

ESG: Theory and Applications  
Spring 2024

14:00-17:00 Tuesday, Chengze Garden #132

## **Syllabus**

### **Instructor:**

Yuhang Pan

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Office hours: 3:00-5:00pm, (Room120, No.24 Building, Main Campus)

### **Course overview:**

Firms and projects attract investment through their financial and non-financial performance, with the former usually presented through financial statements and the latter through reports on their **E**nvironmental impact, **S**ocial responsibility, and corporate **G**overnance. This course will discuss ESG issues from the perspective of companies, markets, governments, and investors. We will start with reports and statistics on these three non-financial factors, and then use research papers and practical cases to understand: (1) why these indicators are important to companies, (2) derived ESG products and markets, (3) how to design public policy for ESG management, and (4) good versus distorted ESG behavior.

### **Course Objectives:**

1. To gain in-depth understanding of how businesses integrate ESG into their strategies and operations, with special focus on ESG reporting, skills and techniques to effectively assess and disclose ESG performance, and proper ways to address ESG issues to stakeholders.
2. To provide a comprehensive understanding of different empirical methods and underlying theories in ESG and their applications to real-world problems.
3. To enable students to analyze ESG risks and opportunities and assess ESG company performance using publicly available information.
4. To develop essential skills to read high-quality empirical papers in leading economics journals.
5. To foster creativity in research design and critical thinking in assessing empirical research via theoretical foundation.

### **Prerequisites:**

It should be noted that practices in ESG accounting and reporting are only one part of this course. Ideally, students enrolling in this course should have been exposed to some basic microeconomic theory or have completed undergraduate-level econometrics, e.g., basic probability and statistics, matrix algebra, and the classical

linear regression model. However, if you have not met these prerequisites but are still interested in taking the course, feel free to reach out to me for further discussion.

### **Statistical Software:**

Demonstrations during lectures will be conducted in Stata or R. In the long run, if you are doing applied micro-econometrics research or data analysis practice, you will almost surely end up using one of these two packages.

### **Assessment:**

Participation/Presentation 30%; Problem Sets 40%; Research Proposal (with preliminary results) 30%.

We will assign 4 problem sets during the semester. For the first three problem sets, you can work cooperatively in groups of up to 2. Late problem sets will incur a penalty of -10% per day late. The last problem set must be worked by yourself and submitted on time; it will not be accepted if late.

### **Meeting:**

The best way to meet is to send me an email ([yhpan@pku.edu](mailto:yhpan@pku.edu)) to schedule — in fact, you are supposed to email me so we can talk about your question or your paper project. We can talk either offline or online.

### **Textbook:**

The course is not based on any one textbook. Some basic background ideas will be borrowed from *Principles of Corporate Finance* (14ed) by Richard Brealey et al. and *Handbook of Sustainable Finance* by Thierry Roncalli. Part of our contents are drawn heavily from lectures notes by Florian Berg (MIT), Alex Edmans (LBS), Caroline Flammer (Columbia), Michael Greenstone (Chicago), Zacharias Sautner (Zurich), and Johannes Stroebe (NYU).

### **Topics and Tentative Schedule**

- I. Introduction to Environmental, Social, and Governance (ESG)
- II. ESG Measurement and Impact
  - A. ESG Reporting
  - B. ESG Rating
  - C. Economic Impact of ESG Ratings
  - D. Divergence of ESG Ratings
- III. Environmental Factors
  - A. Climate Change Risk Exposure
  - B. Pollution and Other Natural Disasters Risk Exposure
  - C. Adaptation and Market Responses to Environmental Risks
- IV. Social Factors
  - A. Business Activities and Social Issues
  - B. Corporate Social and Financial Performance

- C. Social Impact Investing
- V. Governance Factors
  - A. Top Team
  - B. Employee Engagement
  - C. Diversity, Equity, and Inclusion (DEI)
  - D. Corporate Governance Failures
- VI. ESG Investment and Regulation
  - A. Ethics, Law, and Policy for ESG
  - B. ESG Investment
- VII. Special Topic: Climate Finance
  - A. Green Bonds
  - B. Carbon Markets
- VIII. Companies' ESG Practices
  - A. ESG Management
  - B. Greenwash
  - C. Platform Economy and Sustainable Development

## **Required/Recommended Readings**

### **I Introduction to Environmental, Social, and Governance (ESG)**

- Edmans, Alex. 2023. "Applying Economics—Not Gut Feel—to ESG." *Financial Analysts Journal* 79(4): 16–29.
- Edmans, Alex. 2023. "The End of ESG." *Financial Management* 52(1): 3–17.
- Edmans, Alex, and Marcin Kacperczyk. 2022. "Sustainable Finance." *Review of Finance* 26(6): 1309–13.
- Gillan, Stuart L., Andrew Koch, and Laura T. Starks. 2021. "Firms and Social Responsibility: A Review of ESG and CSR Research in Corporate Finance." *Journal of Corporate Finance* 66: 101889.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2006. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives* 20(2): 23–48.
- Hong, Harrison, and Edward Shore. 2023. "Corporate Social Responsibility." *Annual Review of Financial Economics* 15(1): 327–50.
- Kitzmueller, Markus, and Jay Shimshack. 2012. "Economic Perspectives on Corporate Social Responsibility." *Journal of Economic Literature* 50(1): 51–84.
- Liang, Hao, and Luc Renneboog. 2017. "On the Foundations of Corporate Social Responsibility." *The Journal of Finance* 72(2): 853–910.
- Matos, Pedro. 2020. ESG and Responsible Institutional Investing Around the World. CFA Institute Research Foundation.
- Pollman, Elizabeth. 2022. "The Making and Meaning of ESG." *Working Paper.*
- Serafeim, George. 2022. "ESG: Hyperboles and Reality." *Working Paper.*

### **II ESG Measurement and Impact**

- Albuquerque, Rui, Yrjö Koskinen, and Chendi Zhang. 2019. "Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence." *Management Science* 65(10): 4451–69.
- Bartling, Björn, Roberto A. Weber, and Lan Yao. 2015. "Do Markets Erode Social Responsibility?" *The Quarterly Journal of Economics* 130(1): 219–66.
- Berg, Florian, Julian F Kölbl, and Roberto Rigobon. 2022. "Aggregate Confusion: The Divergence of ESG Ratings." *Review of Finance* 26(6): 1315–44.
- Bénabou, Roland, and Jean Tirole. 2010. "Individual and Corporate Social Responsibility." *Economica* 77(305): 1–19.
- Billio, Monica et al. 2021. "Inside the ESG Ratings: (Dis)Agreement and Performance." *Corporate Social Responsibility and Environmental Management* 28(5): 1426–45.
- Christensen, Dane M., George Serafeim, and Anywhere Sikochi. 2022. "Why Is Corporate Virtue in the Eye of The Beholder? The Case of ESG Ratings." *The Accounting Review* 97(1): 147–75.
- Dai, Rui, Hao Liang, and Lilian Ng. 2021. "Socially Responsible Corporate Customers." *Journal of Financial Economics* 142(2): 598–626.
- Ding, Wenzhi, Ross Levine, Chen Lin, and Wensi Xie. 2021. "Corporate Immunity to the COVID-19 Pandemic." *Journal of Financial Economics* 141(2): 802–30.
- Fatemi, Ali, Iraj Fooladi, and Hassan Tehranian. 2015. "Valuation Effects of Corporate Social Responsibility." *Journal of Banking & Finance* 59: 182–92.
- Flammer, Caroline. 2015. "Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach." *Management Science* 61(11): 2549–68.
- Halbritter, Gerhard, and Gregor Dorfleitner. 2015. "The Wages of Social Responsibility — Where Are They? A Critical Review of ESG Investing." *Review of Financial Economics* 26(1): 25–35.
- Hassan, Tarek A, Stephan Hollander, Laurence Van Lent, and Ahmed Tahoun. 2019. "Firm-Level Political Risk: Measurement and Effects." *The Quarterly Journal of Economics* 134(4): 2135–2202.
- Hong, Harrison, and Marcin Kacperczyk. 2009. "The Price of Sin: The Effects of Social Norms on Markets." *Journal of Financial Economics* 93(1): 15–36.
- Krüger, Philipp. 2015. "Corporate Goodness and Shareholder Wealth." *Journal of Financial Economics* 115(2): 304–29.
- Krüger, Philipp, Zacharias Sautner, Tang Dragon Yongjun, and Zhang Rui. 2023. "The Effects of Mandatory ESG Disclosure Around the World." *Working Paper*.
- Lins, Karl V., Henri Servaes, and Ane Tamayo. 2017. "Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis." *The Journal of Finance* 72(4): 1785–1824.
- Serafeim, George, and Aaron Yoon. 2023. "Stock Price Reactions to ESG News: The Role of ESG Ratings and Disagreement." *Review of Accounting Studies* 28(3): 1500–1530.

### III Environmental Factors

- Carleton, Tamma, and Michael Greenstone. 2022. "A Guide to Updating the US Government's Social Cost of Carbon." *Review of Environmental Economics and Policy* 16(2): 196–218.

- Chava, Sudheer. 2014. "Environmental Externalities and Cost of Capital." *Management Science* 60(9): 2223–47.
- Hong, Harrison, Frank Weikai Li, and Jiangmin Xu. 2019. "Climate Risks and Market Efficiency." *Journal of Econometrics* 208(1): 265–81.
- Krueger, Philipp, Zacharias Sautner, and Laura T Starks. 2020. "The Importance of Climate Risks for Institutional Investors." *The Review of Financial Studies* 33(3): 1067–1111.
- Rode, Ashwin et al. 2021. "Estimating a Social Cost of Carbon for Global Energy Consumption." *Nature* 598(7880): 308–14.
- Sautner, Zacharias, Laurence Van Lent, Grigory Vilkov, and Ruishen Zhang. 2023. "Firm - Level Climate Change Exposure." *The Journal of Finance* 78(3): 1449–98.
- Schlenker, Wolfram, and Charles A. Taylor. 2021. "Market Expectations of a Warming Climate." *Journal of Financial Economics* 142(2): 627–40.

#### **IV Social Factors**

- Adams-Prassl, Abi, Kristiina Huttunen, Emily Nix, and Ning Zhang. 2023. "Violence Against Women at Work." *The Quarterly Journal of Economics*: qjad045.
- Alan, Sule, Gozde Corekcioglu, and Matthias Sutter. 2022. "Improving Workplace Climate in Large Corporations: A Clustered Randomized Intervention." *The Quarterly Journal of Economics* 138(1): 151–203.
- Ashenfelter, Orley, and Michael Greenstone. 2004. "Using Mandated Speed Limits to Measure the Value of a Statistical Life." *Journal of Political Economy* 112(S1): S226–67.
- Ashenfelter, Orley, and Michael Greenstone. 2004. "Estimating the Value of a Statistical Life: The Importance of Omitted Variables and Publication Bias." *American Economic Review* 94(2): 454–60.
- Atkin, David et al. 2017. "Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan." *The Quarterly Journal of Economics* 132(3): 1101–64.
- Azmat, Ghazala, and Rosa Ferrer. 2017. "Gender Gaps in Performance: Evidence from Young Lawyers." *Journal of Political Economy* 125(5): 1306–55.
- Bandiera, O., I. Barankay, and I. Rasul. 2007. "Incentives for Managers and Inequality among Workers: Evidence from a Firm-Level Experiment." *The Quarterly Journal of Economics* 122(2): 729–73.
- Bessone, Pedro et al. 2021. "The Economic Consequences of Increasing Sleep Among the Urban Poor." *The Quarterly Journal of Economics* 136(3): 1887–1941.
- Bloom, Nicholas, James Liang, John Roberts, and Zhichun Jenny Ying. 2015. "Does Working from Home Work? Evidence from a Chinese Experiment." *The Quarterly Journal of Economics* 130(1): 165–218.
- Chaigneau, Pierre, Alex Edmans, and Daniel Gottlieb. 2018. "Does Improved Information Improve Incentives?" *Journal of Financial Economics* 130(2): 291–307.
- Edmans, Alex, Lucius Li, and Chendi Zhang. 2023. "Employee Satisfaction, Labor Market Flexibility, and Stock Returns Around the World." *Working Paper*.

- Friebel, Guido, and Matthias Heinz. 2014. "Media Slant against Foreign Owners: Downsizing." *Journal of Public Economics* 120: 97–106.
- Huber, Kilian, Volker Lindenthal, and Fabian Waldinger. 2021. "Discrimination, Managers, and Firm Performance: Evidence from 'Aryanizations' in Nazi Germany." *Journal of Political Economy* 129(9): 2455–2503.
- Kuchler, Theresa, and Johannes Stroebel. 2021. "Social Finance." *Annual Review of Financial Economics* 13(1): 37–55.
- Lee, Jonathan M., and Laura O. Taylor. 2019. "Randomized Safety Inspections and Risk Exposure on the Job: Quasi-Experimental Estimates of the Value of a Statistical Life." *American Economic Journal: Economic Policy* 11(4): 350–74.
- Rohlf, Chris, Ryan Sullivan, and Thomas Kniesner. 2015. "New Estimates of the Value of a Statistical Life Using Air Bag Regulations as a Quasi-Experiment." *American Economic Journal: Economic Policy* 7(1): 331–59.

## **V Governance Factors**

- Ahern, Kenneth R., and Amy K. Dittmar. 2012. "The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation." *The Quarterly Journal of Economics* 127(1): 137–97.
- Bandiera, Oriana, Andrea Prat, Stephen Hansen, and Raffaella Sadun. 2020. "CEO Behavior and Firm Performance." *Journal of Political Economy* 128(4): 1325–69.
- Benmelech, E., E. Kandel, and P. Veronesi. 2010. "Stock-Based Compensation and CEO (Dis)Incentives." *The Quarterly Journal of Economics* 125(4): 1769–1820.
- Bertrand, M., and A. Schoar. 2003. "Managing with Style: The Effect of Managers on Firm Policies." *The Quarterly Journal of Economics* 118(4): 1169–1208.
- Bolton, P., M. K. Brunnermeier, and L. Veldkamp. 2013. "Leadership, Coordination, and Corporate Culture." *The Review of Economic Studies* 80(2): 512–37.
- Broccardo, Eleonora, Oliver Hart, and Luigi Zingales. 2022. "Exit versus Voice." *Journal of Political Economy* 130(12): 3101–45.
- Cai, Jing, and Adam Szeidl. 2018. "Interfirm Relationships and Business Performance." *The Quarterly Journal of Economics* 133(3): 1229–82.
- Cronqvist, Henrik, and Frank Yu. 2017. "Shaped by Their Daughters: Executives, Female Socialization, and Corporate Social Responsibility." *Journal of Financial Economics* 126(3): 543–62.
- De Janvry, Alain et al. 2023. "Subjective Performance Evaluation, Influence Activities, and Bureaucratic Work Behavior: Evidence from China." *American Economic Review* 113(3): 766–99.
- DellaVigna, S., and U. Malmendier. 2004. "Contract Design and Self-Control: Theory and Evidence." *The Quarterly Journal of Economics* 119(2): 353–402.
- Edmans, Alex, and Xavier Gabaix. 2016. "Executive Compensation: A Modern Primer." *Journal of Economic Literature* 54(4): 1232–87.
- Edmans, Alex, Doron Levit, and Devin Reilly. 2019. "Governance Under Common Ownership." *The Review of Financial Studies* 32(7): 2673–2719.
- Edmans, Alex, and Gustavo Manso. 2011. "Governance Through Trading and Intervention: A Theory of Multiple Blockholders." *Review of Financial Studies* 24(7): 2395–2428.

- Ferrell, Allen, Hao Liang, and Luc Renneboog. 2016. "Socially Responsible Firms." *Journal of Financial Economics* 122(3): 585–606.
- Haubrich, Joseph G. 1994. "Risk Aversion, Performance Pay, and the Principal-Agent Problem." *Journal of Political Economy* 102(2): 258–76.
- Heizer, Tobias, and Laura R. Rettig. 2020. "Top Management Team Optimism and Its Influence on Firms' Financing and Investment Decisions." *Review of Financial Economics* 38(4): 601–22.
- Huffman, David, Collin Raymond, and Julia Shvets. 2022. "Persistent Overconfidence and Biased Memory: Evidence from Managers." *American Economic Review* 112(10): 3141–75.
- Jäger, Simon, Benjamin Schoefer, and Jörg Heining. 2021. "Labor in the Boardroom." *The Quarterly Journal of Economics* 136(2): 669–725.
- Kaplan, Steven N., Morten Sørensen, and Anastasia A. Zakolyukina. 2022. "What Is CEO Overconfidence? Evidence from Executive Assessments." *Journal of Financial Economics* 145(2): 409–25.
- Levine, Ross, and Yona Rubinstein. 2017. "Smart and Illicit: Who Becomes an Entrepreneur and Do They Earn More?." *The Quarterly Journal of Economics* 132(2): 963–1018.
- Malmendier, Ulrike, and Geoffrey Tate. 2015. "Behavioral CEOs: The Role of Managerial Overconfidence." *Journal of Economic Perspectives* 29(4): 37–60.
- McCAHERY, Joseph A., Zacharias Sautner, and Laura T. Starks. 2016. "Behind the Scenes: The Corporate Governance Preferences of Institutional Investors." *The Journal of Finance* 71(6): 2905–32.
- Phua, Kenny, T. Mandy Tham, and Chishen Wei. 2018. "Are Overconfident CEOs Better Leaders? Evidence from Stakeholder Commitments." *Journal of Financial Economics* 127(3): 519–45.
- Shleifer, Andrei, and Robert W. Vishny. 1997. "A Survey of Corporate Governance." *The Journal of Finance* 52(2): 737–83.

## **VI ESG Investment and Regulation**

- Avramov, Doron, Si Cheng, Abraham Lioui, and Andrea Tarelli. 2022. "Sustainable Investing with ESG Rating Uncertainty." *Journal of Financial Economics* 145(2): 642–64.
- Bertrand, Marianne et al. 2021. "Hall of Mirrors: Corporate Philanthropy and Strategic Advocacy." *The Quarterly Journal of Economics* 136(4): 2413–65.
- Bloom, N., C. Propper, S. Seiler, and J. Van Reenen. 2015. "The Impact of Competition on Management Quality: Evidence from Public Hospitals." *The Review of Economic Studies* 82(2): 457–89.
- Coqueret, Guillaume. 2020. "ESG Equity Investing: A Short Survey." *SSRN Electronic Journal*.
- De Bettignies, Jean-Etienne, and David T. Robinson. 2018. "When Is Social Responsibility Socially Desirable?" *Journal of Labor Economics* 36(4): 1023–72.
- Dyck, Alexander, Karl V. Lins, Lukas Roth, and Hannes F. Wagner. 2019. "Do Institutional Investors Drive Corporate Social Responsibility? International Evidence." *Journal of Financial Economics* 131(3): 693–714.
- Greenstone, Michael. 2002. "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act

- Amendments and the Census of Manufactures.” *Journal of Political Economy* 110(6): 1175–1219.
- Greenstone, Michael, Christian Leuz, and Patricia Breuer. 2023. “Mandatory Disclosure Would Reveal Corporate Carbon Damages.” *Science* 381(6660): 837–40.
- He, Guojun, Shaoda Wang, and Bing Zhang. 2020. “Watering Down Environmental Regulation in China.” *The Quarterly Journal of Economics* 135(4): 2135–85.
- Hartzmark, Samuel M., and Abigail B. Sussman. 2019. “Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows.” *The Journal of Finance* 74(6): 2789–2837.
- Jacobsen, Mark R, James M Sallee, Joseph S Shapiro, and Arthur A Van Benthem. 2023. “Regulating Untaxable Externalities: Are Vehicle Air Pollution Standards Effective and Efficient?” *The Quarterly Journal of Economics* 138(3): 1907–76.
- Pástor, Ľuboš, Robert F. Stambaugh, and Lucian A. Taylor. 2021. “Sustainable Investing in Equilibrium.” *Journal of Financial Economics* 142(2): 550–71.
- Pedersen, Lasse Heje, Shaun Fitzgibbons, and Lukasz Pomorski. 2021. “Responsible Investing: The ESG-Efficient Frontier.” *Journal of Financial Economics* 142(2): 572–97.
- Riedl, Arno, and Paul Smeets. 2017. “Why Do Investors Hold Socially Responsible Mutual Funds?” *The Journal of Finance* 72(6): 2505–50.

## VII Climate Finance

- Alekseev, Georgij et al. 2022. “A Quantity-Based Approach to Constructing Climate Risk Hedge Portfolios.” *NBER Working Paper*.
- Borenstein, Severin, James Bushnell, Frank A. Wolak, and Matthew Zaragoza-Watkins. 2019. “Expecting the Unexpected: Emissions Uncertainty and Environmental Market Design.” *American Economic Review* 109(11): 3953–77.
- Cui, Jingbo, Chunhua Wang, Junjie Zhang, and Yang Zheng. 2021. “The Effectiveness of China’s Regional Carbon Market Pilots in Reducing Firm Emissions.” *Proceedings of the National Academy of Sciences* 118(52): e2109912118.
- Engle, Robert F et al. 2020. “Hedging Climate Change News.” *The Review of Financial Studies* 33(3): 1184–1216.
- Flammer, Caroline. 2023. “Green Bonds and Carbon Emissions.” *Oxford Review of Economic Policy* 39(4): 752–64.
- Flammer, Caroline. 2020. “Green Bonds: Effectiveness and Implications for Public Policy.” *Environmental and Energy Policy and the Economy* 1: 95–128.
- Flammer, Caroline. 2021. “Corporate Green Bonds.” *Journal of Financial Economics* 142(2): 499–516.
- Fowlie, Meredith L. 2009. “Incomplete Environmental Regulation, Imperfect Competition, and Emissions Leakage.” *American Economic Journal: Economic Policy* 1(2): 72–112.
- Giglio, Stefano et al. 2023. “Four Facts About ESG Beliefs and Investor Portfolios.” *NBER Working Paper*.
- Giglio, Stefano, Bryan Kelly, and Johannes Stroebe. 2021. “Climate Finance.” *Annual Review of Financial Economics* 13(1): 15–36.



- Goulder, Lawrence H., Xianling Long, Jieyi Lu, and Richard D. Morgenstern. 2022. "China's Unconventional Nationwide CO2 Emissions Trading System: Cost-Effectiveness and Distributional Impacts." *Journal of Environmental Economics and Management* 111: 102561.
- Goulder, Lawrence H., Mark R. Jacobsen, and Arthur A. Van Benthem. 2012. "Unintended Consequences from Nested State and Federal Regulations: The Case of the Pavley Greenhouse-Gas-per-Mile Limits." *Journal of Environmental Economics and Management* 63(2): 187–207.
- He, Guojun, Yuhang Pan, and Yang Xie. 2023. "Market vs. Planning: Emission Abatement under Incomplete Information and with Local Externalities." *Working Paper*.
- Hong, Harrison, G Andrew Karolyi, and José A Scheinkman. 2020. "Climate Finance." *The Review of Financial Studies* 33(3): 1011–23.
- Hsu, Po-Hsuan, Kai Li, and Chi-Yang Tsou. 2023. "The Pollution Premium." *The Journal of Finance* 78(3): 1343–92.
- Martin, Ralf, Mirabelle Muûls, Laure B. De Preux, and Ulrich J. Wagner. 2014. "Industry Compensation under Relocation Risk: A Firm-Level Analysis of the EU Emissions Trading Scheme." *American Economic Review* 104(8): 2482–2508.
- Painter, Marcus. 2020. "An Inconvenient Cost: The Effects of Climate Change on Municipal Bonds." *Journal of Financial Economics* 135(2): 468–82.
- Perino, Grischa, Maximilian Willner, Simon Quemin, and Michael Pahle. 2022. "The European Union Emissions Trading System Market Stability Reserve: Does It Stabilize or Destabilize the Market?" *Review of Environmental Economics and Policy* 16(2): 338–45.
- Stroebel, Johannes, and Jeffrey Wurgler. 2021. "What Do You Think about Climate Finance?" *Journal of Financial Economics* 142(2): 487–98.
- Zerbib, Olivier David. 2019. "The Effect of Pro-Environmental Preferences on Bond Prices: Evidence from Green Bonds." *Journal of Banking & Finance* 98: 39–60.

## **VIII Companies' ESG Practices**

- Barrage, Lint, Eric Chyn, and Justine Hastings. 2020. "Advertising and Environmental Stewardship: Evidence from the BP Oil Spill." *American Economic Journal: Economic Policy* 12(1): 33–61.
- Carlsson, Fredrik, Christina Gravert, Olof Johansson-Stenman, and Verena Kurz. 2021. "The Use of Green Nudges as an Environmental Policy Instrument." *Review of Environmental Economics and Policy* 15(2): 216–37.
- Colonnelli, Emanuele, Niels Joachim Gormsen, and Timothy McQuade. 2022. "Selfish Corporations." *NBER Working Paper*.
- Duchin, Ran, Janet Gao, and Qiping Xu. 2022. "Sustainability or Greenwashing: Evidence from the Asset Market for Industrial Pollution." *Working Paper*.
- Flammer, Caroline, Michael W. Toffel, and Kala Viswanathan. 2021. "Shareholder Activism and Firms' Voluntary Disclosure of Climate Change Risks." *Strategic Management Journal* 42(10): 1850–79.
- He, Guojun et al. 2023. "Reducing Single-Use Cutlery with Green Nudges: Evidence from China's Food-Delivery Industry." *Science* 381(6662): eadd9884.
- Zhou, Zoey Yiyuan. 2023. "The Curse of Green Shareholder Oversight: Evidence from Emission Spillover of Divested Plants." *Working Paper*.