

Course Syllabus: Doctoral Studies in Corporate Finance

Instructor Information:

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Course Description:

This course provides an overview of modern corporate finance. The growth of corporate finance theory has been spectacular since Modigliani and Miller developed the capital-structure irrelevance proposition in 1958. After reviewing Modigliani and Miller (1958), we study the optimal capital structure under the presence of various frictions in which capital structure affects firm value. We cover trade-off theory, agency problem, security design, asymmetric information, and payout policy. In addition, we cover the literature on continuous-time model and banking.

Instructor Bio:

Kentaro Asai joined Australian National University in 2016 as an assistant professor in the College of Business and Economics. He earned his PhD, MA, and BA with Honors in economics from the University of Chicago. He has published internationally in scholarly journals and policy reports in economics and finance.

Assessment Summary:

| Assessment Task | Value | Due Date | Date for Return of Assessment |
|-------------------------|---------|----------|-------------------------------|
| 1. Problem sets | 20% x 2 | TBA | TBA |
| 2. Referee report | 10% | TBA | TBA |
| 3. Inclass presentation | 10% | TBA | TBA |
| 4. Take-home exam | 40% | TBA | TBA |

Course Schedule:

| Week/Session | Summary of Activities | Assessment |
|--------------|--|--------------------|
| 1 | Introduction/Capital structure irrelevance | |
| 2 | Math check/Trade-off theory | |
| 3 | Agency theory | |
| 4 | Security design I | Problem set 1 due |
| 5 | Security design II | |
| 6 | Asymmetric information model | Referee report due |
| 7 | Payout policy | |

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| 8 | Continuous-time model I | |
| 9 | Continuous-time model II/Review | Problem set 2 due |
| 10 | Banking | Presentation |
| 11 | Application I | Presentation |
| 12 | Application II/Empirical papers | Presentation |
| | Examination period | Take-home exam due |

Readings:

Textbook

The lecture is based on my lecture note published as Kentaro Asai, 2021, "Corporate Finance and Capital Structure: A Theoretical Introduction." In addition, interested students may want to read

- a. Jean Tirole, 2006, "The Theory of Corporate Finance."
- b. Oliver Hart, 1995, "Firms, Contracts, and Financial Structure."

Capital structure choice in a frictionless world

- a. Franco Modigliani and Merton H. Miller, 1958, "The Cost of Capital, Corporation Finance, and the Theory of Investment," *American Economic Review* 48: 261-297.
- b. Merton H. Miller, 1988, "The M-M Propositions After 30 Years," *Journal of Economic Perspectives* 2: 99-120.

Trade-off theory

- a. Merton H. Miller, 1977, "Debt and Taxes," *Journal of Finance* 32: 261-275.
- b. James H Scott, 1976, "A Theory of Optimal Capital Structure," *Bell Journal of Economics* 7: 33-54.
- c. Michael Bradley, Gregg A. Jarrell, E. Han Kim, 1984, "On the Existence of an Optimal Capital Structure: Theory and Evidence," *Journal of Finance* 39: 857-878.

Agency theory

- a. Stewart C. Myers, 1977, "Determinants of Corporate Borrowing" *Journal of Financial Economics* 5: 147-175.
- b. Michael C. Jensen and William H. Meckling, 1976, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics* 3: 305-360.
- c. Elazar Berkovitch and E. Han Kim, 1990, "Financial Contracting and Leverage Induced Over and Under-Investment Incentives," *Journal of Finance* 45: 765-794.

Security design

- a. Bengt Holmstrom, 1979, "Moral Hazard and Observability," *Bell Journal of Economics* 10: 74-91.
- b. Milton Harris and Artur Raviv, 1979, "Optimal Incentive Contracts with Imperfect Information," *Journal of Economic Theory* 20: 231-259.
- c. Robert Innes, 1990, "Limited Liability and Incentive Contracting with Ex-ante Action Choices," *Journal of Economic Theory* 52: 45-67.
- d. Robert M. Townsend, 1979, "Optimal Contracts and Competitive Markets with Costly State Verification," *Journal of Economic Theory* 21: 265-293.
- e. Douglas Gale and Martin Hellwig, 1985, "Incentive-Compatible Debt Contracts: The One-Period Problem," *Review of Economic Studies* 52: 647-663.

- f. Oliver Hart and John Moore, 1988, "A Theory of Debt Based on the Inalienability of Human Capital," *Quarterly Journal of Economics* 109: 841-879.
- g. Philippe Aghion and Patrick Bolton, 1992, "An Incomplete Contracts Approach to Financial Contracting," *Review of Economic Studies* 59: 473-494.

Asymmetric information model

- a. Hayne Leland and David H Pyle, 1977, "Informational Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance* 32: 371-387.
- b. Stephen A. Ross, 1977, "The Determination of Financial Structure: The Incentive-Signalling Approach," *The Bell Journal of Economics*, 8: 23-40.
- c. Stewart C. Myers and Nicholas S. Majluf, 1984, "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," *Journal of Financial Economics*, 13: 187-221.
- d. Kevin Rock, 1986, "Why New Issues Are Underpriced?" *Journal of Financial Economics*, 15: 187-212.

Payout policy

- a. Sudipto Bhattacharya, 1979, "Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy," *Bell Journal of Economics* 10: 259-70.
- b. Merton Miller and Kevin Rock, 1985, "Dividend Policy under Asymmetric Information," *Journal of Finance*, 40: 1031-51.
- c. Easterbrook, 1984, "Two Agency-Cost Explanations of Dividends," *American Economic Review*, 74: 650-9.
- d. Eric Floyd, Nan Li and Douglas J. Skinner, 2015, "Payout Policy Through the Financial Crisis: The Growth of Repurchases and the Resilience of Dividends" *Journal of Financial Economics*, 118: 299-316.

Continuous-time model

- a. Robert Merton, 1974, "On the Pricing of Corporate Debt: The Risk Structure of Interest Rates," *Journal of Finance* 29: 449-470.
- b. Hayne Leland, 1994, "Corporate Debt Value, Bond Covenants, and Optimal Capital Structure," *Journal of Finance* 49: 1213-1252.
- c. Hayne Leland, 1998, "Agency Costs, Risk Management, and Capital Structure," *Journal of Finance* 53: 1213-1243.
- d. Robert Goldstein, Nengjiu Ju, Hayne Leland, 2001, "An EBIT-Based Model of Dynamic Capital Structure," *Journal of Business* 74: 483-512.

Banking

- a. Douglas W. Diamond, 1984, "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies* 51: 393-414.
- b. Douglas W. Diamond and Philip H. Dybvig, 1983, "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91: 401-419.
- c. Thomas F. Hellmann, Kevin C. Murdock, and Joseph E. Stiglitz, 2000, "Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?," *American Economic Review* 90: 147-165.
- d. Franklin Allen and Douglas Gale, 2004, "Competition and Financial Stability," *Journal of Money, Credit, and Banking* 36: 453-480.
- e. John H. Boyd and Gianni De Nicolò, 2005, "The Theory of Bank Risk Taking and Competition Revisited," *Journal of Finance* 60: 1329-1343.
- f. David Martínez-Miera and Rafael Repullo, 2010, "Does Competition Reduce the Risk of Bank Failure?," *Review of Financial Studies* 23: 3638-3664.

Application

- a. Joshua D. Angrist, Guido W. Imbens, and Donald B. Rubin, 1996, "Identification of Causal Effects Using Instrumental Variables," *Journal of the American Statistical Association* 91: 444-455.
- b. Vladimir A. Atanasov and Bernard S. Black, 2015, "Shock-Based Causal Inference in Corporate Finance and Accounting Research," *Critical Finance Review*: forthcoming.
- c. Kai Li and Nagpurnanand Prabhala, 2005, "Self-Selection Models in Corporate Finance," Robert H. Smith School Research Paper.

I will add some new papers that test corporate finance theories, which will be announced later.