ECON GU4710: Finance and the Real Economy

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Spring 2025

Class meetings: Monday-Wednesday 8:40–9:55 am, Hamilton Hall 602
Office hours (updated): Tuesdays 1:00–2:00 pm, IAB 1131

TA: Nicholas Zevanove nsz2108@columbia.edu
TA Recitations: Thursday 5:00–6:00 pm, Fayerweather 301M

Undergrad TA: Sofia Vergara sr4113@barnard.edu
Undergrad TA Office Hours: Thursday 9:00–10:00am, Lehman Library Room 329A

Overview This course combines economic theory and empirical evidence to study the links between financial markets and the real economy. We will consider questions such as: What is the welfare role of finance? How do financial markets affect households and firms? How do shocks to the financial system transmit to the real economy? How do financial markets impact income and wealth inequality?

Prerequisites Economics 3211 (micro), 3213 (macro), and 3412 (econometrics) (or STAT 1201 or equivalent) are prerequisites for this course. In addition, working knowledge of a data analysis software (such as Stata, R, or Python) is required.

Grading Your course grade will be based on approximately ten problem sets (20% of the grade), participation (10% of the grade), a midterm exam (20% or 30% of the grade) and a final exam (40% or 50% of the grade). If you do better on the midterm than the final, the midterm will count for 30% and the final will count for 40%. Conversely, if you do better on the final than the midterm, the midterm will count for 20% and the final will count for 50%. If, for a valid reason, you miss the midterm, the final will count for 70% of the grade.

The midterm exam will take place in class, Wednesday, March 12th at the usual class time. The final exam is scheduled for Friday, May 9 9:00am–12pm. Both exams are closed-book, although you can bring a one letter-size hand-written note (8.5 x 11 inches), one-sided for the midterm and two-sided for the final. Calculators are not allowed.

Problem sets Please use Gradescope to turn in your problem sets. Late problem sets will not be accepted, however the lowest problem set score will be dropped. Some problem sets will require some coding. For these assignments, students are encouraged to work in pairs. While you should hand in a separate report representing your answers to the questions posed in the assignment, you can submit a common code. You can also use LLMs to help you write the code for these problem sets. Do not use LLMs for problem sets that do not involve coding.

Class Conduct Laptops are fine for taking notes, but please respect your classmates and instructor by limiting yourself to class-related activities.

Statement on Academic Dishonesty As members of an academic community, each of us has a responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity, and plagiarism is a very serious violation. While I encourage you to discuss the course readings and assignments with your classmates, all work that you turn in, both for assignments and on exams, must be your own. Any suspected case of plagiarism will be reported to the university, and students who breach their intellectual responsibility in this regard should anticipate being asked to leave Columbia.

Statement on Disabilities Accommodations If you have an Accommodation Letter please let me know by email. If you believe that you might need an accommodation, please contact Disability Services.

TextBooks and Additional Readings

- Optional readings:

  Joshua D. Angrist and Jorn-Steffen Pischke *Mastering 'Metrics:The Path from Cause to Effect*

  Atif Mian and Amir Sufi *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again*

  Robert J. Shiller *Finance and the Good Society*

Course Outline This outline gives a list of references for the material presented in class. References prefixed with an asterisk (*) are strongly recommended readings.

Introduction: Overview of the Financial Sector

Robin Greenwood and David Scharfstein. "The growth of finance". In: *The Journal of Economic Perspectives* 27.2 (2013), pp. 3–28

Thomas Philippon. "Has the US finance industry become less efficient? On the theory and measurement of financial intermediation". In: *The American Economic Review* 105.4 (2015), pp. 1408–1438

Lending to Firms

Week 1: Capital Allocation

*Chapter 5 Joshua D Angrist and Jörn-Steffen Pischke. *Mastering'metrics: The path from cause to effect.* Princeton University Press, 2014 (OR *Chapter 10 James H Stock and Mark W Watson. “Introduction to econometrics”. In: (2007))

Jith Jayaratne and Philip E Strahan. “The finance-growth nexus: Evidence from bank branch deregulation”. In: *The Quarterly Journal of Economics* 111.3 (1996), pp. 639–670

Bartelsman Eric, Scarpetta Stefano, and Haltiwanger John. “Cross-country differences in productivity: The role of allocation and selection”. In: *American Economic Review* (2013)

Marianne Bertrand, Antoinette Schoar, and David Thesmar. “Banking deregulation and industry structure: Evidence from the French banking reforms of 1985”. In: *The Journal of Finance* 62.2 (2007), pp. 597–628

Week 2: Financing constraints

Bengt Holmstrom and Jean Tirole. “Financial intermediation, loanable funds, and the real sector”. In: *the Quarterly Journal of economics* 112.3 (1997), pp. 663–691 (see Tirole “The Theory of Corporate Finance” Section 3.4 for a textbook version)

Erik Hurst and Annamaria Lusardi. “Liquidity constraints, household wealth, and entrepreneurship”. In: *Journal of political Economy* 112.2 (2004), pp. 319–347

Thomas Chaney, David Sraer, and David Thesmar. “The collateral channel: How real estate shocks affect corporate investment”. In: *The American Economic Review* 102.6 (2012), pp. 2381–2409

Lending to Households

Week 3: Consumption-smoothing

Milton Friedman. “The permanent income hypothesis”. In: *A theory of the consumption function*. Princeton University Press, 1957, pp. 20–37

Brian T Melzer. “The real costs of credit access: Evidence from the payday lending market”. In: *The Quarterly Journal of Economics* 126.1 (2011), pp. 517–555

David Laibson. “Golden eggs and hyperbolic discounting”. In: *The Quarterly Journal of Economics* 112.2 (1997), pp. 443–478

Week 4: Risk-sharing

Atif Mian, Kamalesh Rao, and Amir Sufi. “Household balance sheets, consumption, and the economic slump”. In: *The Quarterly Journal of Economics* 128.4 (2013), pp. 1687–1726

Week 5: Securitization

*Joshua Coval, Jakub Jurek, and Erik Stafford. "The economics of structured finance". In: *The Journal of Economic Perspectives* 23.1 (2009), pp. 3–25

Joshua D Coval, Jakub W Jurek, and Erik Stafford. "Economic catastrophe bonds". In: *The American Economic Review* 99.3 (2009), pp. 628–666

Bo Becker and Victoria Ivashina. "Reaching for yield in the bond market". In: *The Journal of Finance* 70.5 (2015), pp. 1863–1902

Benjamin J Keys et al. "Did securitization lead to lax screening? Evidence from subprime loans". In: *The Quarterly journal of economics* 125.1 (2010), pp. 307–362

Christophe Pérignon and Boris Vallée. "The political economy of financial innovation: evidence from local governments". In: *The Review of Financial Studies* 30.6 (2017), pp. 1903–1934

Equity

Week 6 & 7: Aggregating Information

Albert S Kyle. "Continuous auctions and insider trading". In: *Econometrica: Journal of the Econometric Society* (1985), pp. 1315–1335

Robert J Shiller. "Do stock prices move too much to be justified by subsequent changes in dividends?" In: *American Economic Review* (1981)

John Y Campbell and Robert J Shiller. "The dividend-price ratio and expectations of future dividends and discount factors". In: *The Review of Financial Studies* 1.3 (1988), pp. 195–228

Jennie Bai, Thomas Philippon, and Alexi Savov. "Have financial markets become more informative?" In: *Journal of Financial Economics* 122.3 (2016), pp. 625–654

Week 8: High-Frequency Trading

Eric Budish, Peter Cramton, and John Shim. "The high-frequency trading arms race: Frequent batch auctions as a market design response". In: *The Quarterly Journal of Economics* 130.4 (2015), pp. 1547–1621

Charles M Jones. "What do we know about high-frequency trading?" In: (2013)

Emiliano Pagnotta and Thomas Philippon. *Competing on speed.* Tech. rep. National Bureau of Economic Research, 2011

Week 9: Asset Management

René M Stulz. “Hedge funds: Past, present, and future”. In: *Journal of Economic Perspectives* 21.2 (2007), pp. 175–194

Jakub W Jurek and Erik Stafford. “The cost of capital for alternative investments”. In: *The Journal of Finance* 70.5 (2015), pp. 2185–2226

Kenneth R French. “Presidential address: The cost of active investing”. In: *The Journal of Finance* 63.4 (2008), pp. 1537–1573

Jonathan B Berk and Richard C Green. “Mutual fund flows and performance in rational markets”. In: *Journal of political economy* 112.6 (2004), pp. 1269–1295

Week 10: Impact Investing

José Azar, Martin C Schmalz, and Isabel Tecu. “Anti-competitive effects of common ownership”. In: *Journal of Finance* (2017)

Jonathan Berk and Jules H van Binsbergen. “The Impact of Impact Investing”. In: *Available at SSRN 3909166* (2021)

Inequality

Week 11: The Role of Finance for Labor Income Inequality

Thomas Philippon and Ariell Reshef. “Wages and human capital in the US finance industry: 1909–2006”. In: *The Quarterly Journal of Economics* 127.4 (2012), pp. 1551–1609

Claire Célérier and Boris Vallée. “Returns to talent and the finance wage premium”. In: (2017)

Week 12: The Role of Finance for Capital Income Inequality

Emmanuel Saez and Gabriel Zucman. “Wealth inequality in the United States since 1913: Evidence from capitalized income tax data”. In: *The Quarterly Journal of Economics* 131.2 (2016), pp. 519–578

Thomas Piketty. *Capital in the twenty-first century*. Harvard University Press, 2017

Matthieu Gomez. “Decomposing the Growth of Top Wealth Shares”. Econometrica. 2023