

Mathematical Tools For Assest Management

MTH6113

Week 4 Feedback

Spring Term 2024

1. I was going through the measure of investment risk and on pg 23 for the The (downside) semi-variance of return example why are the intervals for the integrals -0.05 and 0.05 ? Why not 0.15
 - ▶ Not yet covered in class - I will explain it today.

2. For a risk averse person, we learnt that they pay a value cx to avoid a gamble right but a *risk averse person wouldn't want to gamble in the first place* because of the unhappiness of losing that unit of money so why would they pay cx to avoid it as they're losing money by paying for cx ? Plus, how does this relate to investments? Please demonstrate via an example in the lectures when you answer this question

- ▶ The adverse effect of a loss could be huge: For example when you insure your house against fire. The loss could be the value of **the whole house** ($-\$500,000$) or **nothing**. If the fire happens would you be able to pay it if you don't have insurance? No, hence you don't want to face this gamble (not being insured) so you insure and pay $\$100$ insurance premium. If the fire did not happen indeed you are worse off by $\$100$, but if the fire happens, you are much much better off.
- ▶ Investment example - Practice Set