Strathmore
UNIVERSITY

STRATHMORE BUSINESS SCHOOL

MASTER OF SCIENCE IN DEVELOPMENT FINANCE

END OF SEMESTER EXAMINATION

MDF 8203: SUSTAINABLE FINANCE FOR DEVELEOPMENT

Date: Wednesday 8th December 2021   **Time: 3** Hours

Instructions

1. This examination contains **FIVE** questions
2. **Answer Question ONE and any other TWO questions**

Question 1 (Compulsory) (30 Marks)

Part A

Read the case study on Verge Capital: Investing for Social Impact and attempt the following questions:

a) What impact assessment method should the verge Capital team implement to ensure all potential investments are compared fairly against one another?   **(5 marks)**
b) Which of the two potential investments should Vashist recommend to the Verge Capital committee. Support your recommendation with quantitative and qualitative analysis.

(10 marks)

c) How should Verge Capital position itself for future growth? Should it charge for consulting services and/or diversify by engaging in private, profit-motivated investments? Your answer should evaluate both options and their capacity to deliver social change. **(7 marks)**

Part B

d) Circular business models such as those used by certain sustainable fashion brands such as LVMH are becoming increasingly mainstream and demonstrate a clear business case. However, financing circular companies is still not a popular option for several banking institutions. Why is this the case?   **(5 marks)**
e) What is the main difference between best in class investing (also called positive screening) and impact investing?   **(3 marks)**

Question 2 (15 marks)

a) Describe Andrew Lo's Adaptive Markets Hypothesis (AMH) and contrast it with the weak form of the Efficient Markets Hypothesis. **(3 marks)**

b) The Adaptive Markets Hypothesis (AMH) offers a better framework for long term value creation than EMH. Critically discuss this statement. **(8 Marks)**

c) Briefly describe how market failures identified by the Fisherman's dilemma can be rectified. **(4 marks)**

Question 3 (15 Marks)

a) Using relevant examples for each, draw distinctions between business materiality, accounting materiality and stock market materiality in the context of measuring and reporting ecological and social impacts of organizational activity? **(3 marks)**

b) Assume you have been hired as a consultant for Unilever to advise on their sustainability strategy for 2022/2023. They have hired you to give specific recommendations on how to identify and report on material ESG information that is central to their strategy. Provide some recommendations on the steps Unilever should take, including which reporting framework(s) they can consider using. Your answer should provide detailed examples of some of the ESG disclosure items that Unilever would be required to produce, plus a detailed explanation of your choice of reporting framework(s). **(12 marks)**

Question 4 (15 Marks)

a) What is the difference between the true value methodology (e.g. as used by Safaricom) and HSG's public value? **(4 marks)**

b) Briefly describe the ways in which the National Climate Action Plan (2018 to 2022) aligns with the Paris Agreement? **(4 marks)**

c) What is a Science Based Target and what role does it play in meeting the target set forth by the Paris Agreement? **(3 marks)**

d) In your opinion, which type of the following investors have the most influence on the sustainability performance of companies and why? Hedge funds, retail investors, high-frequency traders or pension funds? **(4 marks)**

Question 5 (15 Marks)

Rise is a US based impact investing firm. They have identified 2 potential programs they can consider investing in: Alco- holEdu, an online course designed to deter alcohol abuse among college students, which was given at more than 400 universities and Haven, which educates college students about dating violence and sexual harassment and is used at some 650 universities.

For AlcoholEdu, Rise drew on a 2020 randomized controlled trial demonstrating that students who had been exposed to the program experienced an 11% reduction in "alcohol-related incidents" such as engaging in risky behaviors, doing or saying embarrassing things, or feeling bad about themselves because of their drinking. That would amount to some 239,350 fewer incidents. According to the National Institutes of Health, alcohol-related deaths account for about 0.015% of

all deaths among college students in the United States. Rise estimated that AlcoholEdu would save 36 lives among the approximately 2.2 million students who were projected to engage with the program over a five-year period. Lives saved, arguably the most important impact of less drinking, are relatively straightforward to monetize. But reducing alcohol abuse clearly has additional benefits for individuals and society.

For Haven, Rise focused on the prevention of sexual assault. Some 10.3% of undergraduate women and 2.5% of under- graduate men experience sexual assault every year. According to a 2017 study that evaluated the effects of an in-person course on preventing sexual assault that was taught at a college in the northeastern United States, assault declined by about 19% for women and 36% for men among those who took the course. Applying this data to 2.6 million students expected to experience the Haven program over five years, and assuming that an equal number of college women and men participated, Rise estimated that the program would avert 25,869 incidents of sexual assault among women, and 12,029 incidents among men.

Required:

a) Assuming you were working for Rise, provide a detailed step by step analysis and rationale for which program you would recommend the firm invests in. Your answer should provide a firm case for why you would choose one program over the other one. **(12 marks)**
b) In your opinion, is the skepticism around the claim that sustainable asset management leads to higher stock returns warranted? Why or why not? **(3 marks)**