

# **Sample ACE Memorization Cards**

## **ILA LRM Exam**

### **Instructions for Cards**

- **Extra blank cards are provided, so you can add or delete cards.**
  
- **Card Layout**
  - **Acronym in top left corner (bold font)**
  - **Bottom left -- Resource (Text, SN, PR)**
  - **Bottom right -- ACE study guide section / page**
- **Make notes or add to cards in white space**
- **Some cards that have multiples resources (syllabus has different texts with the same list)**
  
- **Consider purchasing the ACE memorization CDs to help you memorize.**
  
- **Also, consider purchasing the ACE OL seminar!**

# ERM Process

1. Risk Identification and Classification
2. Risk Assessment and Quantification
3. Risk Evaluation, Risk Appetite
4. Risk Monitoring
5. Responses to Risk and Modification

# Traditional vs. Modern ORM

	<b>Traditional ORM</b>	<b>Modern ORM</b>
Definition	Risk is defined by undesirable incidents or events	Risk is defined by exposure to loss
Risk Identification Process	Ask managers to identify their major risks, leads to large set of risks	Use hard or soft data to reveal where the large losses are taking place.
Risk Assessment/ Measurement	Likelihood times the Impact (done for each risk and each incident)	Stochastically model cumulative loss distribution
Aggregation	Results cannot be aggregated	Results can be aggregated
What is measured	Probability weighted loss from one specific incident	Both routine losses and losses in the tail
Goal	Day-to-day management, tactical intervention.	Management of key risks, optimization of risk-reward, risk control and transfer
Cost	Resource intensive	Less resource intensive

# Why Manage Risk? (Theoretical Reasons)

1. Managerial Self Interest
2. Reduce Taxes
3. Cost of Financial Distress
4. Reduce Payments to Stakeholders



# AAA Scenarios - Completion of Yield Curve

1. Calculate a 7-year rate

$${}_{mid}r_t = (1 - \phi) * {}_{mid}r_{t-1} + \phi * [{}_2r_t + \omega_t + \chi_t * ({}_1r_t - {}_2r_t)]$$

2. Find the best-fit historic curve

3. For maturities < 1 year (i.e., for m = 0.25 and 0.50):

$${}_m r_t = {}_1 r_t \left( \frac{{}_m r_{hyp}}{{}_1 r_{hyp}} \right)$$

4. For maturities > 20 years (i.e., for m = 30):

$${}_m r_t = {}_{20} r_t \left( \frac{{}_m r_{hyp}}{{}_{20} r_{hyp}} \right)$$

5. For intervening maturities (i.e., m = 2, 3, 5, 7 and 10):

$${}_m r_t = \Omega_m * {}_1 r_t \left( \frac{{}_m r_{hyp}}{{}_1 r_{hyp}} \right) + (1 - \Omega_m) * {}_{20} r_t \left( \frac{{}_m r_{hyp}}{{}_{20} r_{hyp}} \right)$$

$$\Omega_m = \left( \frac{20 - m}{20 - 1} \right)$$

# Key Rate Duration - Advantages

1. Identifies the price sensitivity to each point on the yield curve
2. KRD aggregates linearly
3. KRDs are applicable over a wide range of yield curve movements
4. Can create a replicating portfolio to mimic an embedded option
5. Compare different types of products/structures
6. Portfolios immunized using key rates will withstand non-parallel yield curve shifts