Syllabus

Course Title	**SUSTAINABLE FINANCE AND INVESTMENT**
Instructor	Christian Schopper
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Office Hours	For consultations, approach me either before or after class.
Credits	2 US credits (4 ECTS credits)
Module	Financial Management
Term	Spring 2024
Course Level	MSc Finance elective. All students are required to take the course for grades. This course is delivered with a class cap of 25 students (please note that no exceptions will be made on this).
Prerequisites	All enrolled students should have successfully completed core finance (Financial Management) and accounting (Financial Reporting & Control) courses at graduate level.
Course Drop	As described by the Regulations of the MS in Finance program: Overview of the MS in Finance | Department of Economics and Business (ceu.edu)

Course description

In the financial sector, sustainability is becoming increasingly relevant and important. What today is considered sustainable finance will soon be the essence of the finance industry. - Sustainable finance is a response to the growing concerns about climate change, environmental degradation, not least social injustice. It takes into account how companies and projects contribute to society and the environment, as sustainable investors want to ensure that their investments are not only financially viable, but also make a positive impact on the world.

This course in Sustainable Finance and Investment (the "Course") will focus on financing as well as capital markets- and bank-related investment decisions addressing a range of environmental, social and governance (ESG) considerations when making decisions related to sustainable economic activities or projects.

At the core of the Course are case studies which will require participants to not only make analytically sound and thoughtful executive management decisions in complex constellations, but especially consider ESG-related aspects when weighing in various investor views and interests, limitations imposed by stakeholders, possibly legal and corporate governance constraints and aspects of value creation alternatives.

Stretching over 3 days, the Course will be highly intensive and emphasize group work as well as interaction and discussion in the class room. Thereby, Corporate Finance-related concepts already introduced and discussed in previous CEU courses will be applied.

Course requirements, grading, and attendance policies

Participation

- Mandatory and conditional to be graded is a full and timely participation in all classes.
- To be able to actively participate, preparation of mentioned literature and handing in of all 5 Case Study Assignments is mandatory.
- Case Study Assignments will be on a group basis. However, you are incentivized to work on an individual basis which will be rewarded with additional bonus points in regards to grading.

Grading

- Grading will be dependent upon the quality of preparation and hand-ins of the Case Study Assignments as well as the active participation and qualitative contribution in class room discussions.
- A participant can receive a maximum of 100 points (plus additional bonus points), whereby the eventual grades will be as follows:

Points	Grade
0 – 30	1
31 –49	2
50 – 55	3-
56 – 60	3
61 – 66	3+
67 – 72	4-
73 – 77	4
78 – 83	4+
84 – 89	5-
90 – 94	5
95 – 100	5+

- Course participants can achieve a certain maximum of points along the following criteria:
    - Quality of class room participation a maximum of 30 points.
        - 10 points over each of 3 days
    - Case Study Assignments a maximum of 70 points.
        - 14 points for each of 5 mandatory group hand-ins
        - up to +3 bonus points for each hand-in delivered on an individual basis
        - up to +3 bonus points for each presentation in class

Attitude

The Course is intense and requires substantial time commitment, effort, energy and concentration, but basically we want to learn and also have fun … - Precondition for this is a professional attitude:

- You are expected to professionally prepare, hand in the Case Study Assignments per deadline, be in class on time and actively participate in sessions.
- In class, you will always have with you:
    - A financial calculator;
    - The Case Study Assignment; and
    - Your hand-in / presentation material on a USB stick
- Mobile phones and other mobile devices will – without exception - be switched off during the entire length of the sessions.

Case Study Assignments

- You are required to hand in Power Point format presentations for a total of 5 case studies.
- Grading will be on group basis. Groups are not to exceed 3 (three) individuals.
- Each group / individual can assume to present (at least) twice during the Course.
- Individuals delivering hand-ins (voluntarily) on an individual basis will be awarded additional bonus points.
- Volume / page numbers / structure of the presentations are up to you (ideally, though, not more than 10 slides, excl. appendices) whereby quality and creativity rules over quantity.
    - Especially in regards to restructuring assignments, creativity can be key, provided a compelling conclusion is backed up with material, analytics or else to support your

    arguments. Whereby, your conclusions will be substantiated with a (more or less extensive) financial model, attached in an appendix
  - A good presentation structure may look like following:
    - Analytical status quo / as-is conclusions
    - Which are the major issues to resolve?
    - Which basic alternatives are available and feasible?
    - What would you recommend to do and why?
    - Next steps
- You will send the presentation hand-ins via email (christian.schopper@aon.at) by latest 24.00 the night prior to the respective session in which the Case Study Assignment will be discussed and bring a copy **<u>on a USB stick</u>** to class.
  - Downloading presentations during class time has frequently proven sub-optimal and consumes unnecessary valuable time we want to spent together to discuss
- 2-3 groups / individuals will either volunteer or be chosen arbitrarily to present their conclusions in front of class (time limit: max 15mins), followed by class Q&A, whereby you will have to support your conclusion(s).
  - Please note: If you intend to voluntarily present, it may be useful to run a rehearsal prior to the session, as there will be an absolute presentation time limit of 15mins
- A maximum of 14 points will be awarded for quality of written materials handed in for each Case Study Assignment. Individuals choosing to deliver hand-ins on an individual basis will be awarded with up to 3 additional bonus points. Those who present could expect to be awarded an additional maximum of 3 bonus points for the quality of the verbal presentation.

Case Study 1: Warren Adams founded **Patagonia Sur** in 2007 as one of the world's first for-profit land conservation businesses. His goal was to purchase over 100,000 acres of land in southern Chile and to run a variety of sustainable businesses to generate annual returns for investors. Patagonia Sur planned to derive various streams of revenue from the land-including eco-tourism, sustainable land development, carbon credits, water rights and eco-brokerage-thereby giving a financial return to investors on top of achieving a positive environmental impact. By 2011, Warren had raised over $20 million from high net worth individuals and Patagonia Sur had over 60,000 acres in Patagonia under management. However, institutional investors seriously questioned whether Patagonia Sur could ever do more than break even on an annual basis. Further, they worried that in fact the risk of the investment went up significantly as the company spent both its capital and management time on so many different revenue streams. In addition, some investors felt that for-profit conservation was morally wrong. Warren needed to convince both individual and institutional investors that his vision would succeed in both generating returns and preserving the natural beauty of Patagonia.

Case Study 2: In late 2013, **Husk Power Systems** found itself falling further and further behind plan. The founding CEO had decided to resign. His co-founder is faced with the decision of quitting his corporate job in the US to head to India and help form a new management team. Husk is an Indian start-up founded in 2007 with the goal of global rural electrification. The company has decided to pivot from operating biomass gasification plants towards developing solar micro-grids in India and East Africa.

Case Study 3: It is March 2017 and **TPG**, a global alternative investment firm with $74 billion assets under management, has recently launched its inaugural impact investing fund-the $2 billion Rise Fund. In an effort to "take the religion out of impact investing," Mike Stone, CIO of Rise, has partnered with Chris Addy at The Bridgespan Group, a non-profit consultancy, to develop an evidence-based methodology for quantifying the impact of prospective Rise investments. Together, they have come up with a framework that ultimately generates an impact multiple of money (IMM), a measure of the social value created by a company per equity dollar invested. If a company fails to meet the IMM threshold, Rise will not invest in it. The case finds Stone and Maya Chorengel, Rise's senior partner for impact, debating whether to make Rise's first investment in EverFi, an educational technology company that offers a range of online educational programming to its K-12 school, university, and corporate clients.

Case Study 4: On October 27, 2021, Daniel S. Loeb, founder and chief executive of the hedge fund Third Point, sent a letter to **Royal Dutch Shell**'s Board of Directors outlining a significant value-creation opportunity. The letter suggested splitting the company in two -- a spinoff company that will include the Liquefied Natural Gas, Renewables, and Marketing businesses and the remaining company that will include the Upstream, Refining, and Chemicals operations. How might the CEO and Board respond to this suggestion? How can Shell manage the increasing pressure from the activists? Should Shell frontally reject the proposal or try to arrive to an agreement? To successfully answer these questions, the participants will need to consider several key factors such as the financial implications of such a spinoff in Shell's valuation and cost of capital, its governance issues, the impact on the various different stakeholders, and how this case fits in the current sustainability trends.

Case Study 5: In March 2021, the team at **Carbfix** - a start-up born out of the culmination of more than 15 years of work by universities and parent company Reykjavik Energy- believed it had a game-changing technology to fight against climate change: eliminating $CO2$ permanently and safely from the atmosphere by storing it in basalt rock. In an aim to scale, they were considering three options to commercialize the concept: licensing the technology to other countries for onsite deployments near carbon dioxide ($CO2$) emitters, accelerating a direct air $CO2$ capture and storage system; and developing a storage hub in Iceland where $CO2$ could be imported and stored. In the deliberations of where to place precious time and resources, the company needed to consider the European Union Emission Trading Scheme (EU ETS) mechanism, a "cap and trade" system that permits carbon units to be sold in order to meet $CO2$ reduction targets. What was the best path forward to deliver on the company goal of reducing $CO2$ while building a viable commercial entity?

Course contents

<u>Content</u>

The Course aims to equip you with unique skills and valuable insights into the area of sustainable finance and investments. The skills acquired will help you in staying up-to-date with one of the latest trends in finance by gaining a deeper understanding of the topic. You will

- Become familiar with key concepts related to sustainability and learn how to integrate them into the financial decision-making process as a corporate seeking funding as well as from an investor perspective seeking and assessing opportunities.
- Establish core knowledge of some of the key ESG-related factors associated with assessing financial decisions and investments.
- Learn how to apply financial tools to incorporate and adopt ESG-related factors in selecting and managing propositions with a view to integrate them in a portfolio.
- Be able to assess the viability of ESG investments, both in the equity-, bond- and loan-related spectrum

Learning Approach

Learning is foremost by building on already acquired know-how of Corporate Finance principles and applying these in case study constellations, with lecture elements provided as needed. Hence, learning will take place in individual preparations and then subsequently in class room.

Learning Outcomes

During this intensive Course you are offered the opportunity to get up to speed in a very short time on relevant themes in the areas of sustainable finance and investment. You will

- Understand the importance and viability of sustainable investing
- Get an insight into the challenges and disruptions facing financial systems and business
- Develop an understanding of ESG-related factors in private and public market investing
- Acquire knowledge about tools and frameworks to respond to financial risks posed by sustainability issues
- Appreciate ESG-related valuation as a tool for making strategic decisions
- Understand the risk and return associated with ESG-based investment strategies
- Understand the sources of value in impact investing
- Identify and understand the different types of sustainable debt
- Measure environmental and social factors
- Gain ability to develop sustainable finance strategies and lead integration into traditional financial management practices
- Develop a vision for the future of sustainable investing

Schedule

	DATE		DATE		DATE
10:50	Intro		**Husk Power**		**Shell Shareholder Activism**
12:30	Company & Analysis				
	LUNCH BREAK		LUNCH BREAK		LUNCH BREAK
13:30	Valuation Approaches		Green Bonds		Restructuring Approaches
15:10					
	COFFEE BREAK		COFFEE BREAK		COFFEE BREAK
15:40	**Patagonia Sur**		**TPG - Rise Fund**		**Carbon Storage**
17:20					
	COFFEE BREAK		COFFEE BREAK		COFFEE BREAK
17:40	TBD		ESG-Related Assessment Tools		Round Up
19:20					
	Case Study				
	Interactive Session				

Course materials

Preparation

- All finance-, funding, as well as bank- as well as private and public capital markets-related topics addressed in the Course can be found in my book: Schopper / Corporate Finance Concepts, 2nd edition.
- Further it is suggested that you may familiarize yourself with literature / readings about the principles of Corporate Finance, such as Damodaran / Corporate Finance or by Brealey, Myers / Principles of Corporate Finance.
- Please note and be mindful of the intensity of the course: One may assume that the preparation of each Case Study Assignment realistically requires 4-5 hours.

Bio

Information regarding my background can be found on www.christianschopper.com

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at CEU are not tolerated.