MAF752 Finance Trimester 1, 2024
Assessment 2 - Group Assignment

DUE DATE AND TIME:	**Friday, 3 May 2024, by 8:00pm (AEST)**
PERCENTAGE OF FINAL GRADE:	**30%**
WORD COUNT:	**2500 words max. (excluding tables, figures and references)**

Description

Background

Nextracker Inc, a global provider of intelligent, integrated solar tracker and software solutions for utility-scale and ground-mounted distributed generation solar projects, made its stock market debut on the NASDAQ on 9 Feb 2023. The initial offering price was set at $24 per share. Nextracker's shares closed at $31.01, representing a one-day pop of 29%. The IPO involved the issuance of approximately 26.6 million ordinary shares to the public, generating around $638 million in capital for Nextracker. As of February 16, 2024, the company's shares are trading at $60.55.

You are the CFO at InsureTek Co. InsureTek is a Melbourne-based company that serves as a worldwide provider of core system software for the life, annuity and health insurance industry. With a workforce of more than 500 people, InsureTek conducts its product and technology research and development from its headquarters in Melbourne. The company has a broad presence, including sales, client service, product development, and support offices in Australia, New Zealand, Hong Kong and Singapore, catering to a diverse clientele. Motivated by Nextracker's good IPO performance, the CEO of InsureTek has decided to raise capital through an initial public offering. He is going to propose the plan to the company's major shareholders. However, the CEO worries about the resistance from some of the shareholders, who are known to be conservative. It is well known that many IPOs in the U.S. were issued at prices substantially below the first day closing market prices. In addition, it is well known that many IPO firms performed poorly a few years after they went public. However, the evidence on the existence of short-run IPO under-pricing phenomenon in the information technology sector of Australian stock market is lacking. The CEO asks you to investigate the short-run and long-run performance of 3 Australian information technology IPOs listed on the Australian Securities Exchange (ASX) in 2019 and prepare a report on the following issues.

Questions

1. *Assessment objective: This question assesses your understanding of the calculation of initial return and daily return and your ability to analyse and interpret the calculation results for Australian IPOs (Topics 4 & 5 Learning outcomes).*

Short-run IPO under-pricing is a well-known phenomenon in the US stock market. But is this phenomenon unique to US IPO firms only? In other words, does this phenomenon perhaps also exist in the Australian stock market? To answer this question, you need to investigate the short-run IPO performance of 3 IPOs in the information technology industry listed on the ASX in 2019. The three information technology IPOs are ReadyTech Holdings Limited (RDY), Damstra Holdings Limited (DTC) and iCetana Limited (ICE).

To perform the analysis, you need to obtain the following information for each of the three IPOs from **Morningstar DatAnalysis Premium** accessible via Deakin Library page:

    i.   Listing date

    ii.   Issue price

    iii.   Unadjusted stock close price on the listing date (ASX listing date =the first trading day)

    iv.   Unadjusted 20 trading days of stock close price after the listing date.

You will need to calculate for each of the three IPOs:

    a) Initial return:

$$Initial\ return = \frac{(\text{The unadjusted first trading day close price} - \text{ issue price})}{\text{issue price}} \times 100$$

    b) Daily returns for 20 trading days starting from the day after the listing date of each IPO.

$$Daily\ return_t = \frac{(P_t - P_{t-1})}{P_{t-1}} \times 100$$

P_t =Stock close price at day t, P_{t-1} =Stock close price at day t-1. As an example, suppose you wish to calculate the daily return for stock ABC on 14 August 2019. Then P_t = Stock close price on 14 August 2019 and P_{t-1} =Stock close price on 13 August 2019. To calculate the daily return of a date that falls on Monday, P_{t-1} is the stock close price of the previous week Friday.

Plot the daily returns for three IPOs on a graph or separately on three graphs. Critically analyse the daily returns for the three IPOs using adequate and appropriate simple descriptive statistics (e.g., mean, standard deviation, median, minimum, maximum, etc). Describe what you learn from the initial return, daily returns (including daily returns plot) and analysis.

Wherever appropriate, the summary of your analysis and/or results (e.g., in a brief table, chart or graph) should be presented in the main text of your report. However, the data, detailed calculation/analysis and results should be presented in the Excel spreadsheet, which must be embedded in the Appendix section of your report. **(8 marks)**

2. *Assessment objective: This question assesses your ability to calculate and compare percentage return (Topic 5 Learning Outcome), and examine the long-run IPO performance (Topic 4 Learning Outcome).*

Examine the performance of these three IPO firms (ReadyTech Holdings Limited, Damstra Holdings Limited and iCetana Limited) 3 years after they were listed on the ASX using the 3-year holding period return.

The formula for 3 year holding period return is

$$3 - year\ holding\ period\ return = \left[\frac{P_3 - P_t}{P_t}\right] \times 100$$

P_3 = the **adjusted** close price on the 3-year anniversary. If the first trading day is August 14, 2019, then the 3-year anniversary is August 14, 2022; if the 3-year anniversary is a non-trading day, then use the adjusted close price of the trading day immediately prior to the 3-year anniversary.

P_t = the **adjusted** close price on the first trading day.

Next, for each of the three IPO firms, calculate the corresponding 3-year holding period return for S&P/ASX 100 Information Technology Index by using the value of S&P/ASX 100 Information Technology Index on the first trading day of the firm you want to compare as P_t and the value of S&P/ASX 100 Information Technology Index on the firm's 3-year anniversary as P_3.

Next, analyse the prospectus of the three IPO firms. Analyse the investment potential and risks associated with these IPOs by closely examining their business, markets/industries, growth prospects, risk factors and the planned use of IPO proceeds at the time of listing. Assess the financial health (e.g. profitability, liquidity) of

the firms by comparing their overall financial performance at the time of listing (using pro forma or forecasted statements, or the latest financial performance if the pro forma or forecasted statements are unavailable) with the financial performance for the financial year 2022. The information on IPO firms can be obtained from their prospectus or Datanalysis Premium and the financial performance for the financial year 2022 can be found in the companies' 2022 annual report.

Based on the insights obtained from the calculation and analysis performed above and the findings obtained in Question (1), would you recommend your company's CEO to propose the IPO plan to InsureTek's major shareholders? Why or Why not?

You are required to provide justification(s) to support your recommendation. Justify your recommendation by utilising the insights gained from analysing the prospectus of the three IPO firms, comparing their financial performance, comparing the 3-year firms' holding period return performance with the short-run IPO performance (the initial return and daily returns performance) of the three firms from Question (1), and comparing the 3-year firms' holding period return performance with the 3-year holding period return of S&P/ASX 100 Information Technology Index. You must properly reference all sources of information used and provide the name of the referencing style in the report. **(12 marks)**

3. *Assessment objective: This question assesses your understanding of the reasons for the occurrence of short-run IPO under-pricing using the results of an empirical study (Topic 4 Learning Outcome).*

According to Rock (1986), the information asymmetry argument to explain the short-run IPO underpricing is based on the premise that stock market is characterized by two groups of investors: informed investors and uninformed investors. If the IPO shares are offered at its expected value, then the informed investors who have information advantage about the IPO will crowd out the uninformed investors. Thus, the IPO shares are generally underpriced to induce the uninformed investors to participate in the IPO market. Ding (2016) applies the information asymmetry theory to explain the relation between risk factor disclosures and short-run IPO underpricing in Australian stock market for the period 1996 – 2007.

Select one stock market from the two provided options: Hong Kong or France. **Identify and describe <u>one empirical study or article</u>** that investigates the presence of short-run IPO under-pricing in the chosen stock market. In your report, you are expected to describe the study (including details about the sample of IPO firms examined in the study, the degree of short-run IPO under-pricing in the chosen market and the factor(s) that contributes to the level of short-run under-pricing in the chosen stock market). Then, discuss the theoretical explanations and empirical results supporting the factor(s)/reason(s) that explain short-run IPO under-pricing in the chosen study and relate the factor(s)/reason(s) proposed by the study to the information asymmetry theory proposed by Rock (1986) and applied by Ding (2016).

To complete the aforementioned task, you are expected to use <u>at least five</u> academic references. You are encouraged to use articles from scholarly journals or books, while refraining from using non-academic internet sources such as Wikipedia, Investopedia, generative AI tools (e.g. ChatGPT) or blogs. It is essential that you retain electronic copies of the articles you use, as you may be requested to provide them for the assessment of your report. You must appropriately reference all sources of information used in your report, specifying the name of the referencing style employed. **(Maximum 1100 words for question 3.)** **(9 marks)**

4. *One mark is allocated to referencing and embedding excel spreadsheet into the report.* **(1 mark)**

(8 + 12 + 9 + 1 = 30 marks)

Useful resources and referencing

You should read and understand <u>Chapters 7, 9 and 15 of your textbook and Topics 4 and 5 lecture slides</u>. You are expected to do research outside of your lecture time, using library/online sources, process the information

gathered, and write an organised, well-thought-out response to the assignment questions. Here are some useful resources:

1. Ding, R. 2016, Disclosure of downside risk and investors' use of qualitative information: Evidence from the IPO prospectus' risk factor section. International Review of Finance 16, 73-126.
2. Rock, K. 1986, Why new issues are underpriced. Journal of Financial Economics, 15, 187-212.
3. Chapters 2, 3 and 4 from: Rosenthal, JA 2012, *Statistics and Data Interpretation for Social Work*, Springer, New York. Available as a Deakin University Library e-book.

Resources relevant to Assignment 2 can be found on the Padlet website (https://padlet.com/buslaw221/maf752-principles-of-finance-1a1ythsfo7eb) and Library Resources Guides website (the link can be found in padlet website) developed specifically for MAF752 Finance.

The listing date, issue prices, historical close prices, and any other relevant financial information should be obtained from **Morningstar DatAnalysis Premium** – a library database that is accessible via the Deakin Library website. Detailed instructions on how to retrieve this information from DatAnalysis can be found in a **separate instruction document and short video clips available on the MAF752 Padlet website.** The value of S&P/ASX 100 Information Technology Index must be obtained from the website indicated in the separate document. **The specific details for Assignment 2 will be discussed during an assessment 2 discussion session in week 4, which will be recorded. It is highly recommended that you attend the online session or watch the recording before beginning work on your assignment**. Please embed the Excel spreadsheet containing the data you will use for the calculations in the appendix section of your report.

Good referencing and carefully checking all your references are important. Make sure you leave enough time to do this. For this assignment, I recommend using the **Harvard referencing style**, as described in the *Deakin guide to referencing*. Click on the 'Deakin Harvard guide to referencing' link in Assessment 2 folder on CloudDeakin to access the Harvard guide online or download a PDF copy. The *Deakin guide to referencing* also provides useful information on academic integrity, general referencing principles and how to integrate your sources into your writing through summarising, paraphrasing, etc. You must provide the name of the referencing style in the report.

If you have used generative AI (genAI) in developing any part of your assessment - such as in the development of ideas, problem solving and data analysis - you must acknowledge your use of genAI. Your genAI acknowledgement should be included in the Appendix section of your report. The acknowledgement needs to specify:

- The name of the genAI tool,
- The month and year you accessed it, and
- Any prompts or instructions provided to the genAI, the output and where exactly in your assessment you have used genAI.

To ensure your acknowledgement includes all necessary details, please refer to the examples of acknowledgements provided at Acknowledging your use | Students (deakin.edu.au).

Learning Outcomes

This task allows you to demonstrate your achievement towards the Unit Learning Outcomes (ULOs) which have been aligned to the Deakin Graduate Learning Outcomes (GLOs). Deakin GLOs describe the knowledge and capabilities graduates acquire and can demonstrate on completion of their course. This assessment task is an important tool in determining your achievement of the ULOs. If you do not demonstrate achievement of the ULOs you will not be successful in this unit. You are advised to familiarise yourself with these ULOs and GLOs as they will inform you on what you are expected to demonstrate for successful completion of this unit.

The learning outcomes that are aligned to this assessment task are:

Unit Learning Outcomes (ULO)	Graduate Learning Outcomes (GLO)
ULO 1: Apply fundamental principles of corporate finance	GLO1
ULO 3: Critically analyse companies' information.	GLO3, GLO4
ULO 4: Provide insights/recommendations based on the results of analysis.	GLO1, GLO4

Submission

You must submit your assignment in the Assignment Dropbox in the unit CloudDeakin site on or before the due date.

Submit your assignment as a <u>SINGLE</u> MS Word document only (<u>not</u> PDFs or other file formats). Workings in Excel must be embedded into the word file ('embedded' means the marker can click on your table, which will then open in Excel, so we can check your workings). <u>Do not</u> submit separate files.

When uploading your assignment, name your document using the following syntax: <student ID number_MAF752.doc (or '.docx'). For example, '123456789_345678911_MAF752.doc'.

Each group must submit one document into the assignment drop box with all student names and IDs on the front page of the submission.

Please sign-up to a group via CloudDeakin from **25 March 2024**. Please click on the "Tools" tab and then select "Groups". You can register as **a group of 1 or 2 students**.

Make sure you and your group partner register correctly. If you make a mistake or wish to change the group, then please email the details (e.g., name, student ID number, wrongly registered group number) to Dr Mong Shan Ee (mong.e@deakin.edu.au). <u>Do not</u> join someone's group unless you have prior permission to do so. You will be removed from a group at the request of the other student!

Submitting a hard copy of this assignment is not required. You must keep a backup copy of every assignment you submit, until the marked assignment has been returned to you. In the unlikely event that one of your assignments is misplaced, you will need to submit your backup copy.

Any work you submit may be checked by electronic or other means for the purposes of detecting collusion and/or plagiarism.

Plagiarism and collusion constitute extremely serious breaches of academic integrity. They are forms of cheating, and severe penalties are associated with them, including cancellation of marks for a specific assignment, for a specific unit or even exclusion from the course. If you are ever in doubt about how to properly use and cite a source of information, consult your lecturer or the Study Support website. http://www.deakin.edu.au/students/study-support/referencing

Plagiarism occurs when a student passes off as the student's own work, or copies without acknowledgement as to its authorship, the work of any other person or resubmits their own work from a previous assessment task.

Collusion occurs when a student obtains the agreement of another person for a fraudulent purpose, with the intent of obtaining an advantage in submitting an assignment or other work.

Work submitted may be reproduced and/or communicated by the university for the purpose of assuring academic integrity of submissions.

(http://www.deakin.edu.au/students/study-support/referencing/academic-integrity

Deakin students are not permitted to recycle their assessment work, or parts of assessment work, without the approval of the unit chair of their current unit. This includes work submitted for assessment at another academic institution. If students wish to reuse or extend parts of previously submitted work, then they should discuss this with the unit chair prior to the submission date. Depending on the nature of the task, the unit chair may permit or decline the request.

When you submit an assignment through your CloudDeakin unit site, you will receive an email to your Deakin email address confirming that it has been submitted. You should check that you can see your assignment in the Submissions view of the Assignment Dropbox folder after upload, and check for, and keep, the email receipt for the submission.

Marking and feedback

The marking rubric for this task is available in the MAF752 CloudDeakin unit site - in the Assessment 2 folder (under Assessment Resources).

It is always a useful exercise to familiarise yourself with the criteria before completing any assessment task. Criteria act as a boundary around the task and help identify what assessors are looking for specifically in your submission. The criteria are drawn from the unit's learning outcomes ensuring they align with appropriate graduate attribute/s.

Identifying the standard you aim to achieve is also a useful strategy for success and to that end, familiarising yourself with the descriptor for that standard is highly recommended.

Students who submit their work by the due date will receive their marks and feedback on CloudDeakin 15 working days after the submission date.

Extensions

Extensions can only be granted for exceptional and/or unavoidable circumstances outside of your control.
Requests for extensions must be made by 12 noon on the submission date using the online Extension Request form under the Assessment tab on the unit CloudDeakin site. All requests for extensions should be supported by appropriate evidence (e.g., a medical certificate in the case of ill health).
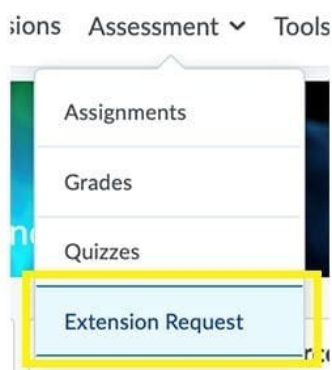
Applications for extensions after 12 noon on the submission date require University level special consideration and these applications must be submitted via StudentConnect in your DeakinSync site.

Late submission penalties

If you submit an assessment task after the due date without an approved extension or special consideration, 5% will be deducted from the available marks for each day after the due date up to seven days*. Work submitted more than seven days after the due date will not be marked and will receive 0% for the task. The Unit Chair may refuse to accept a late submission where it is unreasonable or impracticable to assess the task after the due date. *'Day' means calendar day for electronic submissions and working day for paper submissions.

An example of how the calculation of the late penalty based on an assignment being due on a Friday at 8:00pm is as follows:

- 1 day late: submitted after Friday 11:59pm and before Saturday 11:59pm– 5% penalty.
- 2 days late: submitted after Saturday 11:59pm and before Sunday 11:59pm – 10% penalty.
- 3 days late: submitted after Sunday 11:59pm and before Monday 11:59pm – 15% penalty.
- 4 days late: submitted after Monday 11:59pm and before Tuesday 11:59pm – 20% penalty.
- 5 days late: submitted after Tuesday 11:59pm and before Wednesday 11:59pm – 25% penalty.
- 6 days late: submitted after Wednesday 11:59pm and before Thursday 11:59pm – 30% penalty.
- 7 days late: submitted after Thursday 11:59pm and before Friday 11:59pm – 35% penalty.

The Dropbox closes the Friday after 11:59pm AEST/AEDT time.

Support

The Division of Student Life provides a range of **Study Support** resources and services, available throughout the academic year, including **Writing Mentor** and **Maths Mentor** online drop ins and the SmartThinking 24 hour writing feedback service at **this link**. If you would prefer some more in depth and tailored support, **make an appointment online with a Language and Learning Adviser**.

Referencing and Academic Integrity

Deakin takes academic integrity very seriously. It is important that you (and if a group task, your group) complete your own work in every assessment task Any material used in this assignment that is not your original work must be acknowledged as such and appropriately referenced. You can find information about referencing (and avoiding breaching academic integrity) and other study support resources at the following website: http://www.deakin.edu.au/students/study-support
You are recommended to use the Harvard style of referencing style, as set out in the Deakin guide to Harvard referencing, and include a comprehensive list of references for both your data sources and in-text citations.

Your rights and responsibilities as a student

As a student you have both rights and responsibilities. Please refer to the document *Your rights and responsibilities as a student* in the Unit Guide & Information section in the Content area in the CloudDeakin unit site.