

FORWARD CONTRACT and FUTURE CONTRACT

Summary Comparison of Forwards and Futures Contracts

Forward	Futures
Private contract between two parties	Traded on an exchange
Not standardised	Standardised contract
Usually one specified delivery date	Range of delivery dates
Settled at end of contract	Settled daily
Delivery or final cash settlement usually takes place	Contract is usually closed out prior to maturity
Some credit risk	Virtually no credit risk

SWAPS

Basis	Investment bank	Commercial banks
Meaning	FI that offers services like brokerage, underwriting securities etc	FIs that are into lending and borrowing
Services	Customer specific	Standardized
Customer base	Fewer	Very large
Type of customers	Large companies and institutions	All citizens
Source of earning	Commission and Fee- It is earned in 2 ways: Public offering- securities offered to public ✓ Best efforts- offers securities to an investor and the investor pays a fee to the bank. ✓ Firm commitment- banks buy the securities from issuer and tries to sell at a higher price Private placement – Securities are sold to few large institutional investors, banks receive fee.	Interest payments and fee

OPTIONS CONTRACT- The investor owns the right to buy or sell at a future date.

SCOPE ECONOMIES- Cost saving by joint production. For eg, using same inputs for loan as well as deposits. $TC(q_1, q_2) < TC(q_1) + TC(q_2)$

X-Efficiencies- Differences in managerial ability to control costs or maximize revenues/profits. For eg. Some banks are better at spotting mispricing and thus have a higher return on their actively managed portfolio.

Parametric Methods to Estimate Efficiency:

- SFA (STOCHASTIC FRONTIER ANALYSIS).
- DFA (DISTRIBUTION FREE APPROACH).
- TFA (THICK FRONTIER APPROACH).

Non Parametric Methods to Estimate Efficiency:

- DEA (DATA ENVELOPMENT ANALYSIS).
- FDH (FREE DISPOSAL HULL).

Market must be measured in two aspects-

- Concentration- The assets and services owned by the banks in the market
- Competition- The competition can be measure in two ways-
 - Structural
 - Nonstructural

In case of Structural: S-C-P and efficiency hypothesis (ad hoc approach) models are used to measure whether the highly concentrated market induces collusive behaviour among the larger banks resulting in better performance or whether the efficiency of larger banks results in superior performance leading to acquiring higher shares in the market.

In case of non structural: Panzer-Rosse and Lerner models are used. These models test the use of market power and competition and analyze the bank's competitive conduct in the absence of structural measures.

STRUCTURE CONDUCT AND PERFORMANCE PARADIGM (S-C-P)

See if there's an empirical relationship between structural features (eg.- concentration ratios) and firm performance.

- The SCP paradigm has the assumption the lower number of competitors lead to higher abnormal profit and lower competition.
- Highly concentrated markets usually have low cost of collusion among the largest banks in the industry (illegal cooperation).
- Collusion may be implicit and explicit -causing higher fees, lower deposit rates, higher loan rates etc.

$$P_{ij} = a_0 + a_1 CR_j + \sum a_k X_{ki} + \epsilon$$

Where:

- P_{ij} = performance measure of bank i market j.
- CR_j =measure of market structure, such as HHI.

Plus a variety of variables also deemed important determinants of bank performance (such as capital /assets ratio, asset size, ownership, LLPs etc.)

- Regulators have a concern about the liquidity, the solvency and the risk of financial institutions and they want to monitor with the systemic regulation, particularly, they want to alleviate problems related with a bankruptcy that may lead to contagion risk.

FUNCTIONS OF BANK CAPITAL

- serves a cushion against the risk of failure
- provides funds to help institutions get started
- promotes public confidence
- stipulate funds for growth
- regulator of growth
- regulatory tool to limit risk exposure

BASEL AGREEMENT ON INTERNATIONAL CAPITAL STANDARDS

An international agreement on new capital standards designed to keep their capital position strong, reduce inequalities in capital requirements around the world, promote fair competition and catch up with recent changes in financial market.

The 1988 Capital Accord – BASEL I

Besides the definition of bank capital - **Tier 1 capital** (eg equity capital and disclosed reserves) and **Tier 2 capital** (deemed of lower quality, eg general loan losses reserves) - the main emphasis lies on the structure of the risk weights and solvency.

For a bank to qualify as adequately capitalised, it must have:

- *Tier 1 risk-based capital ratio* – A ratio of core capital to total risk-weighted assets of at least 4%.

$$\frac{\textit{Tier 1 capital}}{\textit{Risk weighted assets}}$$

- *Total risk-based capital ratio*- The ratio of total capital (tier 1+2) to total risk-weighted assets of at least 8%. At least 50% of capital must be tier 1.

$$\frac{\textit{Tier1 + Tier 2}}{\textit{Risk weighted assets}}$$

Calculating risk weightage

The assets are categorised in different risk classes according to the riskiness of each. Risk classes:

- 0 per cent (eg cash or equivalents)
- 20 per cent (eg short-term claims maturing in a year or less)
- 50 per cent (eg mortgages)
- 100 per cent (eg commercial loans).