



## 19BAE710-FINANCIAL DERIVATIVES

Bonds and Floating Rate Notes (FRNs) are not typically categorized as financial derivatives. They are considered traditional fixed-income securities. However, they do share characteristics with financial derivatives in that they derive their value from interest rates, and their prices can be sensitive to market fluctuations.

### Bonds:

#### 1. Definition:

- Bonds are debt securities that represent a loan made by an investor to a borrower, typically a government or corporation. Bonds pay periodic interest (coupon) and return the principal at maturity.

#### 2. Types of Bonds:

- **Government Bonds:** Issued by governments to raise capital.
- **Corporate Bonds:** Issued by corporations to fund business activities.
- **Municipal Bonds:** Issued by local governments or municipalities.
- **Agency Bonds:** Issued by government-sponsored enterprises.

#### 3. Coupon Payments:

- Bonds pay periodic fixed or floating interest payments, known as coupon payments.

#### 4. Maturity:

- Bonds have a fixed maturity date when the principal is repaid to the bondholder.

#### 5. Price and Yield Relationship:

- Bond prices and yields have an inverse relationship. As interest rates rise, bond prices fall, and vice versa.

#### 6. Market Risk:

- Bond prices are subject to interest rate risk, credit risk, and market sentiment.

## **7. Derivative-like Features:**

- Some bonds have embedded options (callable or puttable bonds), giving issuers or bondholders the right to call or put the bond before maturity.

## **Floating Rate Notes (FRNs):**

### **1. Definition:**

- Floating Rate Notes (FRNs) are bonds with variable interest rates that are adjusted periodically based on a reference interest rate, such as LIBOR or a government bill rate.

### **2. Interest Payments:**

- Unlike traditional fixed-rate bonds, FRNs pay a variable coupon rate linked to a benchmark rate.

### **3. Benchmark Rate:**

- The benchmark rate is typically reset at regular intervals (e.g., quarterly or semi-annually).

### **4. Risk Mitigation:**

- FRNs are designed to mitigate interest rate risk by adjusting coupon payments in response to changes in market interest rates.

### **5. Price Stability:**

- FRNs generally exhibit lower price volatility compared to fixed-rate bonds, as their coupon rates adjust to prevailing market rates.

### **6. Market Liquidity:**

- The liquidity of FRNs can vary based on the benchmark rate and the specific terms of the note.

### **7. Issuer Flexibility:**

- Some FRNs may have embedded options, allowing issuers or bondholders to adjust terms under certain conditions.

While bonds and FRNs are not classified as financial derivatives, they are important components of the fixed-income market. Derivatives, on the other hand, include instruments like options, futures, and swaps, which derive their value from underlying assets, interest rates, or other financial variables. The distinction lies in the nature of the instruments and their primary characteristics.