



Course Outline

Sustainable Finance: Innovation and Trends in Capital Markets

FINC-GB.2360.10
(3.0 Credits)

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Aims and Objectives

There is currently a deep rethinking of the purpose served by Companies and the birth of a genuine and expanding determination to place Finance at the service of the overarching long-term goals of Sustainable development. This issue becomes even more important in this period of economic and social uncertainty due to the COVID-19 pandemic.

Sustainability or Environmental, Social and Governance (ESG) factors are becoming relevant in getting greater insights into company risk and performance. Some of these factors include: climate change, carbon emissions, air and water pollution (E); labor standards, employee engagement, human rights, gender and diversity policies (S); board composition, executive compensation (G). The implications of these factors on companies' business models provide a new long-term perspective on the financial materiality of firms' sustainability dimensions. The challenges posed by the current COVID-19 pandemic are bringing to light the materiality of these non-financial factors, reinforcing the linkage between companies and their stakeholders (investors, employees, suppliers, communities, environment, and government).

In the past years, the number of companies reporting ESG information increased from fewer than 20 companies in the early 1990s to nearly 9,000 in 2016.

Investors' interest in ESG data also grew rapidly. As of 2018, the UN Principles for Responsible Investment (PRI) - launched in 2006, and committed to incorporating ESG issues into their investment analysis and practices - had about 2,900 signatories with total *Assets Under Management (AUM)* of about \$90 trillion.

In addition, a new ESG rating industry has emerged, with several external providers offering independent assessments of companies' sustainable risks based on data, analytics and judgmental factors.

Finally, Regulation is currently driving Investment Managers, Banks, Insurers, and Non-Financial Firms to invest in new capabilities to complying with ESG requirements.

The goal of the course is to analyze the interplay of Sustainability and Finance and the related new risks and opportunities. In fact, the intersection of ESG and Financial issues generates new risks over longer risk horizons, which should be factored into company valuation frameworks from fundamental analysis. This interplay will also take into account the current COVID-19 pandemic risk whose magnitude and systemic ramifications are unprecedented. However, understanding, measuring, and pricing these new sources of risk, and also assessing the related opportunities, presents challenges due to the wide breadth of ESG-related issues coupled with data limitations.

Examples on how ESG factors are incorporated into Investing, Lending and Insurance activities will be provided and discussed. A focus will also be given to ESG impact, via an analysis of the UN Sustainable Development Goals (SDGs) that provide a sustainability



framework for companies and investors. Finally, key Environmental, Social and Governance themes - *Climate Change*, *Water Risk*, *Gender Diversity* and *Corporate Governance* - will be analyzed in depth, highlighting the societal and financial impacts over longer term horizons.

In this exceptional context of a global pandemic outbreak, this course will provide future managers with the new business and analytical tools to understand how to create a sustainable business model in the long-run, and how to assess extra-financial risks impacting corporate and investment risk performances. COVID-19 now requires companies to move from theory to practice in incorporating societal factors into their business models. Tracking their response will be an important component of this Sustainable Finance course.

Topics Covered

- The Relevance of Environmental, Social and Governance (ESG) Factors
- Pandemic Risks and implications on Financial Stability
- Market & Regulatory Trends
- How ESG Risk is measured
- Sustainable Investing (Equity, Bonds)
- ESG in Banking and Insurance Activities
- Integrated Financial & Sustainability Reporting
- Impact Investing and Sustainable Development Goals (SDGs)
- ESG and Credit Ratings
- Impact of Climate Change on Companies' Default Risk
- Water Risk and its financial impact
- Gender Diversity and Corporate Governance

Reading Materials

There is no required text, due to the novelty of this topic. A basic knowledge of Finance, Risk Management, Accounting and Sustainable Finance would suffice to understand the links among these subjects.

The reading material for this course is based on the following combination of journal articles, working papers, industry analyses and regulatory reports (other references will be made available during classes):

- Chatterji A., D. Rodolphe D., Levine D., Touboul S. (2014), “*Do Ratings of Firms Converge? Implications for Managers, Investors and Strategy Researchers*”, Vol. 37, Issue 8, [Strategic Management Journal](#)
- Cleary Gottlieb (2020), “*Sustainable Finance: A Global Overview of ESG Regulatory Developments*”, October, <https://www.clearygottlieb.com/-/media/files/alert-memos-2020/sustainable-finance-a-global-overview-of-esg-regulatory-developments.pdf>
- European Commission (2018a), “*Final Report of the High-Level Expert Group on Sustainable Finance*”, January, <https://ec.europa.eu>
- European Commission (2018b), “*Action Plan: Financing Sustainable Growth*”, March, <https://ec.europa.eu>
- Friedman M. (1970), “*The Social Responsibility of Business is To Increase Its Profits*”, [The New York Times](#), September
- Global Sustainable Investment Alliance - GSIA (2019), “*Global Investment Review*”, March, http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf
- Khan M., Serafeim G., Yoon A. (2016), “*Corporate Sustainability: First Evidence on Materiality*”, Vol. 91, No. 6, [Accounting Review](#)
- Oliver Wyman (2018), “*Extending Our Horizons: Assessing credit risk and opportunity in a changing climate: Outputs of a working group of 16 banks piloting the TCFD Recommendations - Part 1: Transition –related risks & opportunities*”, April, <http://www.unepfi.org/wordpress/wp-content/uploads/2018/04/EXTENDING-OUR-HORIZONS.pdf>
- PRI - Principle for Responsible Investment (2017), “*Shifting Perceptions: ESG, Credit Risk and Ratings - Part 1: The State of Play*”, July, www.unpri.org
- PRI - Principle for Responsible Investment (2018), “*Shifting Perceptions: ESG, Credit Risk and Ratings - Part 2: Exploring the disconnects*”, June, www.unpri.org
- PRI - Principle for Responsible Investment (2019), “*Shifting Perceptions: ESG, Credit Risk and Ratings - Part 3: From disconnects to action areas*”, January, www.unpri.org
- Russell Investments (2018), “*Materiality matters: Targeting the ESG issues that can impact performance*”, March, <https://russellinvestments.com/uk/insights/articles/materiality-matters>



- Schoenmaker D., Schramade W. (2019), *“Principles of Sustainable Finance”*, Oxford University Press
- Serafeim G., A. Amel-Zadem (2017), *“Why and How Investors Use ESG Information: Evidence from a Global Survey”*, forthcoming in Financial Analyst Journal
- S&P Global Ratings (2017), *“How Environmental And Climate Risks And Opportunities Factor Into Global Corporate Ratings - An Update”*, November
- S&P Global Ratings (2018a), *“How Social Risks and Opportunities Factor into Global Corporate Ratings”*, April
- S&P Global Ratings (2018b), *“The Rise Of ESG In Fixed Income”*, September
- S&P Global Ratings (2018c), *“How Management & Governance Risks And Opportunities Factor Into Global Corporate Ratings”*, November
- United Nations (2015), *“Transforming our world: the 2030 agenda for sustainable development”*, January, <https://sustainabledevelopment.un.org/>

In addition to the above material, lecture slides will be provided for each class.

Assessment

The grade for the course will be based on an intermediate assessment and a take-home final exam after the last session of the course that will determine 15% and 45% of the total grade respectively. There will also be 30% credit for class participation and bringing to the classroom discussion relevant themes from ongoing sustainability and financial risk issues at time of the course. The final 10% of the grade will be based on a project that will be carried by group of students with selected organizations (the list of companies will be posted on the course website after the 3rd session).



Summary Outline

Session <i>(6:00 to 9:00 pm)</i>	Topic
1 <i>February 11, 2021</i>	▪ The Evolution of Corporate Capitalism ✓ Milton Friedman's Doctrine ✓ Rebalancing Corporate Priorities under Covid-19: From Shareholder to Stakeholder Value ✓ Why Purpose & Profit matter to Investors
2 <i>February 25, 2021</i>	▪ Sustainable Finance ✓ The Role of Capital in reaching ESG goals ✓ ESG Factors across Asset Classes ✓ ESG Derivatives
3 <i>March 4, 2021</i>	▪ The Regulatory Landscape on Sustainability ✓ EU and UK ✓ USA ✓ Emerging Markets
4 <i>March 11, 2021</i>	▪ ESG Data and Analytics ✓ Review of ESG Ratings Vendors ✓ Key differences in ESG scoring methodologies
5 <i>March 18, 2021</i>	▪ ESG Integration: Incorporating Sustainability factors into Equity and Credit Products ✓ Active and Passive Investing
6 <i>March 25, 2021</i>	▪ ESG in Lending and Insurance Activities ✓ Material Factors and Potential Financial Impact ✓ Stress Testing for Transition and Physical Risks
7 <i>April 1, 2021</i>	▪ Integrated Financial and Sustainability Reporting ✓ The Framework from IIRC ✓ GRI Reporting Standards ✓ The SASB's Financial Materiality Approach



8 April 8, 2021	▪ ESG Impact Investing ✓ The Role of the UN Sustainable Development Goals (SDGs) ✓ How SDGs relate to Corporates and Investors
9 April 15, 2021	▪ ESG and Credit Ratings ✓ How Environmental, Social, Governance factors are incorporated into External Ratings ✓ <i>Case Studies</i>
10 April 22, 2021	▪ Country and Sector view on Sustainability ✓ ESG Factors and Sovereigns ✓ Material Factors for some key sectors: Agriculture, Automotive, Oil & Gas, Metal & Mining, Food Retail, and Real Estate
11 April 29, 2021	▪ Thematic Focus (1) - Environmental Risks and their financial impact ✓ Climate Change – Findings from the scientific community (IPCC report) – Physical and Transition Risks – <i>Case-Study: Energy Transition Scenarios and Credit Risk</i> ✓ Water Risk around the world – Sectoral impact – <i>Case Studies</i>
12 May 6, 2021	▪ Thematic Focus (2) – Social & Governance ✓ Corporate Culture: The Business Dimension of Gender Diversity ✓ Corporate Governance and Sustainability Strategy ✓ The Response of Companies to COVID-19