

## Solutions and grading scale Finance I

Evaluación	Quiz 1
Fecha	21-03-2012

Question	Area	Outstanding (3)	Sufficient (2)	Needs improvement (1)	Insufficient (0)	Score	Factor
1. Why is a dollar today worth more than a dollar tomorrow?	Understanding key assumptions of Financial Theory	The response clearly identifies the correct concept: <b>Because you could invest a dollar today in a risk free asset and receive more than a dollar tomorrow</b>	- Identifies the ability to invest a dollar as the main argument, although the response <b>does not mention the use of a risk free asset</b>	-Does not include the concept of risk free investment opportunity and <b>includes individual preferences such as risk aversion or time-consumption</b>	The response doesn't comply with minimum requirements of previous levels	15	5
2. Please explain the agency problem, providing an example in a corporate context?	Understanding of the agency problem	<b>Describes the agency problem clearly</b> , using adequate language and <b>proposes a precise and coherent corporate example</b> - The agency problem consists in the conflict raised between different parties due to divergent interests or goals	Response <b>contains both the explanation and example, but one of them doesn't comply with the requirement</b> of an outstanding response	Response contains <b>either</b> : - only 1 of the elements with the outstanding requirements - both elements, without the outstanding requirements	The response doesn't comply with minimum requirements of previous levels	15	5
3. Suppose you own a portfolio with 2 assets. Asset 1 has an expected return of 16% and a standard deviation of 8%. Asset 2 has an expected return of 24% and a standard deviation of 22%.							
a. Graph the risk (standard deviation) and expected return of each asset. (1 Pt)		<b>Correctly graphs both assets</b> , identifying coordinates and axis. <b>Does not include additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	<b>Correctly graphs both assets</b> , identifying coordinates and axis. <b>Includes additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	<b>Incorrectly graphs one asset. Does not include additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	The response doesn't comply with minimum requirements of previous levels	15	5
b. Determine what is the weight each asset should have in the portfolio, if you require the portfolio to provide an expected return of 20%.-		<b>Correctly calculates the expected portfolio return as the weighted average</b> of the assets' expected return and solves for the proportion of each asset. Correct response is <b>50% each asset</b>	<b>Correctly calculates the expected portfolio return as the weighted average</b> of the assets' expected return and solves for the proportion of each asset. Provides an <b>incorrect response for the proportion of each asset</b>	<b>Doesn't calculate the expected portfolio return as the weighted average</b> of the assets' expected return and instead uses other approach or formula that lead to an incorrect proportion	The response doesn't comply with minimum requirements of previous levels	15	5
c. Calculate the standard deviation of the portfolio from 3.b, assuming a correlation coefficient of 0.5	Portfolio Risk and Return	<b>Correctly uses the portfolio variance formula provided, with the correct proportion from 3.b. Correctly translates variance into std. dev.</b> Correct response is <b>13.45%</b>	<b>Correctly uses the formula provided, with incorrect proportions from 3.b.</b> Provides an estimation of the std. dev. <b>between 8% and 22%, or</b> - Using the procedure from the outstanding response, fails to calculate the std. dev and <b>provides the variance instead</b>	<b>Incorrectly uses the formula provided.</b> Provides an estimation of the std. dev. <b>between 8% and 22%</b>	The response doesn't comply with minimum requirements of previous levels	15	5
d. Graph the risk and return of the portfolio from 3c.- Show in the graph the difference between the portfolio risk and the weighted average risk of the assets.		<b>Correctly graphs the portfolio and the weighted average risk</b> , identifying coordinates and axis. <b>Does not include additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	<b>Correctly graphs the portfolio and the weighted average risk</b> , identifying coordinates and axis. <b>Includes additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	<b>Incorrectly graphs either the portfolio or the weighted average risk.</b> Doesn't <b>include additional incorrect items</b> such as portfolio's frontiers (as no information is given to correctly graph a portfolio frontier)	The response doesn't comply with minimum requirements of previous levels	15	5

Total score 90  
% required to approve 60%