Duke University Fuqua School of Business

Professor Adriano Rampini Finance 553 Corporate Finance Theory Spring 2012

Syllabus

This second year Ph.D. course in the theory of corporate finance provides a rigorous introduction and prepares students for theoretical research in corporate finance.

Topics. The topics include the role of debt (week 1-3), liquidity (week 4-7), dynamic financing and macroeconomics (week 8-10), and collateral (week 11-13).

The course is based on journal articles and working papers, but you may want to use Tirole, J., 2006, *The Theory of Corporate Finance*, Princeton University Press, Princeton, as a reference book. You may also want to refer to Salanié, B., 2005, *The Economics of Contracts*, MIT Press, Cambridge, or Bolton, P., and M. Dewatripont, 2005, *Introduction to the Theory of Contracts*, MIT Press, Cambridge.

Prerequisites, Requirements, and Miscellanea. No background beyond first year graduate microeconomics is required, although familiarity with contract theory and information economics is useful. Course requirements include problem sets, a paper, and a final exam. The course meets on Wednesdays from 9am to 12pm in DeSanctis seminar room. The first class meets on Wednesday, January 18. You can contact me by email at rampini@duke.edu. The teaching assistant is Basil Williams and can be contacted at basil.williams@duke.edu. There will be occasional review sessions conducted by the TA. There is a course web page with a schedule and additional course information (url http://faculty.fuqua.duke.edu/~rampini/finance553.htm).

1. Debt and Financing with Costly State Verification

- Townsend, R., 1979, Optimal contracts and competitive markets with costly state verification, Journal of Economic Theory 21, 417-425.
- Gale, D., and M. Hellwig, 1985, Incentive-compatible debt contracts: the one-period problem, *Review of Economic Studies* 52, 647-663.

2. Financial Intermediaries

- Diamond, D., and P. Dybvig, 1983, Bank runs, deposit insurance, and liquidity, *Journal of Political Economy* 91, 401-19.
- Jacklin, C., 1987, Demand deposits, trading restrictions, and risk sharing, in: E. Prescott and N. Wallace, eds., *Contractual Arrangements for Intertemporal Trade*, University of Minnesota Press, Minneapolis.
- Diamond, D., 1984, Financial intermediation and delegated monitoring, *Review of Economic Studies* 51, 393-414.

3. Debt and Liquidity

- Dang, T.V., G. Gorton, and B. Holmström, 2010, Opacity and the optimality of debt for liquidity provision, working paper, Yale University and MIT.
- Gorton, G., and G. Pennacchi, 1990, Financial intermediaries and liquidity creation, *Journal* of Finance 45, 49-71.

4. Capital Reallocation: M&A, Takeovers, and Restructuring

- Kurlat, P., 2011, Lemons markets and the transmission of aggregate shocks, working paper, Stanford University.
- Eisfeldt, A., and A. Rampini, 2006, Capital reallocation and liquidity, *Journal of Monetary Economics* 53, 369-399.

5. Liquidity and Bubbles

Farhi, E., and J. Tirole, 2011, Bubbly liquidity, Review of Economic Studies forthcoming.

6. Liquidity, Financial Intermediation, and the Government

- Holmström, B., and J. Tirole, 1997, Financial intermediation, loanable funds, and the real sector, *Quarterly Journal of Economics* 112, 663-91.
- Holmström, B., and J. Tirole, 1998, Private and public supply of liquidity, Journal of Political Economy 106, 1-40.

7. Illiquidity and Search in Financial Markets

Duffie, D., N. Gârleanu and L. Pedersen, 2005, Over-the-counter markets, *Econometrica* 73, 1815-1847.

8. Dynamic Financing with Moral Hazard

- DeMarzo, P., and Y. Sannikov, 2006, Optimal security design and dynamic capital structure in a continuous-time agency model, *Journal of Finance* 61, 2681-2724.
- DeMarzo, P., M. Fishman, Z. He, and N. Wang, 2010, Dynamic agency and the q theory of investment, *Journal of Finance* forthcoming.
- Clementi, G. L., and H. Hopenhayn, 2006, A theory of financing constraints and firm dynamics, Quarterly Journal of Economics 121, 229-265.
- DeMarzo, P. and M. Fishman, 2007a, Agency and optimal investment dynamics, *Review of Financial Studies* 20, 151-188.

DeMarzo, P. and M. Fishman, 2007b, Optimal long-term financial contracting, Review of Financial Studies 20, 2079-2128.

9. Dynamic Financing with Limited Enforcement

- Rampini, A., and S. Viswanathan, 2011, Collateral and capital structure, working paper, Duke University.
- Albuquerque, R., and H. Hopenhayn, 2004, Optimal dynamic lending contracts with imperfect enforceability, *Review of Economic Studies* 71, 285-315.
- Cooley, T., R. Marimon, and V. Quadrini, 2004, Aggregate consequences of limited contract enforceability, *Journal of Political Economy* 112, 817-847.

10. Financing Constraints and Business Cycles

- Bernanke, B., and M. Gertler, 1989, Agency costs, net worth, and business fluctuations, *American Economic Review* 79, 14-31.
- Scheinkman, J., and L. Weiss, 1986, Borrowing constraints and aggregate economic activity, *Econometrica* 54, 23-45.
- Carlstrom, C., and T. Fuerst, 1997, Agency costs, net worth, and business fluctuations: a computable general equilibrium analysis, *American Economic Review* 87, 893-910.

11. Collateral and Asset Prices

Kiyotaki, N., and J. Moore, 1997, Credit cycles, Journal of Political Economy 105, 211-48.

- Kiyotaki, N., 1998, Credit and business cycles, Japanese Economic Review 49, 18-35.
- Kehoe, T., and D. Levine, 1993, Debt-constrained asset markets, *Review of Economic Studies* 60, 865-888.
- Rampini, A., and S. Viswanathan, 2010, Collateral, risk management, and the distribution of debt capacity, *Journal of Finance* 65, 2293-2322.

12. Collateral and Efficiency

Lorenzoni, G., 2008, Inefficient credit booms, Review of Economic Studies 75, 809-833.

Kilenthong, W., and R. Townsend, 2011, Market based, segregated exchanges with default risk, working paper, University of the Thai Chamber of Commerce and MIT.

13. Collateral and Heterogeneous Beliefs

Geanakoplos, J., 2003, Liquidity, default, and crashes, Advances in Economics and Econometrics: Theory and Applications, Eighth World Conference, Volume II, Econometric Society Monographs, 170-205. Geanakoplos, J., 2010, The leverage cycle, in: D. Acemoglu, K. Rogoff and M. Woodford, eds., NBER Macroeconomics Annual 2009 24, 1-65, University of Chicago Press, Chicago.

Simsek, A., 2010, When optimists need credit, working paper, Harvard University.

Additional Topics Not Covered This Year

Financing and Control

- Aghion, P., and P. Bolton, 1992, An incomplete contracts approach to financial contracting, *Review of Economic Studies* 59, 473-494.
- Hart, O., 1995, Firms, Contracts and Financial Structure, Oxford University Press, Oxford.
- Hart, O., and J. Moore, 2008, Contracts as reference points, Quarterly Journal of Economics 123, 1-48.

Financial Distress

- Myers, S., 1977, The determinants of corporate borrowing, *Journal of Financial Economics* 5, 147-175.
- Gertner, R., and D. Scharfstein, 1991, A theory of workouts and the effects of reorganization law, *Journal of Finance* 46, 1189-1222.
- Bulow, J., and J. Shoven, 1978, The bankruptcy decision, Bell Journal of Economics 9, 437-471.
- Shleifer, A., and R. Vishny, 1992, Liquidation values and debt capacity: a market equilibrium approach, *Journal of Finance* 47, 1343-66.

Multiple Financiers

- Bolton, P., and D. Scharfstein, 1996, Optimal debt structure and the number of creditors, Journal of Political Economy 104, 1-25.
- Berglöf, E., and E.-L. von Thadden, 1994, Short-term versus long-term interests: capital structure with multiple investors, *Quarterly Journal of Economics* 109, 1056-1084.
- Berglöf, E., G. Roland, and E.-L. von Thadden, 2010, The design of corporate debt structure and bankruptcy, *Review of Financial Studies* 23, 2648-2679.
- Stulz, R., and H. Johnson, 1985, An analysis of secured debt, Journal of Financial Economics 14, 501-521.

Finance and Growth

- Greenwood, J., and B. Jovanovic, 1990, Financial development, growth, and the distribution of income, *Journal of Political Economy* 98, 1076-1107.
- Castro, R., G.L. Clementi, and G. MacDonald, 2004, Investor protection, optimal incentives, and economic growth, *Quarterly Journal of Economics* 119, 1131-1175.
- Castro, R., G.L. Clementi, and G. MacDonald, 2009, legal institutions, sectoral heterogeneity, and economic development, *Review of Economic Studies* 76, 529-561.