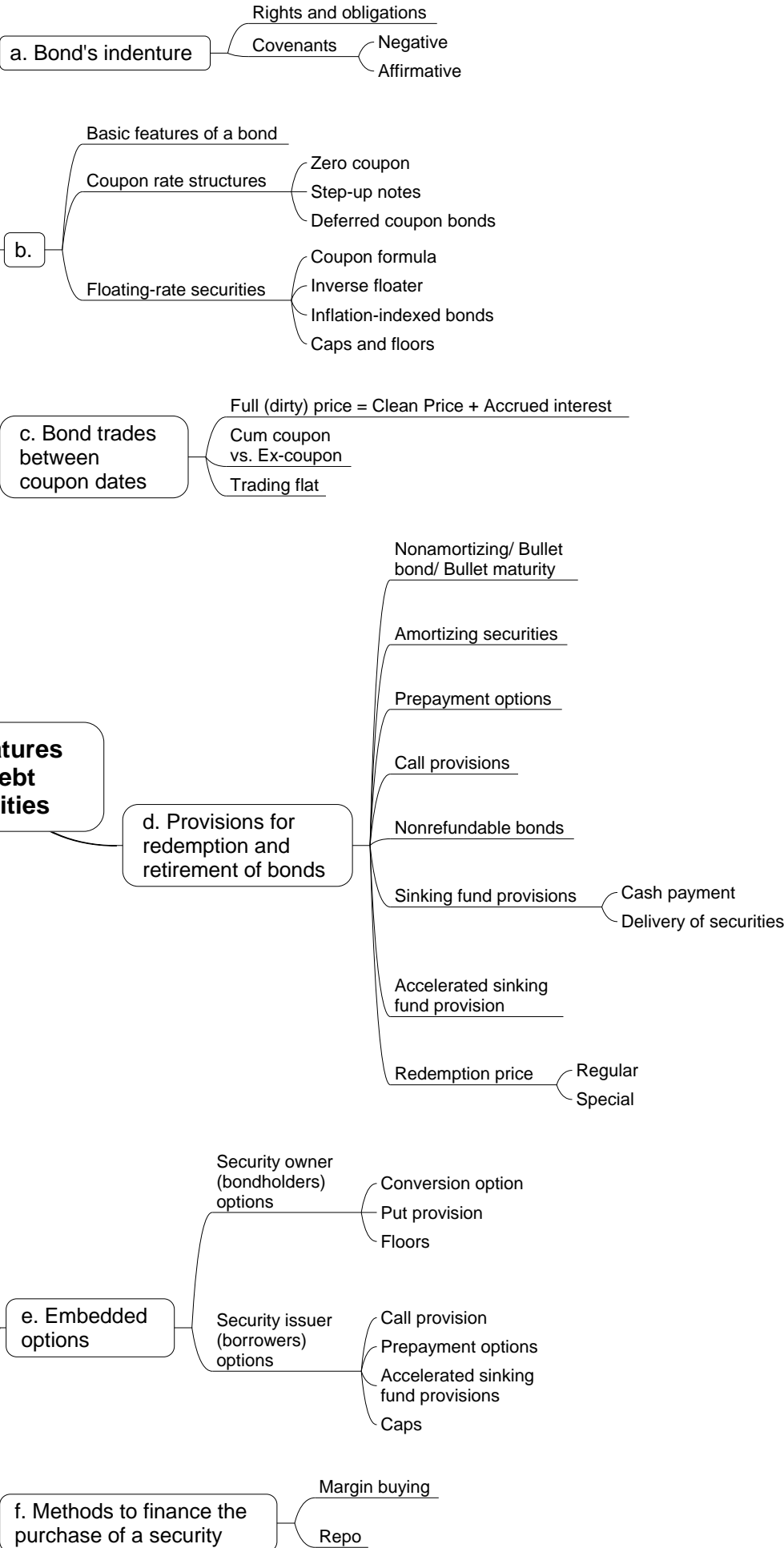


**CFA LEVEL 1**

**STUDY SESSION 15 & 16**

**FIXED INCOME**

# 61. Features Of Debt Securities



# 62. Risks Associated With Investing In Bonds

## a, i, j, k, l, m, n, o. Risks

- Interest rate risk
- Yield curve risk
- Call risk
- Prepayment risk
- Reinvestment risk
  - i. Factors affecting reinvestment risk
    - Coupon
    - Call feature
    - Amortizing
    - Prepayment option
- Credit risk
  - j. Forms
    - Default risk
    - Credit spread risk
    - Downgrade risk
  - j. Meaning and role of credit rating
- Liquidity risk
  - k. why important even hold to maturity
- l. Exchange-rate risk
- m. Inflation risk
- n. Volatility risk
- o. Event risk
  - Disaster
  - Corporate restructuring
  - Regulatory issues
- Sovereign risk

## b. Relations among

- Coupon rate
- Market yield
- Bond's price relative to par value
  - Discount
  - Premium
  - Equal to par

## c. Effect on interest rate risk of

- Maturity
- Coupon
- Embedded options
  - Call
  - Put
- Yield

## d, h. Callable bond

- Value =
  - value of option-free bond
  - minus
  - value of embedded call
- h. Disadvantages of a callable or prepayable security to investors
  - Less certain CF- call risk/prepayment risk
  - Reinvestment risk
  - Potential price appreciation < option free securities

## e. Floating rate security

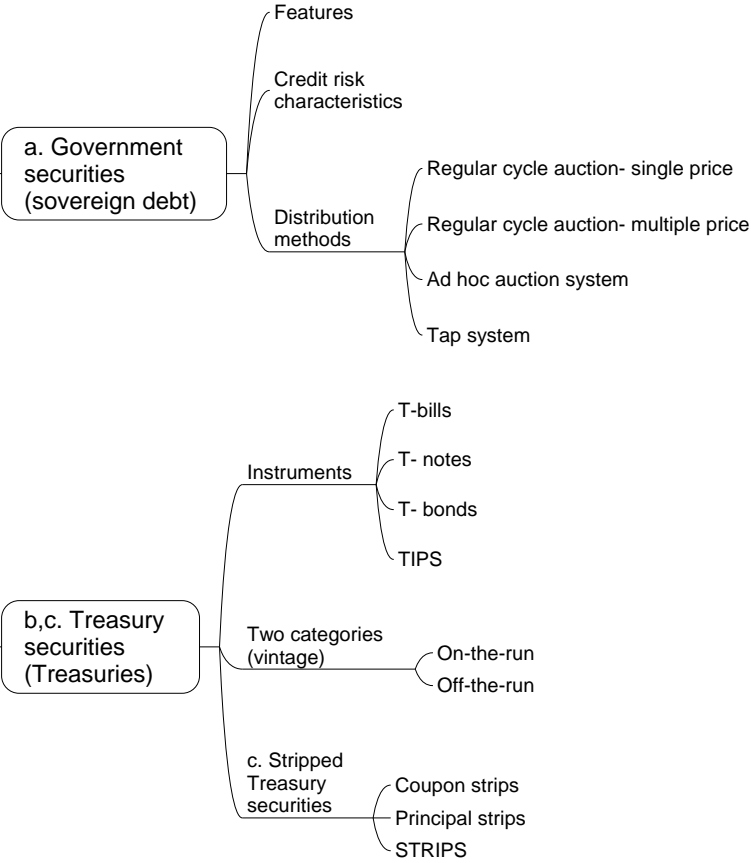
- Interest rate risk
- Reasons Price ≠ Par
  - Cap risk
  - Margin

## f, g. Duration

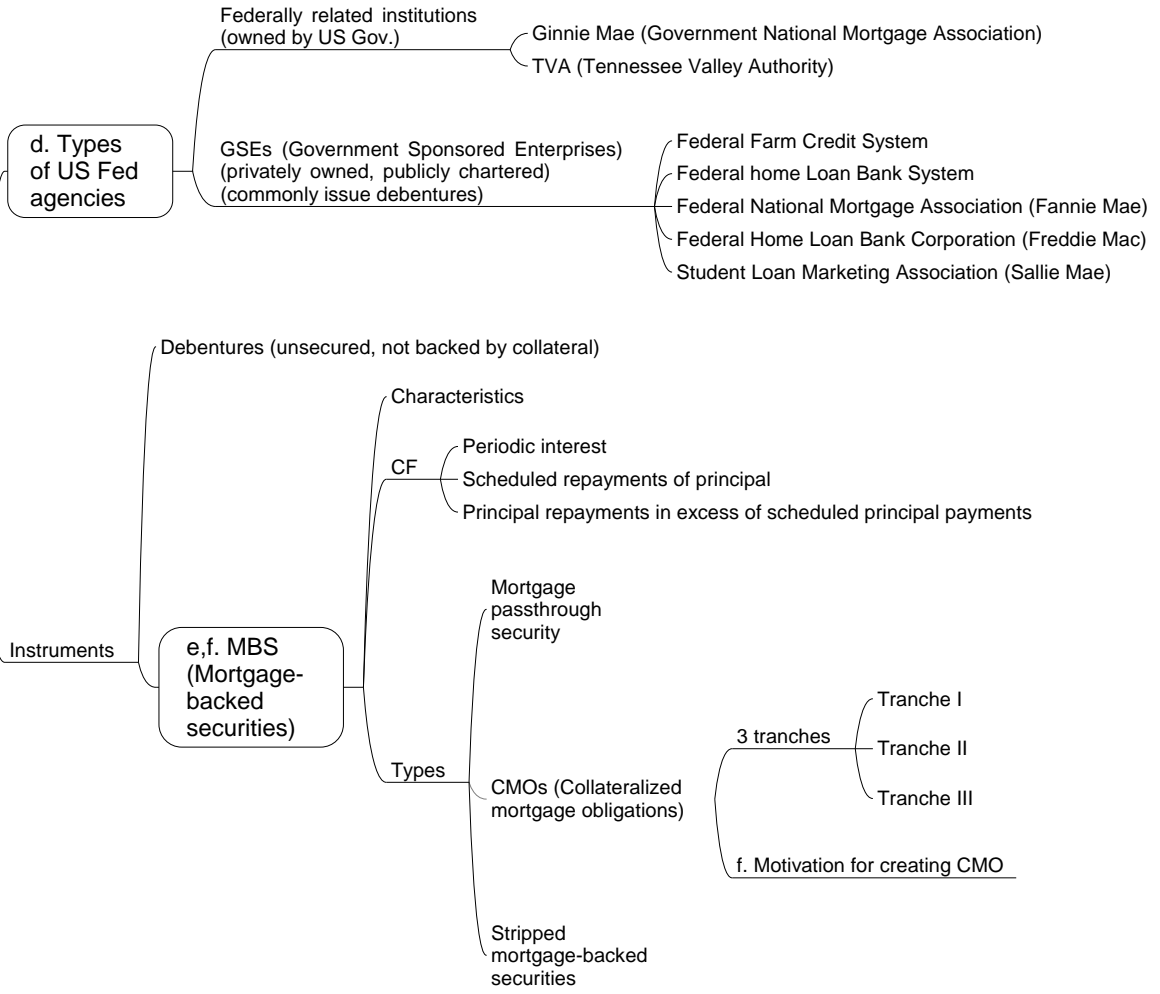
- Duration =
- Dollar duration =
- g. Duration and Yield curve risk for a portfolio of bonds

**63.1  
Overview  
Of Bond  
Sectors  
And  
Instruments**

**TREASURIES**



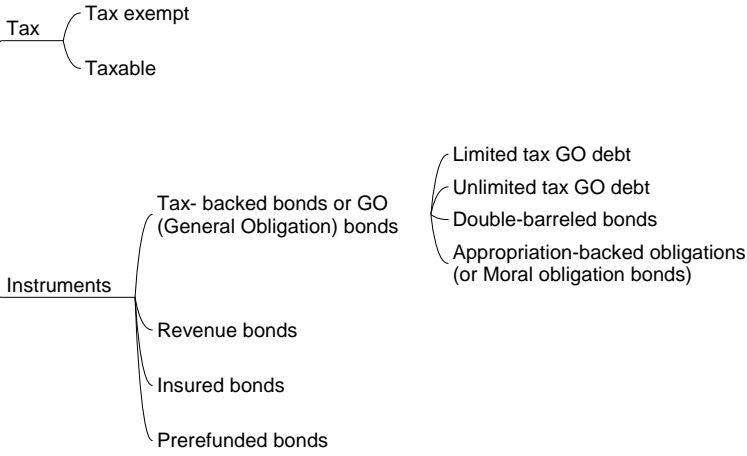
**AGENCY BONDS**



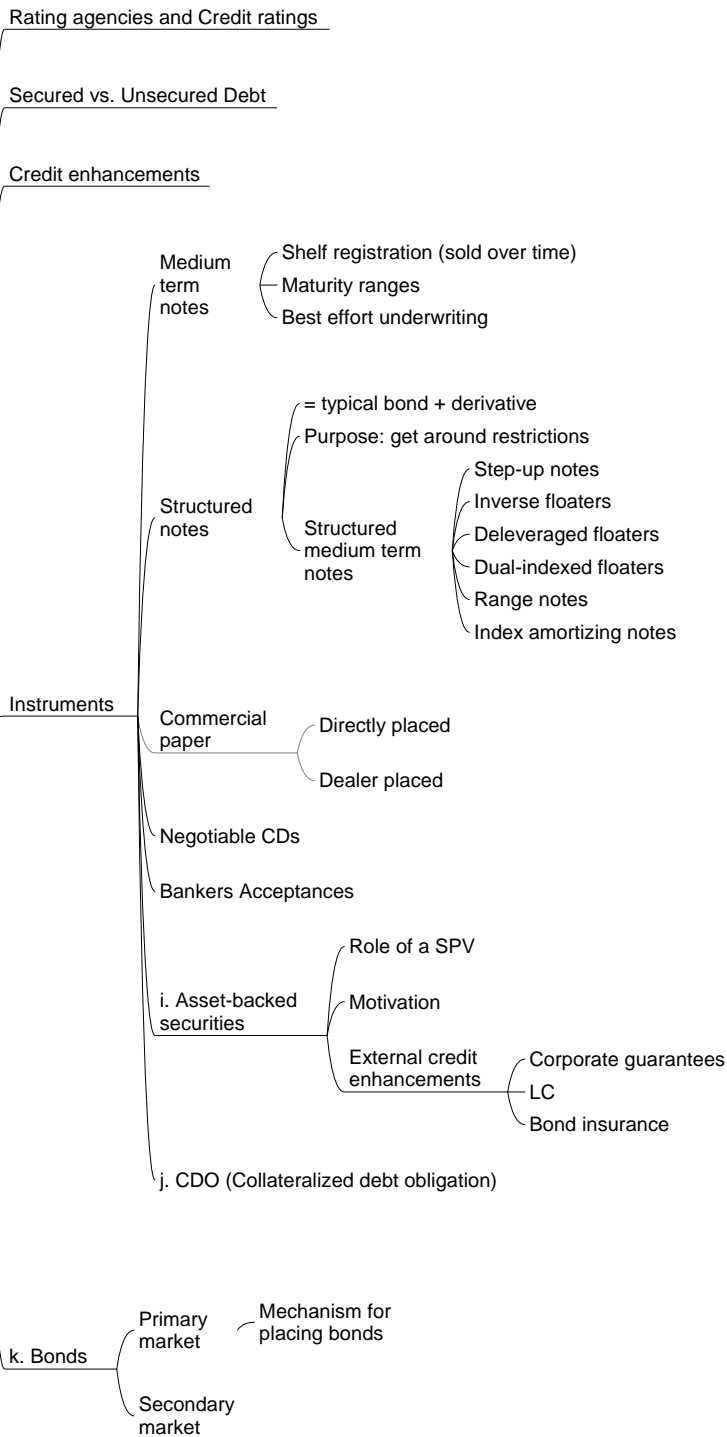
f. Motivation for creating CMO

**63.2  
Overview  
Of Bond  
Sectors  
And  
Instruments  
(cont.)**

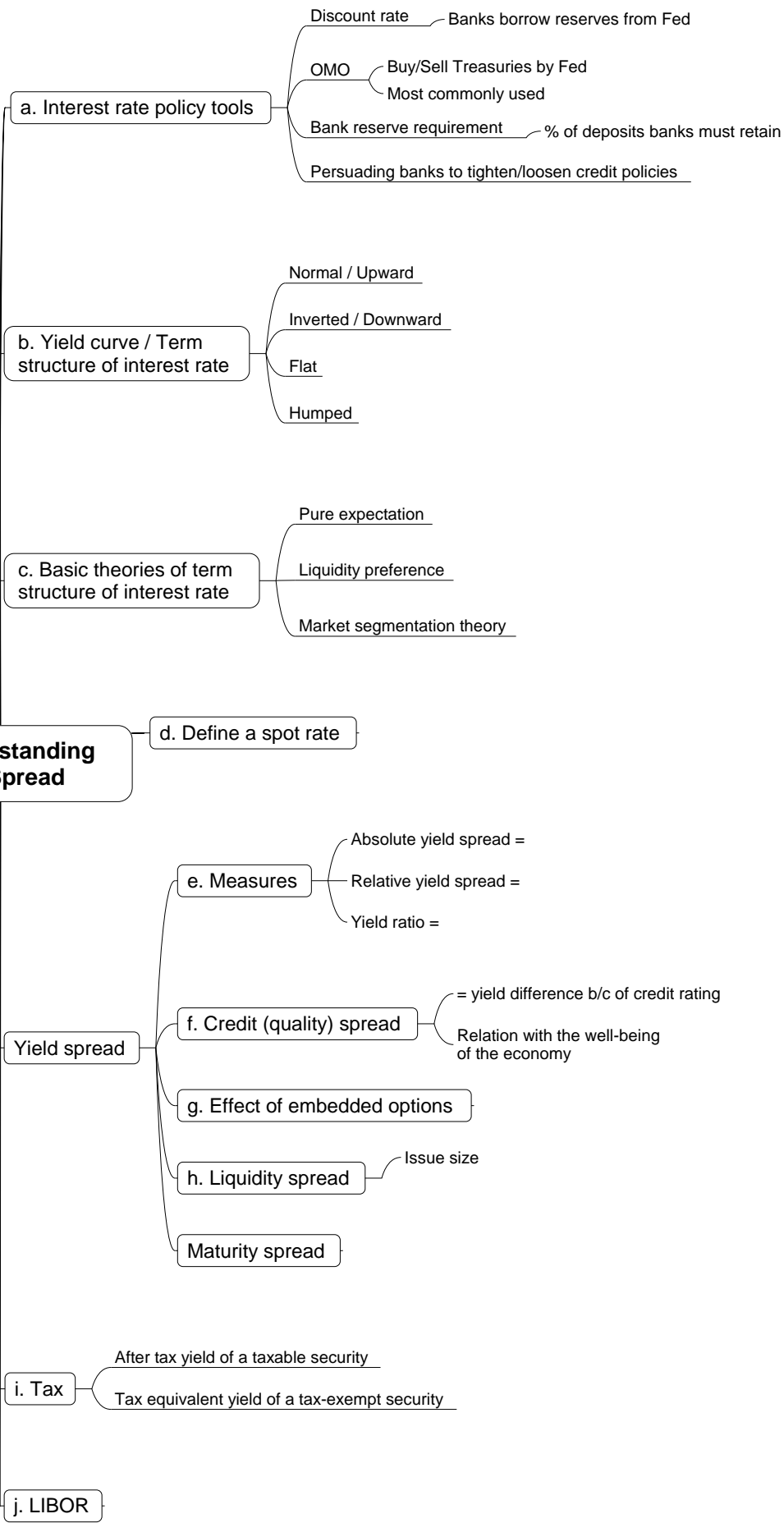
**g. MUNIS  
(Municipal  
securities)**

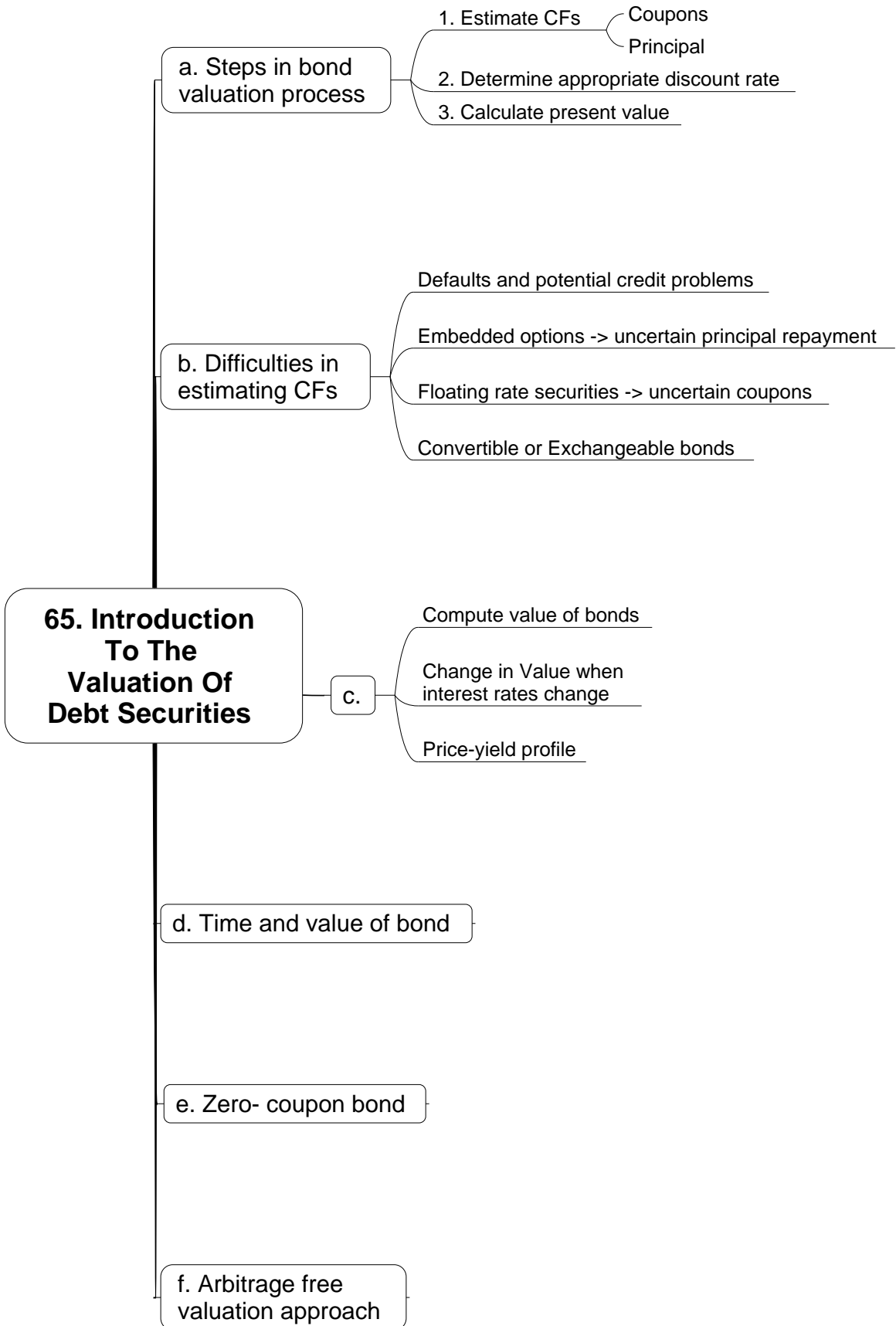


**h,i,j,k.  
CORPORATE  
ISSUES**

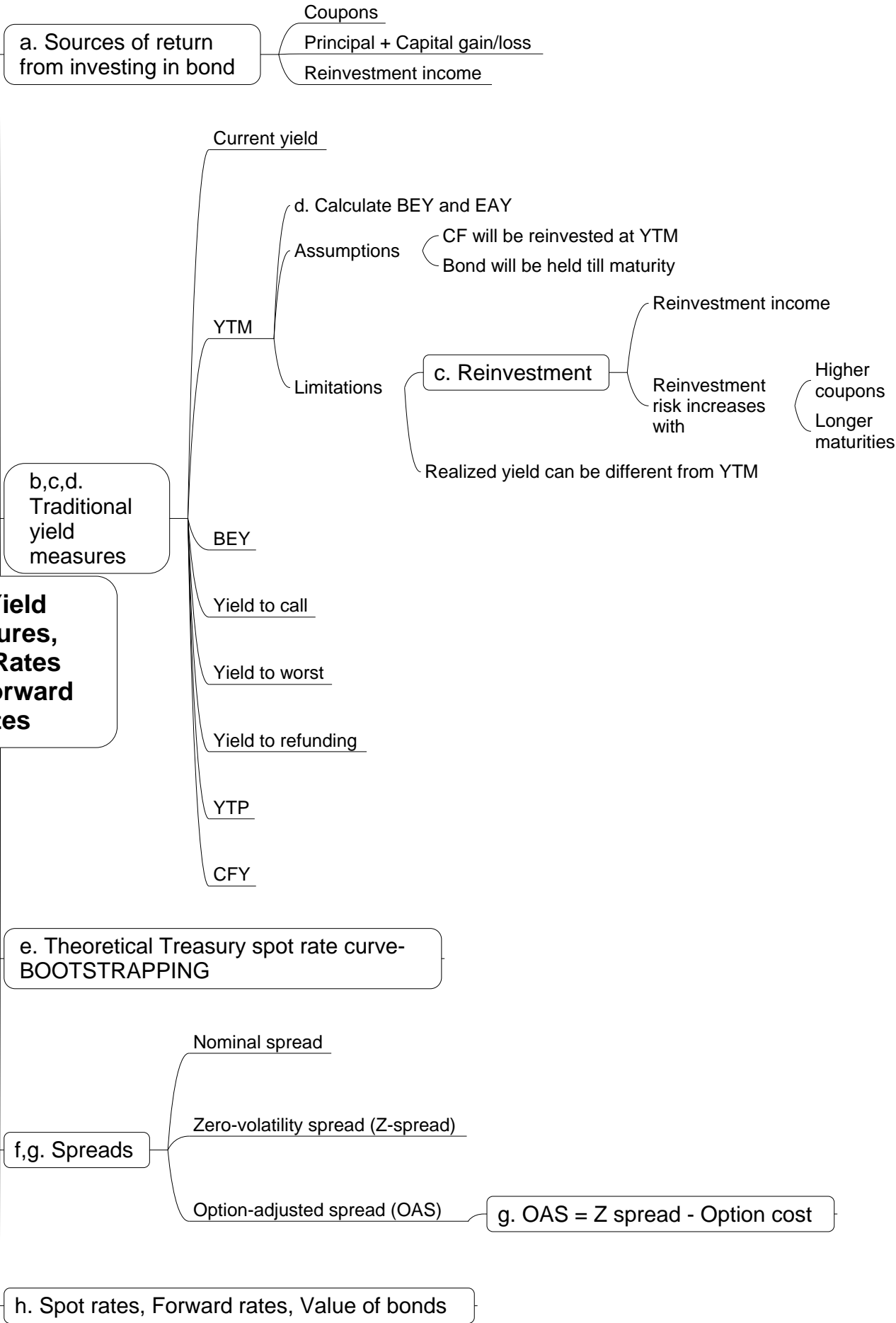


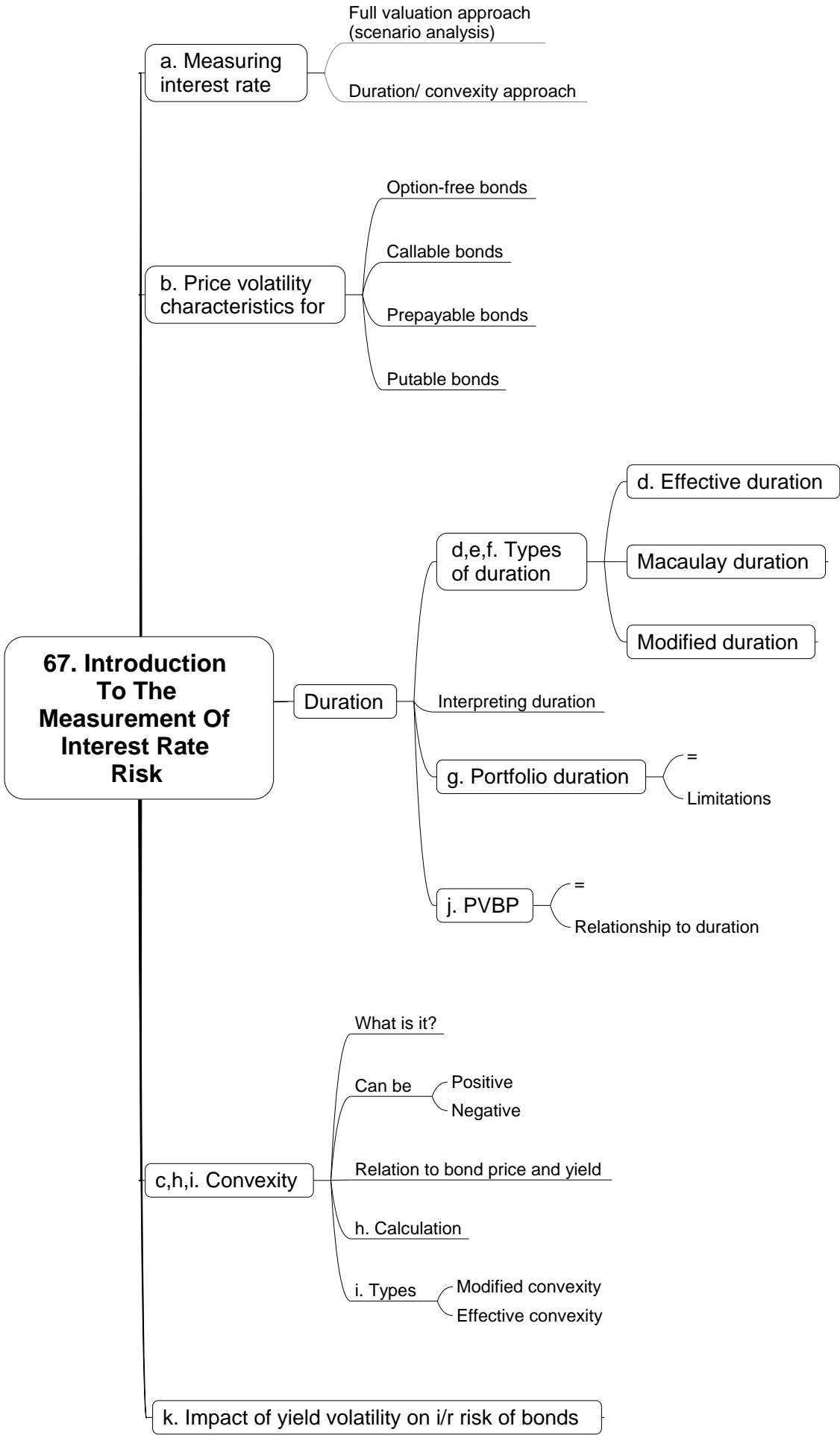
# 64. Understanding Yield Spread





# 66. Yield Measures, Spot Rates And Forward Rates





**67. Introduction To The Measurement Of Interest Rate Risk**

a. Measuring interest rate

- Full valuation approach (scenario analysis)
- Duration/ convexity approach

b. Price volatility characteristics for

- Option-free bonds
- Callable bonds
- Prepayable bonds
- Puttable bonds

Duration

d,e,f. Types of duration

- d. Effective duration
- Macaulay duration
- Modified duration

Interpreting duration

g. Portfolio duration

- Limitations

j. PVBP

- Relationship to duration

c,h,i. Convexity

- What is it?
- Can be
  - Positive
  - Negative
- Relation to bond price and yield
- h. Calculation
- i. Types
  - Modified convexity
  - Effective convexity

k. Impact of yield volatility on i/r risk of bonds