STRUCTURED FINANCE OPTIONS

CCP CHAPTER 19 MODULE D

19.1 INTRODUCTION TO STRUCTURED FINANCE (SF)

Banking has evolved significantly, bringing **new loan products** into the market. Around the globe, you'll find many **financing options** with similar features—like **cash credit** or **term loans**—which are **conventional** ways of getting funds for typical business needs.

However, today's world is filled with **complexities**, **innovation**, and **disruptions**. Financing is no exception! When a **borrower** and their **financing requirements** are special or **unusual**, we need **unique** financing solutions. That's where **Structured Finance (SF)** comes in.

Structured Finance involves modern financing methods that help **reduce risk** even in situations like securitizing "packageable" assets. It's sometimes misunderstood as just "wrapping up" debt. But in truth, **"Structured Finance"** means providing **custom** lending/borrowing solutions tailored to each borrower's specific needs. It focuses **less** on simply bundling receivables for securitization and **more** on a **tailored product** suited exactly to the user's requirements.

Why SF?

- To create conditions that let you **deliver** financing solutions and sometimes earn **profits** even from **small** price movements of an underlying asset.
- SF structures are designed so that **inherent risks** (which can be high in plain vanilla models) are **reduced** or **fully transferred** elsewhere.

19.2 STRUCTURED FINANCE EXPLAINED

Securitization at the Core

Securitization lies at the **heart** of structured finance. It's how specialists in SF:

1. **Create asset pools**
2. Form **complex financial instruments** that suit the needs of certain **corporations** or **investors** with unique goals.

IMPORTANT TERMINOLOGIES ☝

(*Ref: Master Direction – Reserve Bank of India (Securitisation of Standard Assets) Directions, 2021.*)

1. **Special Purpose Entity (SPE)** 🏢

   A **company/trust/entity** set up for a **specific purpose**. Its structure and activities are designed to keep it **separate** from the originator's credit risk.

2. **Originator** 🏦

   A lender moving **one or more assets** off its own balance sheet to an **SPE** in a securitization deal. This can also cover entities in the same corporate group (for example, **HDFC Ltd.** selling home loans to **HDFC Bank**).

3. **Securitisation** 📦

   A method where an **originator** transfers a **pool of assets** to an **SPE**. The **cash flows** (like EMI payments) from these assets repay **different tranches** with varied **credit risk** levels. Investor repayments depend on how these assets perform, not on a promise from the originator.

4. **Securitisation Exposures** 💡
   - These include claims on **securitisation notes** (e.g., asset-backed or mortgage-backed securities), **credit enhancements**, underwriting commitments, liquidity facilities, interest or currency swaps, credit derivatives, and trenched covers.

- Even **reserve accounts** (cash collateral) set aside for losses are considered "securitisation exposures."

5. **Mortgage-backed Securities (MBS)** 🏠
   - Securitisation notes where **all** underlying loans are backed by **commercial** or **residential** mortgages.
6. **Credit Enhancement Facilities** 🛡️
   - Various **support measures** that improve a transaction's credit quality. This includes extra security/financial support covering losses in tough conditions.
7. **Derivative** 🔀
   - A financial instrument (settled in the future) whose **value** comes from changes in interest rates, FX rates, credit ratings, or security prices (the "underlying").
8. **Interest Rate Swap** ♻️

- A **derivative** where two parties exchange future interest **payment streams** for a certain period on a notional amount.

9. **Currency Swap** 💱
   - A **derivative** where two parties exchange interest and/or principal in **different currencies** at agreed times and exchange rates.

Structured Finance Instruments 🎯

Such **credit-providing** tools help **reduce big risks** related to **complicated assets**. While most borrowers use simple loans (like mortgages), large conglomerates or modern entrepreneurs seek **structured finance** to handle **bigger** and **more unique** financial needs.

SF is essentially a **structured approach** for borrowers and lenders to meet **timely financing** with **minimal risk**—often not relying on free cash flow. It also spans many asset classes across varied businesses, creating a range of risk-mitigating products.

Remember: SF usually applies to deals that are **too big** or complicated for a plain vanilla loan/bond. Corporate giants often use SF to get **cheaper** debt. **Europe** pioneered SF in the mid-1980s. Later, **the USA** adopted it, listing SF products with the **SEC** so regular investors can access them (like **shares**, **bonds**, **ETFs**, **mutual funds**). These SF deals frequently involve multiple **transaction options**, so they carry more than normal risks.

SF products are often **pre-wrapped** investments—usually combining **interest-linked assets** plus one or more **derivatives**. They might be tied to an **index** or a **basket** of securities, designed to reach **specific** risk-

return targets. This is done by taking a normal security (like a BBB-rated bond) and **replacing** the usual interest/maturity features with custom payoffs based on the performance of certain underlying assets instead of the **issuer's cash flow**. Hence, we call SF **non-cash-flow-based financial solutions**.

19.3 IMPORTANCE OF SF ?F

Structured Finance (SF) matters because **big players**—corporations, business conglomerates, financial institutions, and banks—use these products. Consequently, **huge sums of money** go into the overall economy.

A few highlights:

- **Restructuring Huge Debts**: SF is strong in deals involving major debt overhauls—often using multiple "regenerated" instruments **not** tied to a borrower's direct cash flow.
- **Saving on Repayments**: Ordinarily, interest is paid from operating revenue, principal from net profit. In **SF**, obligations might come from a separate "underlying pool."
- **Freeing Up Cash Flow**: Thanks to SF, companies can use free cash more effectively for **working capital** or expansions.

- **Suitable for Global & Complex Deals**: SF is often the **best** choice for organizations with **multinational** interests and **complicated** financial structures.

19.4 ADVANTAGES OF STRUCTURED FINANCE

Since **SF** involves **large sums** of capital, the investors providing it generally accept certain constraints (compared to standard loans). Yet, **borrowers** are increasingly using SF solutions for three main reasons:

1. **Manage & Reduce Risk**
2. **Develop Strong Financial Markets**
3. **Expand Business Reach**

From an **investor's** viewpoint, SF also **unbundles risk**—letting them pick parts of the transaction that match their risk-return appetite.

Using SF changes how cash flows are generated and can **reshape** an entity's liquidity in two ways:

1. **Risk Transfer**: From **sellers** to **buyers** of the SF products.
2. **Asset Offloading**: By removing specific assets from a balance sheet (packaging them into the SF deal).

FINAL TAKEAWAY

- **Structured Finance** is critical for **large**, **complex** funding tasks.
- It involves **innovative instruments** (like securitizations, derivatives, etc.) to **transfer or lessen** big risks.
- Corporations, banks, and global conglomerates use SF to **access** big money without relying heavily on standard free cash flows.
- **Investors** get new ways to earn returns and handle risk (e.g., choosing senior or junior tranches).

In short, SF **connects** sophisticated financing techniques with large-scale borrowing demands in a way that **ordinary** loans or bonds **cannot** match.

Below is a **reader-friendly** rewrite of your text about **Structured Finance (SF) and Securitization**. The **structure and details** remain exactly the same, but the language is **simplified**, with **emojis/icons** and **tables** to make it both **fun** and **easy** to understand.

19.5 SF AND SECURITIZATION

Securitization is a **major method** used in **structured finance (SF)** to create **pools of assets** and then **package** (or sell) them. Through this approach, one can build **complex financial instruments** that suit the needs of **borrowers** and **investors** requiring special arrangements.

19.5.1 Debtor-Creditor Relationship

When an **originator (lender)** securitizes its loans:

- It **transfers** certain **risks** to outside investors.
- However, this **does not change** the basic **debtor-creditor** relationship between the **original lender** and the **borrower**.
- The **borrower** continues making **payments** (like EMIs) to the **originator**, usually **unaware** their loan has been securitized.

19.5.2 Bankruptcy Remoteness Clause

Per the **RBI** definition, an entity that is **"bankruptcy remote"** is highly unlikely to face **bankruptcy proceedings**, whether by itself (voluntarily) or by creditors/others.

1. **Even if the originator goes bankrupt**:
    - The **liquidator cannot** claim the repayments (EMIs) if they're **escrowed** to the **Special Purpose Vehicle (SPV)** under the **structured product** agreement.
2. **Pass-Through Certificates (PTCs)**:
    - These instruments remain **safe** from the originator's bankruptcy, reducing **solvency risk** for **investors**.

- This method of **"ring-fencing"** the cash flows in the securitized asset pool is known as **bankruptcy remoteness**.

19.6 DIFFERENT STRUCTURED FINANCE PRODUCTS

A variety of **structured finance products** (and combinations thereof) exist to meet **large borrowers'** unique needs. Some of the main SF products are listed below:

(a) Syndicated Loans

A **Syndicated Loan** is a **combined loan package** given by a group of lenders (often **banks**, **financial institutions**, **insurance companies**, **pension funds**, etc.) to **one borrower**. Here's how it typically works:

- **Long-term**, often for **big-cost** projects (e.g., infrastructure).
- Each lender has a **portion** of the total loan.
- Lenders can **sell** part or all of their share in secondary markets (common in some western countries).
- No special labels in the lenders' books; it's usually recorded as a normal loan.

(b) Collateralized Debt Obligations (CDOs) 📦🔗

A **CDO** is essentially a **"repackaged"** offering that contains a **large portfolio** of credits (loans, bonds, etc.). It involves:

- A **Special Purpose Vehicle (SPV)** issuing debt secured by these underlying assets.
- **Risk Splitting**: Unlike a simple repackaging (where the investor takes on **all** risk), a CDO divides it into **"tranches"** (layers), such as **senior**, **mezzanine**, and **junior**.
- Different **classes** of investors take different levels of risk and returns.
- **Funding Structures**: CDOs can be classified further by how they **raise** money (e.g., issuing bonds vs. other methods).

(c) Collateralized Bond Obligations (CBOs) & Collateralized Loan Obligations (CLOs) 🏷️

CBO:

- Raising money by **issuing bonds** (hence "bond obligations").

CLO:

- Raising money by **issuing loans** (thus "loan obligations").

(d) Credit Default Swaps (CDSs)

A **Credit Default Swap (CDS)** is a **derivative** contract between two parties involving one or more **reference assets** (e.g., bonds, loans). Here's the typical process:

- **Protection Buyer** pays a fee (usually **quarterly**) to the **Protection Seller**.
- The fee is generally expressed in **annualized basis points** of the **notional** (face) amount.
- If **no credit event** (e.g., default) happens, the Protection Seller simply collects the fee and assumes the **credit risk**.
- If a **credit event does** occur within the contract term, the **Protection Seller** must compensate the **Protection Buyer**. The exact settlement method can be:
- **Physical Settlement**: The Buyer delivers the defaulted asset to the Seller, who pays an agreed sum.
- **Cash Settlement**: The Seller pays the Buyer the **difference** between the face value of the asset and its **market value** after the credit event.

CDSs follow legal guidelines and definitions set by the **International Swaps and Derivatives Association (ISDA)**. The **market value** of the assets (if needed for calculation) is determined using ISDA's rules or a

confirmation document. Sometimes a **pre-agreed sum** may be used instead.

(e) Total Return Swaps (TRS) 💱

Also known as **Total Rate of Return Swaps (TROR)**, a **TRS** is a **bilateral** contract that recreates the financial returns of an underlying asset—without the receiver actually owning it on their balance sheet.

- One party (the **TR payer**) pays the **total return** (e.g., interest, fees, and any gains) of a **reference asset** to the other party (the **TR receiver**).
- The **TR receiver** makes **regular variable** payments (like a floating interest rate) back to the TR payer—this is seen as a **funding cost**.
- A TRS transfers **both** credit risk (like in a CDS) **and market risk** (price fluctuations).
- Payments can occur if there's a **credit event** or if there are **changes** in market value—similar to how a CDS might trigger under certain circumstances.

(f) Hybrid Securities

A **Hybrid Security** is a **single financial instrument** that combines features of **two or more** different kinds of securities. A classic example is a **convertible debenture**, which:

1. Functions like a **bond** (debt instrument) because it pays interest.
2. Has an **equity** characteristic (it can convert into **shares**), so its value can swing with the stock price of the issuing company.

(g) Collateralized Mortgage Obligations (CMOs)

A **CMO** is a type of **mortgage-backed security**. It works like this:

1. A pool of **mortgage loans** (e.g., home loans) is bundled together as **collateral**.
2. These are sold as **investments** to the market.
3. **Cash flows** (loan repayments) go into the CMO structure.
4. The **principal and interest** are distributed to investors based on **pre-agreed** conditions, such as different maturities or risk levels in the CMO structure.

(h) Synthetic Financial Instruments

"Synthetic" instruments are **created** to meet special needs **not** served by typical products. They aim to **reduce risk**, **increase diversification**, or **offer higher returns**. Examples:

1. **Synthetic Floating Rate Instrument**: Combine a **fixed-rate bond** + an **interest rate swap** to produce a "floating" outcome.
2. **Replicating a Stock's Risk/Reward**: Buy a **call option** and **sell a put option** on the same share, effectively mirroring the share's behavior without directly holding it.

QUICK REFERENCE TABLE

Product	Main Idea	Risk Focus
CDS	Protection Buyer pays periodic fee; gets compensated if a credit event occurs.	Transfers **credit risk**
TRS	TR payer transfers total return of an asset to TR receiver; TR receiver pays floating interest or cost in return.	Transfers **credit + market** risk
Hybrid Securities	Combines features of two or more instruments (e.g., bond + stock = convertible debenture).	Mix of **debt** and **equity** characteristics

Product	Main Idea	Risk Focus
CMO	Mortgage-backed security with loans packaged as collateral.	Risk depends on mortgage repayment reliability
Synthetic Instruments	Built using combos of existing instruments (swaps, options) to create new risk/return profiles.	Minimizes risk, increases diversification

RETURNS DISTRIBUTION

For **Structured Finance (SF)** products, **returns** (or **payoffs**) to investors typically come when the SF product **matures**. A key detail is that **these payoffs** depend on the **actual performance** of the underlying assets or conditions. This means:

- If the **actual return** of the underlying is high, the payoff to the investor could be higher.
- If the **actual return** is lower, the investor's final distribution will also be lower.

Essentially, **SF products** are designed similarly to **option pricing** models. They often include **other derivatives** (like **futures**, **forwards**, **swaps**), plus

any special **built-in features**—like **"upside leverage"** (boost to gains) or **"downside buffer"** (some protection on losses).

19.8 RISK INVOLVED IN STRUCTURED FINANCE

SF products carry several **risks**:

1. **Illiquidity** ♻️
    - Because an SF instrument may be **highly customized**, it might not be easily **tradable** in secondary markets. This lack of liquidity is quite common.
    - **Frequent** buying or selling is **not** ideal for SF; they're often **hold-to-maturity** instruments.
2. **Longer Time Horizon** ⏳
    - SF products usually go on for a **long** period until maturity. The **longer** the horizon, the **higher** the overall risk exposure (market changes, economic cycles, etc.).
3. **Complexity** ❓
    - SF products can be **hard** for a **regular** investor to fully understand, because of their **multiple** performance-based features.
    - Without a thorough product understanding, one cannot accurately gauge all risks.

4. **Issuer's Credit Risk** 🏦
    - Although the **cash flows** might come from assets different than the issuer's own free cash flow, an SF note is still the **issuer's liability** until it's repaid.
    - If the **issuer's financial health** weakens, it **directly** affects the SF product's **credit quality** too.
    - In an economic downturn (slowdown, recession, depression), SF instruments can lose part or even all of the investor's original principal—similar to **option**-type risks.
5. **Price Risk & Transparency** 🤫
    - SF pricing is **not** always transparent, so you might **not** see a standard "market price."
    - When there isn't a **uniform** pricing method, investors **cannot** easily compare SF products with different issuers.
    - **Fees** can be "built in" to the structure in a **hidden** way, making them less noticeable to investors.