



FRM Level 1 Lecture Notes

v. 1.0.0

Bin Guo

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Introduction

The FRM exam

Key to success

Foundations of risk management

Overview

Risk management: a helicopter view



- ▶ International professional certification offered by **GARP** (The Global Association of Risk Professionals).
- ▶ A certificate focus on risk management, 2 levels:
 - ▶ **Part 1**: tools used to assess financial risk : Foundations of Risk Management, Quantitative Analysis, Financial Markets and Products, Valuation and Risk Models
 - ▶ **Part 2**: Measurement and Management of: Market Risk, Credit Risk, Operational and Integrated Risk; Current Issues in Financial Markets
- ▶ Scoring and results:
 - ▶ All multiple choice questions
 - ▶ No penalties for wrong answers
 - ▶ Passing scores determined by FRM committee (~ 50%)
 - ▶ Exam results emailed six weeks after the exam, quartile results



Table: Part 1 exam contents and weights

Book	Knowledge Domains	Weight	# Questions
1	Foundations of Risk Management	20%	20
2	Quantitative Analysis	20%	20
3	Financial Markets and Products	30%	30
4	Valuation and Risk Models	30%	30

^a 4 hours exam time



Plan and practice

- ▶ Begin studying early
- ▶ Study plan and stick to the plan
- ▶ **Practice exams**

Recourses

- ▶ Official books
- ▶ Schweser
- ▶ bbs.pinggu.org



Concepts

- ▶ **Risk:** uncertainty regarding losses/gain.
- ▶ **Risk management:** Activities aimed to reduce eliminate potential to incur expected losses.
- ▶ **Risk trading:** taking risk → generating incremental gains

Types of risk

- ▶ Market risk: *e.g.* IR, FX, equity, commodity price, *etc*
- ▶ Credit risk: *e.g.* default, bankruptcy, downgrade and settlement
- ▶ Liquidity risk: *e.g.* funding/trading liquidity risk
- ▶ Operation risk



Risk management process

1. Identify
2. Quantify and estimate
3. Determine collective effects/cost-benefit analysis
4. Develop risk mitigation strategy
5. Assess performance and amend risk mitigation strategy as needed



Tools and procedures

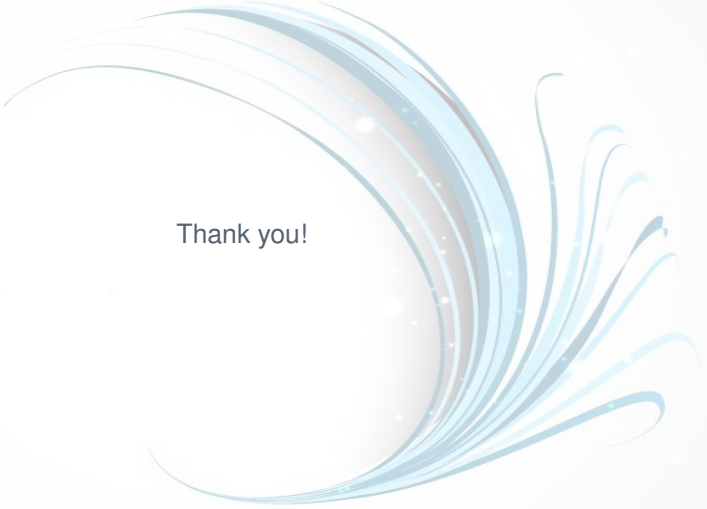
- ▶ Quantitative measures: *e.g.* VaR, Expected shortfall, Exposures^a
- ▶ Quantitative assessment: scenario analysis, stress testing,
- ▶ Enterprise risk management (ERM): integrative approach within an entire entity

^aWill re-visit

Expected & unexpected loss

- ▶ Quantitative measures: *e.g.* VaR, Expected shortfall, Exposures^a
- ▶ Quantitative assessment: scenario analysis, stress testing,
- ▶ Enterprise risk management (ERM): integrative approach within an entire entity

^aWill re-visit



Thank you!