COURSE............. Quantitative Methods Applied for Corporate Finance
SEMESTER/YEAR.... 2°/2026
PROGRAM............ School of Methods
CLASS-HOURS........ ☒30 hours
PROFESSOR.......... Murillo Campello
LANGUAGE...........ENGLISH

COURSE OBJECTIVES

This is a condensed doctoral-level class on corporate finance, covering modern empirical work. The class will also look at the interface between corporate finance and other research areas, such as banking and industrial organization. The overarching goal is to expose students to "state-of-the-art" research and prepare them to conduct their own work using new methods and tools.

LEARNING GOALS

The course learning goals are presented in the table below, showing how they contribute to the learning goals related to methods, for the stricto sensu graduate programs at FGV-EAESP.

Program learning goals	**Course learning goals**	**Level of contribution**
Scientific method	To understand and critically discuss different methodological approaches to cutting-edge scientific methods used in assigning causal effects in empirical research.	● ● ●
Research project / procedures	To understand how prepare research projects. Hands-on approach to how to write papers that can be published at top academic journals.	● ● ○
Qualitative research methods	The course is primarily about quantitative methods, but qualitative insights are explored.	● ○ ○
Quantitative research methods	This is a course primarily dedicated to understanding quantitative methods used to design "empirical identification strategies." It ultimately helps researches separate casual effects from correlation effects. It helps policy making at firms, governments, and households.	● ● ●
Development of academic papers	To discuss brand new ideas on matters that lead to papers that can be published at top academic journals.	● ● ●
Other course learning goals: To verbally present research papers. To write a substantive report about research papers.		

The full description of the learning goals of FGV-EAESP stricto sensu graduate programs can be found at https://rebrand.ly/cursos-pos-eaesp.

PREVIOUS KNOWLEDGE REQUIRED

Basic knowledge of econometrics is important. Topics expected include: OLS regressions, instrumental variables regressions, and panel data analysis. Familiarity with statistical packages, such as STATA, is helpful.

CONTENT/METHODOLOGY

Lectures and in-class discussion
Homework assignments
Referee report
Paper presentation/discussion

ASSESSMENT

Students will be evaluated on a number of activities and will be graded according to standard practice used at FGV. There will be hands-on data home works, one referee report assignment, and one presentation/discussion of papers in circulation. I will describe these items in detail next.

- Regular class participation: 20%

All students are expected to have read prior to class all the papers scheduled for discussion that day. Students need to come to the classroom with their minds on the material being discussed. Just "showing up" for class does not count for class participation.

- Referee report, homework assignments, other tasks: 50%

I will give specific guidelines regarding homework assignments during the course. These will be data-oriented, hands-on tasks. On the referee report, I am looking for the students to mature on the art of writing reports. The report will be on a paper that I have actually reviewed for a top journal, so the students can compare their assessment with that which decided the fate of the paper. Referee reports are individual work, but other assignments may be done in pairs (fostering a sense of collaboration/co-authorship).

- Paper presentation/discussion in the "mini AFAs" (last day of classes): 30%

One class will be dedicated to emulating an American Finance Association session-like setting where students will present and discuss papers as if they were professors at a research school. Papers will be chosen among the "hottest/newest" WPs in circulation. Some students will present (i.e., defend) the papers as if they were their own work, while others will discuss (i.e., critique) the papers. Presentations and discussions will be tightly timed and they will have to be professional. This is practice for the type of "ideas competition" you will see in the real world of academia. Each student should request to either present or discuss one paper in the list. Selection will be primarily made on a first-come/first-served basis. Your goal is to present yourself as a good presenter/debater of ideas. As I grade your performance, I'll pay particular attention to items like the how comfortable you are with your presentation, the quality of your slides and how you "sync with" (go through) your slides, ability to make your point within the assigned time, seriousness/motivation of your performance, ability to criticize/refute others. You will be asked to choose one paper from a list provided after we have an account of the number of students in the course.

The overall, final grade will fall between 0 and 10; with the passing grade cut-off set at 6.

COURSE SCHEDULE

Class #1 (SP - June 29; from 1 to 4:45PM)	Course Introduction / "How to Publish in Top Journals"
Class #2 (SP - July 1; from 1 to 4:45PM)	Empirical Methods I [Endogeneity] / Assignment#1 Due
Class #3 (SP - July 3; from 1 to 4:45PM)	Empirical Methods II [D & DID Estimators]
Class #4 (SP - July 6; from 1 to 4:45PM)	Empirical Methods II [DID & DIDID Estimators]
Class #5 (SP - July 7; from 1 to 4:45PM)	Empirical Methods III [IV & LATE Estimators]
Class #6 (RJ - July 13; from 1 to 4:45PM)	Empirical Methods IV [RDD & RKD Estimators]
Class #7 (RJ - July 14; from 1 to 4:45PM)	Empirical Methods V [Matching Estimators]
Class #8 (Virtual - July 20; from 1 to 4:45PM)	Mini AFAs / Referee Report / Assignment #2 Due

BIBLIOGRAPHY

Endogeneity, Basic Identification, Natural Experiments, and Difference Estimators: Lecture Notes I & II

Ahern, K. and A. Dittmar, 2012, "The Changing of the Boards: The Impact of Firm Valuation of Mandated Female Board Representation?" *Quarterly Journal of Economics* 125, 137-197.

Almeida, H. and M. Campello, 2007, "Financial Constraints, Asset Tangibility, and Corporate Investment," *Review of Financial Studies* 20, 1429-1460.

Amore, M. and M. Bennedsen, 2013, "The Value of Political Connections in a Low-Corruption Environment," *Journal of Financial Economics* 110, 387-402.

(*) Aretz, K., M. Campello, and M. Marchica, 2020, "Access to Collateral and the Democratization of Credit: France's Reform of the Napoleonic Security Code," *Journal of Finance* 75, 45-90.

(*) Baker, A., D. Larcker, and C. Wang, 2022, "How Much Should We Trust Staggered Difference-in-Differences Estimates?" *Journal of Financial Economics* 144, 370-395.

(*) Bertrand, M., E. Duflo, and S. Mullainathan, 2004, "How Much Should We Trust Differences-in-Differences Estimates?" *Quarterly Journal of Economics 119,* 249-275.

(*) Bertrand, M. and S. Mullainathan, 2003, "Enjoying the Quiet Life? Corporate Governance and Managerial Preferences," *Journal of Political Economy* 94, 991-1113.

(*) Bertrand, M. and S. Mullainathan, 2004, "Are Emily and Greg More Employable that Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review* 94, 991-1013.

(*) Bernstein, S., A. Kortweg, and K. Laws, 2017, "Attracting Early Stage Investors: Evidence from a Randomized Field Experiment," Journal of Finance 72, 509-538.

Besley, T. and A. Case, 2000, "Unnatural Experiments? Estimating the Incidence of Endogenous Policies," *Economic Journal* 110, 672-694.

(*) Blanchard, O., F. Lopez-de-Silanes, and A. Shleifer, 1994, "What do Firms do with Cash Windfalls?" *Journal of Financial Economics* 36, 337-360.

Boehmer, E., C. Jones, and X. Zhang, 2020, "Potential Pilot Problems: Treatment Spillovers in Financial Regulatory Experiments," *Journal of Financial Economics* 135, 68-87.

(*) Bowen, D., L. Fresard, and J. Taillard, 2016, "What's Your Identification Strategy? Innovation in Corporate Finance Research," *Management Science* 63, 2397-2771.

(*) Butler, A. and J. Cornaggia, 2011, "Does Access to External Finance Improve Productivity? Evidence from a Natural Experiment," *Journal of Financial Economics* 99, 184-203.

(*) Callaway, B. and P. Sant'Anna, 2021, "Difference-in-Differences with Multiple Time Periods," *Journal of Econometrics* 225, 200-230.

(*) Campello, M. and J. Graham, 2013, "Do Stock Prices Influence Corporate Decisions? Evidence from the Technology Bubble," *Journal of Financial Economics*, 107, 89-110.

(*) Campello, M. and E. Giambona, 2013, "Real Assets and Capital Structure," *Journal of Financial and Quantitative Analysis* 48, 1333-1370.

(*) Campello, M., G. Kankanhalli, and H. Kim, 2024, "Delayed Creative Destruction: How Uncertainty Shapes Corporate Assets," *Journal of Financial Economics, 153, 103786.*

(*) Campello, M., T. Ladika, R. Matta, 2019, "Renegotiation Frictions and Financial Distress Resolution: Evidence from CDS Spreads," *Review of Finance* 23, 513-556.

Campello, M., R. Ribas, A. Wang, 2019, "Is the Stock Market Just a Side Show? Evidence from a Structural Reform," *Review of Corporate Financial Studies* 29, 349-383.

Card, D. and A. Krueger, 1994, "Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania," *American Economic Review* 84, 772-793.

Chang A. and O. Li, 2022, "Is Economics Research Replicable? Sixty Published Papers from Thirteen Journals Say "Often Not"," *Critical Finance Review* 11, 185-206.

(*) Currie, J., H. Kleven, and E. Zwiers, 2020, "Technology and Big Data Are Changing Economics: Mining Text to Track Methods," *American Economic Review* (Papers and Proceedings) 110, 42-48.

(*) Dai, R., L. Donohue, Q. Drechsler, and W. Jiang, 2023, "Dissemination, Publication, and Impact of Finance Research: When Novelty Meets Conventionality," *Review of Finance* 27, 79-141.

(*) Dessaint and A. Matray, 2017, "'Do Managers Overeact to Salient Risks? Evidence from Hurricanes Strikes" *Journal of Financial Economics* 126, 97-121.

Goldsmith-Pinkham, P., 2024, "Tracking the Credibility Revolution across Fields," *Working Paper, ArXiv.*

(*) Goodman-Bacon, A., 2021, "Difference-in-Differences with Variation in Treatment Timing," *Journal of Econometrics* 225, 254-277.

(*) Grullon, G., S. Michenaud, and J. Weston, 2015, "The Real Effects of Short Selling Constraints," *Review of Financial Studies* 28, 1737-1767.

(*) Heath, D., M. Ringgenberg, M. Samadi, and I. Werner, 2023, "Reusing Natural Experiments," *Journal of Finance* 78, 2329-2364.

Imbens, G., 2004, "Nonparametric Estimation of Average Treatment Effects under Exogeneity: A Review,'' *Review of Economics and Statistics* 86, 4-29.

(*) Jayaratne, J. and P. Strahan, 1996, "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation," *Quarterly Journal of Economics* 111, 639-670.

Lai, S., C. Lin, and X. Ma, 2024, "RegTech Adoption and the Cost of Capital," *Management Science* 70, 309-331.

(*) LaPorta, R, F. Lopez-De-Silanes, A. Shleifer, R. Vishny, 1997, "Legal Determinants of External Finance," *Journal of Finance* 52, 1131-1150.

Mitton, T., "Methodological Variation in Empirical Corporate Finance," *Review of Financial Studies* 35, 527-575.

Rosenzweig, M. and K. Wolpin, 2000, "Natural `Natural Experiments' in Economics," *Journal of Economic Literature* 38, 827-874.

(*) Sun, L. and S. Abraham, 2021, "Difference-in-Differences with Multiple Time Periods," *Journal of Econometrics* 225, 175-199.

(*) Tang, T., 2009, "Information Asymmetry and Firms' Credit Market Access: Evidence from Moody's Credit Rating Format Refinement,'' *Journal of Financial Economics* 93, 325-351.

Wooldridge, J. M., 2002, Econometric Analysis of Cross Section and Panel Data, MIT Press. Cambridge, Mass. (Chapters 6, 10, and 18.)

LATE, RDD (+ RKD & Bunching) & ME: Lecture Notes III, IV & V

Abadie, A., 2021, "Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects," *Journal of Economic Literature* 59, 391-425.

Abadie, A., A. Diamond, and J. Hainmuller, 2010, "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program," *Journal of the American Statistical Association* 105, 493-505.

Abadie, A., A. Diamond, and J. Hainmuller, 2015, "Comparative Politics and the Synthetic Control Method," *American Journal of Political Science* 105, 495-510.

Abadie, A., D. Drukker, J. Herr, and G. Imbens, 2004, "Implementing Matching Estimators for Average Treatment Effects in Stata," *Stata Journal* 4, 290-311.

Abadie, A. and G. Imbens, 2002, "Simple and Bias-Corrected Matching Estimators for Average Treatment Effects," Working Paper.

(*) Almeida, H., M. Campello, B. Laranjeira, and S. Weisbenner, 2011, "Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis," *Critical Finance Review* 1, 3-58.

(*) Agarwal, S. A. Mukerjee, and L. Naaraayanan, 2023, "Roads and Loans," *Review of Financial Studies* 36, 1508-1547.

(*) Angrist, J., 1990, "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," *American Economic Review* 80, 313-336.

(*) Angrist, J., G. Imbens, and D. Rubin, 1996, "Identification of Causal Effects Using Instrumental Variables," *Journal of the American Statistical Association* 91, 444-455.

(*) Angrist, J. and A. Krueger, 2001, "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments,'' *Journal of Economic Perspectives* 15, 69-85.

Angrist, J. and V. Lavy, 1999, "Using Maimonides' Rule To Estimate The Effect Of Class Size On Scholastic Achievement," *Quarterly Journal of Economics 114*, 533-575.

Bakke, T. and T. Whited, 2012, "Threshold Events and Identification: A Study of Cash Shortfalls," *Journal of Finance 61*, 1113-1148.

(*) Berger, E., A. Butler, E. Hu, and M. Zekhnini, 2021, "Financial Integration and Credit Democratization: Linking Banking Deregulation to Economic Growth," *Journal of Financial Intermediation* 45, 1000857.

(*) Bisetti, E. and S. Karolyi, 2024, "Inside the Family Firm: The Role of Families in Succession Decisions and Performance," *Journal of Finance* 79, 2845- 2885.

(*) Bennedsen, M., K. Nielsen, F. Pérez-González, and D. Wolfenzon, 2007, "Inside the Family Firm: The Role of Families in Succession Decisions and Performance," *Quarterly Journal of Economics* 122, 647-691.

(*) Campello, M., J. Gao, J. Qiu, and Y. Zhang, 2018, "Bankruptcy and The Cost of Organized Labor: Evidence from Union Elections," *Review of Financial Studies* 31, 980-1013.

(*) Campello, M., J. Graham, and C. Harvey, 2010, "The Real Effects of Financial Constraints: Evidence from a Financial Crisis," *Journal of Financial Economics* 97, 470-487.

(*) Campello, M., G. Junqueira, 2025, "Tax Incentives and Venture Capital Risk-Taking" *Working Paper,* University of Florida.

Card, D., D. Lee, Z. Pei, and A. Weber, 2015, "Inference on Causal Effects in a Generalized Regression Kink Design," *Econometrica* 83, 2453-2483.

Chava, S. and A. Purnanandam, 2011, "The Effect of Banking Crisis on Bank-Dependent Borrowers," *Journal of Financial Economics* 99, 116-135.

(*) Chernenko, S. and A. Sunderam, 2011, "The Real Consequences of Market Segmentation," *Review of Financial Studies* 25, 2041-207.

(*) Chava, S. and M. Roberts, 2008, "How does Financing Impact Investment? The Role of Debt Covenants," *Journal of Finance* 63, 2085-2121

(*) Cunat, V, M. Gine, and M. Guadalupe, 2012, "The Vote Is Cast: The Effect of Corporate Governance on Shareholder Value," *Journal of Finance* 67, 1943-1977.

Dehejia, R. and S. Wahba, 2002, "Propensity Score Matching Methods for Non-Experimental Causal Studies," *Review of Economics and Statistics* 84, 151-161.

(*) DiNardo, J. and D. Lee, 2004, "Economic Impacts of New Unionization on Private Sector Employers: 1984-2001," *Quarterly Journal of Economics* 119, 1383-1442.

Hahn, J, P., Todd, and W. van der Klaauw, 2001, "Identification and Estimation of Treatment Effects with a Regression-Discontinuity Design," *Econometrica* 69, 201-209.

(*) Iliev, P., 2010, "The Effect of SOX Section 404: Costs, Earnings Quality, and Stock Prices," *Journal of Finance* 65, 1163-1196.

G. Imbens, 2012, "Better LATE Than Nothing: Some Comments on Deaton (2009) and Heckman and Urzua (2009)." *Journal of Economic Literature* 48, 399-423.

(*) Indarte, S., 2023, "Moral Hazard versus Liquidity in Household Bankruptcy," *Journal of Finance* 78, 2421-2464.

Imbens, G., 2004, "Nonparametric Estimation of Average Treatment Effects under Exogeneity: A Review," *Review of Economics and Statistics* 86, 4-29.

(*) Imbens, G. and T. Lemieux, 2008, "Regression Discontinuity Designs: A Guide to Practice," *Journal of Econometrics* 142, 615-635.

(*) Lee, D. and T. Lemieux, 2010, "Regression Discontinuity Designs in Economics," *Journal of Economic Literature* 48, 281-355.

(*) Lee, D., 2008, "Randomized Experiments from Non-Random Selection in U.S. House Elections," *Journal of Econometrics* 142, 675-697.

(*) Londoño-Vélez, J. and J. Ávila-Mahecha, 2024, "Behavioral Responses to Wealth Taxation: Evidence from Colombia," forthcoming, *Review of Economic Studies.*

(*) Malmendier, U. and G. Tate, 2009, "Superstar CEOs," *Quarterly Journal of Economics* 124, 1593-1638.

Olden, A. and J. Møen, 2022, "The Triple Difference Estimator," *The Econometrics Journal* 25, 531-553.

(*) Popdadak, J., 2014, "A Corporate Culture Channel: How Increased Shareholder Governance Reduces Firm Value," Working Paper, Duke University

(*) Rauh, J., 2006, "**Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans**." *Journal of Finance 61,* 33-71.

Rosembaum, P. and D. Rubin, 1983, "The Central Role of the Propensity Score in Observational Studies for Causal Effects," *Biometrika* 70, 41-55.

(*) Saez, E., 2010, "Do Tax Payers Bunch at Kink Points?" *American Economic Journal; Economic Policy* 2, 180-212.

Van der Klaauw, W., 2008, "Regression-Discontinuity Analysis: A Survey of Recent Developments in Economics," *LABOUR* 22, 219-245.

Welch, I., 2013, "A Critique of Recent Quantitative and Deep-Structure Modeling in Capital Structure Research and Beyond," *Critical Finance Review* 2, 131-172.