Spring 2022 PhD Course

Financial Theory II, Part 2 (1.5 credits)

Instructor: Viral V Acharya, Department of Finance, NYU Stern (vva1@stern.nyu.edu) Teaching Assistant: Stefano Pastore, Department of Finance, NYU Stern (sp5528@stern.nyu.edu)

Timings: 1:30 to 4:30 PM (March 28, April 4, 11 and 25, May 2, 9)

Tentative Outline (a few papers to be discussed and related literature may be updated)

The focus of the course will be on theoretical models of corporate liquidity management (cash and lines of credit) in normal times and under stress; information frictions (corporate disclosures, income smoothing, risk-shifting, etc.); and the role of funding problems (agency issues, market freezes) in financial crises. Some relevant empirical evidence will also be discussed as motivating facts.

Format: Each class will consist of presentations by me or Stefano Pastore, with expectation that students would read the key papers before the class and be able to engage in informed conversations about the topic and the models being presented.

Evaluation: Each student will be required to write **three referee reports** during the course. The six candidate papers as options for writing referee reports that provide **critical and objective evaluation** are marked with (*) below. Referee reports can focus on just the theoretical aspects of the paper, i.e., the model, although students are free to also comment on the empirical parts if they wish. **The first report will be due by April 11, the second by May 2, and the third by May 16.** The final grade of each student will be based on the assessment of the three referee reports (20% weight each), three homework problems (5% weight each), and a final exam (25% weight). Referee report expectations will be discussed in first class.

Week by week course plan

1. Corporate liquidity management in normal times and under stress:

Week 1 (March 28: 1:30 to 4:30 PM):

- Almeida, Heitor, Murillo Campello and Michael S. Weisbach (2004): "The Cash Flow Sensitivity of Cash," *The Journal of Finance*, 59 (4), 1777-1804.
 <u>Download PDF</u>
- (*) Acharya, Viral V., Soku Byoun and Zhaoxia Xu (2022): "The Sensitivity of Cash Savings to the Cost of Capital," *Working Paper*. <u>Download PDF</u>

Related readings for Week 1:

 Acharya, Viral V., Heitor Almeida and Murillo Campello (2007): "Is Cash Negative Debt? – A Hedging Perspective on Corporate Financial Policies," *Journal of Financial Intermediation*, 16 (4), 515-554.
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Week 2 (April 4: 1:30 to 4:30 PM):

- Acharya, Viral V., Heitor Almeida and Murillo Campello (2013): "Aggregate Risk and the Choice between Cash and Lines of Credit," *Journal of Finance*, 68 (5), 2059-2116.
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- Kashyap, Anil K., Raghuram Rajan and Jeremy C. Stein (2002): "Banks as Liquidity Providers: An Explanation for the Coexistence of Lending and Deposit-taking," *Journal of Finance*, 57 (1), 33-73.
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Related readings for Week 2:

- Acharya, Viral V., Heitor Almeida, Filippo Ippolito and Ander Perez (2014): "Credit Lines as Monitored Liquidity Insurance: Theory and Evidence," *Journal of Financial Economics*, 112 (3), 287-319.
 <u>Download PDF</u>
- Acharya, Viral V., Heitor Almeida, Filippo Ippolito and Ander Perez (2020): "Bank Lines of Credit as Contingent Liquidity: Covenant Violations and their Implications," *Journal of Financial Intermediation*, 44, 100817.
 Download PDF
- Acharya, Viral V., Heitor Almeida, Filippo Ippolito and Ander Perez (2021): "Credit Lines and the Liquidity Insurance Channel," *Journal of Money, Credit and Banking*, 53 (5), 901-938.

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Week 3 (April 11: 1:30 to 4:30 PM):

 Acharya, Viral V., Sergei Davydenko and Ilya Strebulaev (2012): "Cash Holdings and Credit Risk," *Review of Financial Studies*, 25 (12), 3572-3609.
 <u>Download PDF</u> • (*) Acharya, Viral V., Heitor Almeida, Yakov Amihud and Ping Liu (2022): "Efficiency or Resiliency? Choosing between Operational and Financial Hedging," *Working Paper*. Download PDF

Related readings for Week 3:

- Almeida, Heitor, Murillo Campello, Igor Cunha and Michael S. Weisbach (2014): "Corporate Liquidity Management: A Conceptual Framework and Survey," *Annual Review of Financial Economics*, 6, 135-162.
 <u>Download PDF</u>
- (*) Bolton, Patrick, Neng Wang and Jinqiang Yang (2021): "Leverage Dynamics and Financial Flexibility," *Working Paper*.
 <u>Download PDF</u>

2. Information-theoretic issues:

Week 4 (April 25: 1:30 to 4:30 PM):

- Stein, Jeremy (1989): "Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior," *Quarterly Journal of Economics, 104 (4)*, 655-669.
 <u>Download PDF</u>
- Acharya, Viral V. and Bart M. Lambrecht (2015): "A Theory of Income Smoothing When Insiders Know More Than Outsiders," *Review of Financial Studies*, 28 (9), 2534-2574.

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Related readings for Week 4:

• Acharya, Viral V., Peter DeMarzo and Ilan Kremer (2011): "Endogenous Information Flows and the Clustering of Announcements," *American Economic Review*, 101 (7), 2955-2977.

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 Acharya, Viral V. and Alberto Bisin (2014): "Counterparty Risk Externality: Centralized Versus Over-the-Counter," *Journal of Economic Theory*, 149, 153-182.
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3. The Role of Funding Problems in Financial Crises:

Week 5 (May 2: 1:30 to 4:30 PM):

- Acharya, Viral V. and S. Viswanathan (2011): "Leverage, Moral Hazard and Liquidity," *Journal of Finance*, 66 (1), 99-138.
 <u>Download PDF</u>
- (*) Acharya, Viral V., Ravi Anshuman and S. Viswanathan (2021): "Bankruptcy Exemption of Repo Markets: Too Much Now for Too Little Tomorrow?," *Working Paper*.

Related readings for Week 5:

- Acharya, Viral V., Douglas Gale and Tanju Yorulmazer (2011): "Rollover Risk and Market Freezes," *Journal of Finance*, 66 (4), 1177-1209.
 <u>Download PDF</u>
- Acharya, Viral V. and Sascha Steffen (2020): "The Risk of Being a Fallen Angel and the Corporate Dash for Cash in the Midst of COVID," *Review of Corporate Finance Studies*, 9 (3), 430-471.
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- Acharya, Viral V., Robert F. Engle and Sascha Steffen (2021): "Why Did Bank Stocks Crash during COVID-19?," *Working Paper*. Download PDF

Week 6 (May 9: 1:30 to 4:30 PM):

- Stein, Jeremy (2012): "Monetary Policy as Financial-Stability Regulation," *Quarterly Journal of Economics*, 127 (1), 57-95.
 <u>Download PDF</u>
- (*) Acharya, Viral V., and Raghuram Rajan (2022): "Liquidity, Liquidity Everywhere, Not a Drop to Use – Why Flooding Banks with Central Bank Reserves May Not Expand Liquidity," *Working Paper*. Download PDF

Related readings for Week 6:

- Fabo, Brian, Martina Jancokova, Elisabeth Kempf, Lubos Pastor (2021): "Fifty Shades of QE: Comparing Findings of Central Bankers and Academics," *Journal of Monetary Economics*, 120, 1-20.
 Download PDF
- Acharya, Viral V., Ryan Banerjee, Matteo Crosignani, Tim Eisert and Renee Spigt (2022): "Exorbitant Privilege? Quantitative Easing and The Bond Market Subsidy of Prospective Fallen Angels," *Working Paper*. <u>Download PDF</u>