



## **Abstract and Outline**

### **Applying financial econometrics and statistics in risk management research**

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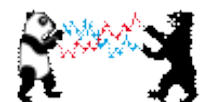
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#### **Abstract**

The purposes of this lecture are (1) to give a brief review of financial analysis, planning, and forecasting; (2) to demonstrate the importance of financial econometrics and statistics in risk management research; (3) to discuss credit analysis, distress analysis, and bond rating forecasting; (4) to show that the evolution of alternative methods have been used to perform credit rating forecasting; and (5) to present how the joint determination of capital structure and stock returns can be performed in terms of LISREL model. Overall, this lecture will theoretically and empirically show how financial econometrics and statistics can be used to perform financial analysis, planning, and forecasting.





## **Outline**

### **A. Introduction**

### **B. Financial analysis, planning, and forecasting**

#### **B1. Overview**

#### **B2. Classification of risk management**

**(i) Credit risk**

**(ii) Market risk**

**(iii) Operation risk**

#### **B3. Accounting, economics, and marketing information**

#### **B4. Financial econometrics**

#### **B5. Financial statistics**

### **C. Credit Analysis, distress analysis, and bond rating forecasting**

#### **C1. Overview**

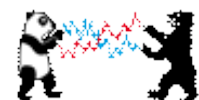
#### **C2. Z-score**

#### **C3. The determination of problem banks**

#### **C4. Bond rating forecasting**

### **D. Logistic regression and credit rating forecasting**

#### **D1. Introduction**





## **D2. Methodology**

### **(i) Ohlson model**

### **(ii) Shumway model**

### **(iii) KMV model**

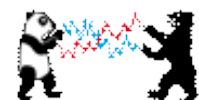
## **D3. Research papers as examples**

## **E. The Joint Determinants of Capital Structure and Stock Rate of Return: A LISREL Model Approach**

## **F. Summary and conclusion remarks**

## **References**

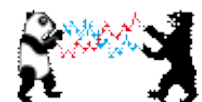
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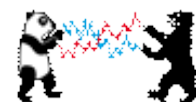
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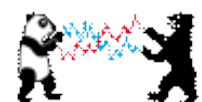
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