

## Spring 2024 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 (February 5, 12, 26; March 4, 11, 25), Gruber Conference Room (KMC 9-191)

### 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 the 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 **two referee reports** of the papers marked with (\*) below. Referee reports should provide a **critical and objective evaluation** of the papers, and can focus on just the theoretical aspects, 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 February 26, and the second by March 25.** The final grade of each student will be based on the assessment of the two referee reports (10% weight each), four homework problems (10% weight each), and a final exam (40% 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 (February 5: 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.  
[Download PDF](#)
- Acharya, Viral V., Soku Byoun and Zhaoxia Xu (2023): “The Sensitivity of Cash Savings to the Cost of Capital,” *Working Paper*.  
[Download PDF](#)

### **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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### **Homework 1 (due on February 12)**

### **Week 2 (February 12: 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.

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- Acharya, Viral V., Heitor Almeida, Yakov Amihud and Ping Liu (2022): “Efficiency or Resiliency? Choosing between Operational and Financial Hedging,” *Working Paper*.

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### **Related readings for Week 2:**

- 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.

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- (\*) Bolton, Patrick, Neng Wang and Jinqiang Yang (2021): “Leverage Dynamics under Costly Equity Issuance,” *Working Paper*.

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### **Week 3 (February 26: 1:30 to 4:30 PM):**

- 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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- 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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### **Referee Report 1 due**

### Related readings for Week 3:

- 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.  
[Download PDF](#)
- 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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### Additional (mostly empirical) readings around the Covid-19 episode, which may be useful for developing new research ideas:

- Acharya, Viral V., Maximilian Jager and Sascha Steffen (2023): “Contingent Credit Under Stress,” *Working Paper*.  
[Download PDF](#)
- 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.  
[Download PDF](#)
- Acharya, Viral V., Robert F. Engle and Sascha Steffen (2023): “Why Did Bank Stocks Crash during COVID-19?,” *forthcoming, Review of Financial Studies*.  
[Download PDF](#)
- Chodorow-Reich, Gabriel, Olivier Darmouni, Stephan Luck and Matthew Plosser (2022): “Bank Liquidity Provision Across the Firm Size Distribution,” *Journal of Financial Economics*, 144 (3), 908-932.  
[Download PDF](#)
- Greenwald, Daniel L., John Krainer and Pascal Paul (2023): “The Credit Line Channel,” *forthcoming, Journal of Finance*.  
[Download PDF](#)

**Homework 2 (due on March 4):** Read and summarize this literature. Review each paper around its key findings (tables/figures) and then relate these findings to each other. What

are the common lessons for theory that can be drawn from this literature? What is the novel finding of each paper? What are open theoretical questions that remain unanswered?

## **2. Information-theoretic issues:**

### **Week 4 (March 4: 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.  
[Download PDF](#)
- 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.  
[Download PDF](#)

### **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.  
[Download PDF](#)
- Acharya, Viral V. and Alberto Bisin (2014): “Counterparty Risk Externalities: Centralized Versus Over-the-Counter,” *Journal of Economic Theory*, 149, 153-182.  
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### **Homework 3 (due on March 11)**

## **3. The Role of Funding Problems in Financial Crises:**

### **Week 5 (March 11: 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.  
[Download PDF](#)
- (\*) Acharya, Viral V., Ravi Anshuman and S. Viswanathan (2023): “Bankruptcy Exemption of Repo Markets: Too Much Now for Too Little Tomorrow?,” *Working Paper*.  
[Download PDF](#)

### **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.  
[Download PDF](#)
- He, Zhiguo and Wei Xiong (2012): “Rollover Risk and Credit Risk,” *Journal of Finance*, 67 (12), 391-430.  
[Download PDF](#)
- Morris, Stephen and Hyun Song Shin (2015): “Illiquidity Component of Credit Risk – The 2015 Lawrence R. Klein Lecture,” *International Economic Review*, 57 (4), 1135-1148.  
[Download PDF](#)

### **Week 6 (March 25: 1:30 to 4:30 PM):**

- Stein, Jeremy (2012): “Monetary Policy as Financial-Stability Regulation,” *Quarterly Journal of Economics*, 127 (1), 57-95.  
[Download PDF](#)
- Acharya, Viral V., and Raghuram Rajan (2023): “Liquidity, Liquidity Everywhere, Not a Drop to Use – Why Flooding Banks with Central Bank Reserves May Not Expand Liquidity,” *forthcoming, Journal of Finance*.  
[Download PDF](#)

### **Referee Report 2 due**

### **Related empirical 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 Renée Spigt (2023): “Exorbitant Privilege? Quantitative Easing and The Bond Market Subsidy of Prospective Fallen Angels,” *Working Paper*.  
[Download PDF](#)

- Acharya, Viral V., Rahul Chauhan, Raghuram Rajan and Sascha Steffen (2023): “Liquidity Dependence and the Waxing and Waning of Central Bank Balance Sheets,” *Working Paper*.

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**Homework 4 (due on April 1):** Read and summarize this literature. Review each paper around its key findings (tables/figures) and then relate these findings to each other. What are the common lessons for theory that can be drawn from this literature? What is the novel finding of each paper? What are open theoretical questions that remain unanswered?