

# Banking and Financial Intermediation:

**This version: (First official draft)**

## Course instructors

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## Location

Campus Heilbronn

## Application and registration procedure

### Goal and target audience

### Application/Registration process

There is a limit of 15 participants maximum for this course. Please use the official application procedure for the TUM MGT Doctoral Summer School.

**The application starts on June 17, 2025, 12:00 noon. The deadline for application is June 30, 2025, end of day. Registration works on a first come, first served basis.** Registration is only possible for doctoral candidates of TUM School of Management.

Please find the link for registration here: <https://www.mgt.tum.de/faculty-research/doctoral-program/course-program>

## Course aims

### What this course is

This PhD course covers both the theory and the empirics of banking, financial intermediation and financial crises. Half of the course is devoted to the study of classical models (Diamond and Dybvig, Gorton and Pennacchi, Stiglitz and Weiss, Holmstrom and Tirole, etc.), and half is devoted to empirical tests of these models. The course also spends a significant amount of time discussing recent topics (financial crises, regulation, monetary policy, etc.) as well as unsettled empirical issues in the literature.

There are no strict prerequisites, but basic courses in microeconomics, macroeconomics and econometrics are strongly advised.

### What this course is not

This course is purely research-focused. As a consequence, it is not immediately designed for people seeking a job in the financial industry.

# Course objectives

## Knowledge, Skills and Learning Objectives

1. Gain a deep understanding of the role of banks in the financial system, both theoretically and empirically.
2. Better understand microeconomic methods and how they apply in the context of banks and other intermediaries.
3. Understand financial crises and policy interventions in this context.

## Preliminary schedule

The course takes place in the second week of the **TUM MGT Doctoral Summer School** from September 8 to September 19, 2025.

Please refer to the schedule for the Summer School for further details on the course schedule.

The schedule for the Summer School can be found in the digital flyer on the Summer School:

<https://www.mgt.tum.de/faculty-research/doctoral-program/course-program>

## Core readings

There are no required readings. However, the course will cover many important papers in banking and finance more broadly. There references to the papers we will cover are provided below.

- Introduction: **Financial intermediation in perfect markets**
- Session 1: **Liquidity creation, bank runs and deposit insurance**
  - **Main model:** Diamond and Dybvig (1983)
  - **Key topics:** insurance against consumption shocks, bank runs and coordination failures, deposit insurance, Mankiw's reflection problem.
  - **Readings / Main papers discussed:**
    - Calomiris, C. and Jaremski, M. (2016), "Stealing Deposits: Deposit Insurance, Risk Taking and the Removal of Market Discipline in Early 20th Century Banks", *Journal of Finance*, Vol. 74, 711-754.
    - Calomiris, C. and C. Kahn. (1991), "The role of demandable debt in structuring optimal banking arrangements", *American Economic Review*, Vol. 81, 497-513.
    - Chen, Q., Goldstein, I., Jiang, W. (2010), "Payoff complementarities and financial fragility: evidence from mutual fund outflows", *Journal of Financial Economics*, 97, 239-262.
    - Diamond, D. and P. Dybvig. (1983), "Bank runs, deposit insurance, and liquidity", *Journal of Political Economy*, Vol. 91, 401-419.

- Goldstein, I. (2012), “Empirical literature on financial crises: fundamentals vs. panic”, *The Evidence and Impact of Financial Globalization*, G. Caprio (Ed.), Elsevier-Amsterdam.
  - Goldstein, I. and A. Pauzner. (2005), “Demand deposit contracts and the probability of bank runs”, *Journal of Finance*, Vol. 60, 1293–1327.
  - Gorton, G. (1988) “Banking panics and business cycles”, *Oxford Economic Papers*, Vol. 40, 751–782.
  - Jacklin, C. 1987. “Demand deposits, trading restrictions, and risk sharing”. In *Contractual Arrangements for Intertemporal Trade* (ed. E. Prescott and N. Wallace), Chapter II, pp. 26–47. Minneapolis, MN: University of Minnesota Press.
- Session 2: **Creation of information-insensitive debt and funding dry-ups**
    - **Main model:** Gorton and Pennacchi (1990)
    - **Key topics:** Adverse selection, information-sensitivity of debt, banking panics, safe assets, securitization.
    - **Readings / Main papers discussed:**
      - Dang, T-V., Gorton, G., Holmstrom, B. and Ordonez, G. (2017), “Banks as Secret Keepers”, *American Economic Review*, Vol. 107, p. 1005-1029.
      - Gorton, G. (2017), “The history and economics of safe assets”, *Annual Review of Economics*, Vol. 9, 547-586.
      - Gorton, G., and G. Pennacchi. (1990), “Financial Intermediaries and Liquidity Creation,” *Journal of Finance*, XLV, 49-71.
      - Holmstrom, B. (2015), “Understanding the role of debt in the financial system”, *BIS Working Paper*, No 479.
      - Pérignon, C., Thesmar, D. and Vuillemeys, G. (2018), “Wholesale funding dry-ups”, *Journal of Finance*, Vol. 73, 575-617.
      - Sunderam, A. (2015), “Money creation and the shadow banking system”, *Review of Financial Studies*, Vol. 28.
  - Session 3: **Detegated monitoring and relationship banking**
    - **Main model:** Diamond (1984)
    - **Key topics:** Specialness of bank loans, monitoring, diversification, relationship banking, hold-up problems.
    - **Readings / Main papers discussed:**
      - Boot, A. (2000), “Relationship Banking: What Do We Know?”, *Journal of Financial Intermediation*, Volume 9, Issue 1, Pages 7-25.

- Diamond, D. (1984), “Financial Intermediation and Delegated Monitoring,” *Review of Economic Studies*, Vol. 51, 393–414.
  - Diamond, D. (1996), “Financial Intermediation as Delegated Monitoring: A Simple Example”, *Federal Reserve Bank of Richmond Economic Quarterly*, Vol. 82/3.
  - Gustafson, M. T., Ivanov, I. T. and Meisenzahl, R. (2016), “Bank monitoring: Evidence from syndicated loans”, Working paper.
  - Hale, G. and Santos, J. (2009), “Do banks price their informational monopoly?”, *Journal of Financial Economics*, Vol. 93, p. 185-206.
  - James, C. (1987), “Some evidence on the uniqueness of bank loans”, *Journal of Financial Economics*, Vol. 19, 217-235.
  - Nguyen, N.-L. (2016), “Do Bank branches still matter? The effects of closings on local economic outcomes”, Working paper.
  - Petersen, M. and Rajan, R. (1994), “The Benefits of Lending Relationships: Evidence from Small Business Data”, *Journal of Finance*, Vol. 49, p. 3-37.
  - Rajan, R. (1992), “Insiders and Outsiders: The Choice between Informed and Arm’s-Length Debt”, *Journal of Finance*, Vol. 47, pp. 1367-1400.
- Session 4: **Information frictions in banking**
    - **Main model:** Stiglitz and Weiss (1981)
    - **Key topics:** Credit rationing, pooling, menus of contracts, credit bureaus
    - **Readings / Main papers discussed:**
      - Berger, A. N. and Udell, G. (1992), “Some Evidence on the Empirical Significance of Credit Rationing”, *Journal of Political Economy*, Vol. 100, No. 5, pp. 1047-1077
      - Bester, H. (1985), “Screening vs rationing in credit markets with imperfect information”, *American Economic Review* 75 (4): 850–855.
      - Chiappori, P.A., Salanié, B. (2000), “Testing for asymmetric information in insurance markets”, *Journal of Political Economy*, 108:56–78
      - De Meza, D., and D. Webb. (1987), “Too much investment: A problem of asymmetric information”, *Quarterly Journal of Economics*, 102 (2): 281–292.
      - Doblas-Madrid, A. and Minetti, R., (2013), “Sharing information in the credit market: Contract-level evidence from U.S. firms”, *Journal of Financial Economics*, 109, 198–223.
      - Jappelli, T., Pagano, M., (1993), “Information sharing in credit markets”, *Journal of Finance*, 48 (5), 1693-1718.

- Stiglitz, J. and A; Weiss. (1981), “Credit Rationing in Markets with Imperfect Information”, *American Economic Review*, vol. 71, issue 3, 393-410
- Session 5: **Credit crunches**
  - **Main model:** Holmstrom and Tirole (1997)
  - **Key topics:** Moral hazard, net worth, credit crunches, Khwaja-Mian estimation, bank lending channel, balance sheet channel.
  - **Readings / Main papers discussed:**
    - Almeida, H., Campello, M., Laranjeira, B. and Weisbenner, S. (2012), “Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis”, *Critical Finance Review*, Vol. 1, p. 3-58.
    - Holmstrom, B. and Tirole, J. (1997), “Financial intermediation, loanable funds and the real sector”, *Quarterly Journal of Economics*, Vol. 112, p. 663-691.
    - Ivashina, V. and Scharfstein, D. (2010), “Bank lending during the financial crisis of 2008”, *Journal of Financial Economics*, Vol. 97, p. 319-338.
    - Iyer, R., Peydro, J.-L., da-Rocha-Lopes, S. and Schoar, A. (2014), “Interbank Liquidity Crunch and the Firm Credit Crunch: Evidence from the 2007–2009 Crisis”, *Review of Financial Studies*, Vol. 27, p. 347-372.
    - Khwaja, A. and Mian A. (2008), “Tracing the impact of bank liquidity shocks: Evidence from an emerging market,” *American Economic Review*, 98, p. 1413-1442.
- Session 6: **Mutual funds**
  - **Main model:** Berk and Green (2004)
  - **Key topics:** Mutual funds, flow-performance relationship, skill vs. luck, stock-picking, market timing, agency conflicts in delagation
  - **Readings / Main papers discussed:**
    - Berk, J. and Green, R. (2004), “Mutual Fund Flows and Performance in Rational Markets”, *Journal of Political Economy*, Vol. 112.
    - Cremers, M., Driessen, J., Maenhout, P. and Weinbaum, D. (2009). “Does Skin in the Game Matter? Director Incentives and Governance in the Mutual Fund Industry”, *Journal of Financial and Quantitative Analysis*, Vol. 44, p. 1345-1373
    - Fama, E. and French, K. (2010), “Luck versus Skill in the Cross-Section of Mutual Fund Returns”, *Journal of Finance*, Vol. 65, p. 1915-1947
    - Kacperczyk, M. and Van Nieuwerburgh, S. and Veldkamp, L. (2014), “Time-Varying Fund Manager Skill”, *Journal of Finance*, Vol. 69

- Koenker, R. and Hallock, K. F. (2001). "Quantile regression", *Journal of Economic Perspectives*, Vol. 15, p. 143-156.
- Mahoney, P. G. (2004). "Manager-Investor conflicts in mutual funds", *Journal of Economic Perspectives*, Vol. 18, p. 161-182.

## Course procedures

**Attendance is mandatory. Please be on time. Active participation in class is strongly encouraged.**

## Assessment

The participants will be assessed based on their participation during class (50%) and based on a short assignment to be provided at the beginning of the course (50%).

## Workload

3 ECTS (21 hours lectures, 90 hours total workload)