *Journal of Applied Corporate Finance*, 20, Fall 2008, 49-57.
157. “Brealey, Myers and Allen on Real Options” (with R. Brealey and S. Myers), *Journal of Applied Corporate Finance*, 20, Fall 2008, 58-71.
158. “Financial Crises: Theory and Evidence” (with A. Babus and E. Carletti), *Annual Review of Financial Economics* 1, 2009, 97-116.
159. “An Overview of the Crisis: Causes, Consequences and Solutions” (with E. Carletti), *International Review of Finance* 10, 2010, 1-27.
160. “Mark-to-Market Accounting in Times of Crisis” (with E. Carletti), *Revue d'Économie Financière*, 100, 2010, 201–209.
161. “The Value of Bank Capital and the Structure of the Banking Industry,” (with P.

- Fulghieri and H. Mehran), *Review of Financial Studies* 24, 2011, 971-982.
162. "African Financial Systems: A Review" (with I. Otchere and L. Senbet) *Review of Development Finance* 1, 2011, 79-113.
 163. "Financing the Developing World" (with G. Yago), *The World Financial Review*, September-October 2011, 44-48.
 164. "Deposit Insurance and Risk Taking," (with E. Carletti and A. Leonello) *Oxford Review of Economic Policy* 27, 2011, 464 -478.
 165. "Trends in Financial Innovation and their Welfare Impact: An Overview," *European Financial Management* 18(4), 2012, 493–514.
 166. "New Theories to Underpin Financial Reform" (with E. Carletti) *Journal of Financial Stability* 9, 2013, 242– 249.
 167. "What is Systemic Risk?" (with E. Carletti) *Journal of Money, Credit and Banking*, Supplement to 45(1), August 2013, 121-127.
 168. "Systemic Risk from Real Estate and Macro-Prudential Regulation," (with E. Carletti), *International Journal of Banking, Accounting and Finance*, 5(1/2), 2013, 28-48.
 169. "Banks in Europe: The Impact of the Recent Regulatory Reforms," (with T. Beck and E. Carletti), (in French), *Revue d'Economie Financiere*, 112, December 2013, 21-36.
 170. "Introduction to Financial Economics," (with D. Vayanos and X. Vives), *Journal of Economic Theory*, 149, 2014, 1-14.
 171. "China's Financial System and the Law," (with J. "QJ" Qian), *Cornell International Law Journal* 47, 2014, 499-553.
 172. "China's Financial System and the Law," (with J. "QJ" Qian), *Peking University Law Review* 15, 2014, 327-368. (In Chinese)
 173. "Enhancing Prudential Standards in Financial Regulations," (with I. Goldstein, J. Jagtiani and W. Lang), *Journal of Financial Services Research* 49, 2016, 133-151.
 174. "An Overview of China's Financial System," (with J. "QJ" Qian, and X. Gu), *Annual Review of Financial Economics*, forthcoming.

BOOK REVIEWS, DISCUSSIONS, NEWSPAPER ARTICLES AND DICTIONARY ENTRIES:

175. Book review of *Financial Markets and Incomplete Information-Frontiers of Modern Financial Theory*, Volume 2, edited by S. Bhattacharya and G. M. Constantinides, 1989, 188-197, Rowman and Littlefield in *Review of Financial Studies*, 1990, 3, 309-313.

176. Discussion of "Banking, Financial Intermediation and Corporate Finance" by Martin Hellwig, Chapter 3 in *European Financial Integration*, edited by A. Giovannini and C. Mayer, 1991, Cambridge University Press, 64-68.
177. "Design of Securities" in *The New Palgrave Dictionary of Money and Finance* 1992, 647-648.
178. "Subordinated Debt" (with A. M. Santomero) in *The New Palgrave Dictionary of Money and Finance* 1992, 600-601.
179. Discussion of "Informational Capacity and Financial Collapse" by Douglas Gale in *Capital Markets and Financial Intermediation*, edited by C. Mayer and X. Vives, Cambridge, U.K.: Cambridge University Press, 1993, 148-151.
180. Comment on "Capital Requirements, Loan Renegotiation and the Borrower's Choice of Financing Source" by A. V. Thakor and P. Furlong Wilson *Journal of Banking and Finance*, 1995, 19, 717-718.
181. Book review of *Strong Managers, Weak Owners* by M. Roe, Princeton University Press, *Journal of Economic Literature* 1995, 33, 1994-1996.
182. "Riding on the Crest of a Wave can be Easy But ..." *Financial Times*, Mastering Finance Series, Number 10, July 1997, 2-4.
183. Book review of *The Political Economy of Japanese Financial Markets: Myths versus Reality* by Dick Beason and Jason James, *Economic Journal*, 2000, 110, F813-F814.
184. Book review of *The Asian Financial Crisis: Causes, Contagion and Consequences* by P. Agenor, M. Miller, D. Vines and A. Weber, *Economic Journal*, 2001, 111, F502-F503.
185. "Comments on Sir Edward George's "Comparing Financial Systems: How Much Convergence," *Volkswirtschaftliche Tagung 2001*, "*Der Einheitlinche Finanzmarkt – Ein Zwischenbilanz nach zwei Jahren* WWU, Austrian National Bank, 2001, 29-31.
186. Discussion of "Ageing and Financial Stability" by E. Philip Davies in *Ageing, Financial Markets and Monetary Policy* edited by A. Auerbach and H. Herrmann, 2002, Springer-Verlag, 228-234.
187. Discussion of "Liquidity, Default and Crashes: Endogenous Contracts in General Equilibrium" by J. Geanakoplos and "Trading Volume" by A. Lo and J. Wiang, *Advances in Economics and Econometrics: Theory and Applications, Eighth World Congress* edited by M. Dewatripont, L. Hansen and S. Turnovsky, 2003, Volume II, 278-283.
188. Discussion of "Monetary Policy and Financial Market Evolution" by V. Bencivenga and B. Smith in *Financial and Real Economic Activity* edited by A. Gilbert, St. Louis: *Federal Reserve Bank of St. Louis Review* 2003, 85(4), 27-29.
189. Discussion of "Banks and Markets: The Changing Character of European Finance" by R.

Rajan and L. Zingales in *The Transformation of the European Financial System* edited by V. Gaspar, P. Hartmann and O. Sleijpen, 2003, European Central Bank, 169-172.

190. Book review of *Theoretical Foundations of Corporate Finance* by J. Amaro de Matos in *Journal of Economics/ Zeitschrift für Nationalökonomie*, 2003, 79(2), 212-214.
191. Book review of *Financial Crises, Liquidity, and the International Monetary System* by Jean Tirole in *Journal of International Economics*, 2004, 62(1) 233-236.

UNPUBLISHED PAPERS

192. "The Social Value of Asymmetric Information," Rodney L. White Working Paper 23-84, University of Pennsylvania.
193. "Tax Clienteles and the Miller Model with Incomplete Markets," (with J. Jaffe), Rodney L. White Working Paper 5-88, University of Pennsylvania.
194. "Unbalanced Growth Redux: Sectoral Productivity and Capital Markets," (with G. Faulhaber and A. C. Mackinlay), 1989, Fishman-Davidson Discussion Paper 42, University of Pennsylvania.
195. "Scoring Rules for Continuous Probability Distributions when Utility Functions are Unknown," mimeo, University of Pennsylvania.
196. "Banking Regulation versus Securities Market Regulation" (with R. Herring), Working Paper 01-29, Wharton Financial Institutions Center, University of Pennsylvania.
197. "A Comparative Theory of Corporate Governance" (with D. Gale).

WORKS IN PROGRESS:

198. Does Economic Structure Determine Financial Structure?" (with L. Bartiloro, X. Gu and O. Kowalewski), working paper, March 2007.
199. "How Important Historically Were Financial Systems for Growth in the U.K., U.S., Germany, and Japan?" (with F. Capie, C. Fohlin, H. Miyajima, R. Sylla, G. Wood, and Y. Yafeh), working paper, 2011.
200. "What should Central Banks do about Real Estate Prices?," (with E. Carletti), working paper, 2012.
201. "Government Guarantees and Financial Stability" (with E. Carletti, I. Goldstein and A. Leonello), working paper, 2013
202. "Improving Access to Banking: Evidence from Kenya" (with E. Carletti, R. Cull, J. Qian, L. Senbet, and P. Valenzuela) working paper, 2013.

203. “Understanding Informal Financing,” (with M. Qian and J. Xie), working paper, 2014.