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# UNIVERSITY OF ESWATINI DEPARTMENT OF BUSINESS ADMINISTRATION MAIN EXAMINATION PAPER MAY 2019

**DEGREE AND** 

YEAR OF STUDY

MASTER OF BUSINESS ADMINISTRATION

TITLE OF PAPER

INVESTMENT ANALYSIS AND PORTFOLIO

**MANAGEMENT** 

COURSE CODE

ACF624

TOTAL MARKS

100 MARKS

TIME ALLOWED

THREE (3) HOURS

INSTRUCTIONS

- This paper consists of <u>FOUR</u> (4) numbered pages, including this page and Appendix A which contains useful formulae.
- 2. There are <u>FOUR</u> (4) questions, answer <u>ALL</u> questions.
- 3. Begin solution to each question on a new page.
- 4. Show all the necessary workings.
- 5. Round off as you deem appropriate.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR OR SUPERVISOR.

#### **QUESTION 1**

#### (40 marks)

You have prepared the following information regarding three shares you are considering for investment:

| State of<br>Economy | Probability of state | Return share<br>Draco | Return share<br>Malfoy | Return share<br>Khubeka |
|---------------------|----------------------|-----------------------|------------------------|-------------------------|
| Normal              | 50%                  | - 2%                  | 4%                     | 0%                      |
| Boom                | 50%                  | 18%                   | 6%                     | 11%                     |

The Treasury bills rate is 4%.

#### Required:

(a) As a risk-averse investor, indicate which of the three shares you should choose. Support your answer with relevant calculations.

(15 marks)

- (b) Assuming that you have E120 000, you invest it as follows, E20 000 in Treasury bills, E30 000 in Draco, E45 000 in Malfoy and E25 000 in Khubeka. Calculate:
  - (i) the expected return of the portfolio

(5 marks)

(ii) the standard deviation or total risk of the portfolio

(20 marks)

### QUESTION 2 (20 marks)

Our goal as financial managers is the maximisation of shareholder wealth. How do we measure shareholder wealth? It is the value of all the shares that the shareholders own. In order to implement the goal of maximisation of shareholder wealth, it is necessary to assume that markets are efficient (Koewn et al, 2007: 19).

#### Required:

In light of the above statement, discuss the Efficient Market Hypothesis (EMH), paying particular attention to:

Define the EMH and discuss what makes markets efficient.
 The adjustment of share prices to new information in an efficient and inefficient market.

# QUESTION 3 (20 marks)

Prepare a detailed report explaining the basic elements and the importance of an Investment Policy Statement.

## QUESTION 4 (20 marks) PART A

Passive funds have taken root in this decade.

Passives are now widely used by our survey respondents. 66% see them as a mature part of their portfolio, and a further 15% are now in the implementation phase. Amongst the rest, 3% are close to decision making, and the remaining 16% are still in the awareness-raising phase. Passives have been implemented via three vehicles: traditional indexed funds used by 48% of respondents, segregated accounts by 38% and ETFs by 23%. Thus, passives are already mainstream for the majority of pension plans. Two drivers have influenced this outcome. According to our survey respondents, passives have, on average, delivered superior results net of fees compared with actives in this decade. Passives have also experienced a strong boost from certain dramatic upheavals in the investment landscape over the past 18 years. Both are considered separately below.

https://etf.dws.com/SWE/SWE/Download/Brochure/79382ba7-e035-4e69-b085-dff2232528c7/Passive-Investing-Research-2018-2336.pdf

With reference to the above extract, discuss any two passive strategies which can be employed in bond portfolio management.

(10 marks)

#### PART B

In Defense of Active Investing

By Charles Ellis, CFA

Active investing has been subjected to increasing abuse, particularly by those whose opinions are driven by the persistent accumulation of hard data and logical arguments. As we all know, active investing is on the defensive — even, some skeptics claim, "on the ropes" — having suffered a series of setbacks and increasingly virulent attacks. Especially scornful personal abuse has been aimed at active investing's few remaining advocates.

The recent past has been a particularly mean-spirited time for active managers owing to a rare market phenomenon: Small-cap stocks have performed poorly. For the 12 months ended 30 September 2014, the Russell 1000 Index (large-cap stocks) rose more than 19% while the Russell 2000 Index (small-cap stocks) rose less than 4%. This unusual differentiation in performance has recently penalized active managers, who often invest 10%–30% of their portfolios in small-cap stocks, and this factoid is being overexploited by the usual active-investing deniers. The "active attackers" are in full throat now as they gloat over such seemingly decisive data. Although sensitive defenders of active investing can retort that "it's always darkest before the dawn" and cite the long history of how consensus conviction has almost always been wrong, the best defense is more robust. Before I present the case for the defense of active investing, however, let's briefly review the so-called case for the prosecution.

https://blogs.cfainstitute.org/investor/2015/06/23/in-defense-of-active-investing/

With reference to the above extract, discuss two strategies which active managers can use to add value to their equity portfolios.

(10 marks)

# APPENDIX A: USEFUL FORMULAE

• 
$$E(R_i) = R_F + \beta_I [E(R_M) - R_F)] x$$

$$\bullet \quad \beta_P = \sum_{i=1}^n (w_i \times \beta_i)$$

• 
$$R_P = w_1 R_1 + w_2 R_2 + \dots w_m R_m$$

• 
$$E(R_P) = \sum_{i=1}^{n} [R_P \times p_i]$$
 or  $\sum_{i=1}^{n} [w_i \times E(R_i)]$ 

• 
$$Var(R_P) = \sum_{i=1}^{n} [p_i x (R_P - \overline{R}_P)^2]$$

• SD = 
$$\sqrt{Variance}$$

$$\sigma = \sqrt{[W_A^2 \sigma_A^2 + W_B^2 \sigma_B^2 + W_c^2 \sigma_c^2 + 2W_A W_B \sigma_A \sigma_B r_{AB} + 2W_A W_c \sigma_A \sigma_C r_{AC} + 2W_B W_C \sigma_B \sigma_C r_{BC} }$$