Derivative Markets and Participants

Introduction

Derivatives markets can be broadly divided into **exchange-traded derivatives (ETD)** and **over-the-counter (OTC) derivatives**. Each of these markets has distinct characteristics, participants, and structures for managing risk, such as clearinghouses for ETD and cleared OTC markets.

This notebook explores the following:

1. **ETD Market**: Characteristics and the role of exchanges and clearinghouses.
2. **OTC Market**: Differences between cleared and bilateral OTC transactions.
3. **Market Participants**: Overview of major participants and how they interact with ETD and OTC markets.

1. Exchange-Traded Derivatives (ETD)

Exchange-traded derivatives are standardized contracts traded on regulated exchanges. These markets provide a transparent, centralized venue for trading derivatives with standardized terms, including contract size, expiration, and settlement methods.

Characteristics of the ETD Market

- **Standardization**: All ETD contracts have predefined terms, making them easier to trade and manage.
- **Daily Settlement and Clearing**: Contracts are marked-to-market daily, with clearinghouses acting as intermediaries to manage counterparty risk.
- **Transparency and Liquidity**: Exchanges offer high transparency in pricing, volumes, and liquidity, appealing to a broad base of participants.

Role of Clearinghouses in ETD

Clearinghouses play a crucial role in ETD markets by acting as a central counterparty to all trades, which reduces counterparty risk. They also enforce daily margin requirements, ensuring that both sides of a trade remain financially secure.

Common Users of ETD Markets

- **Hedge Funds and Banks**: Use ETD contracts for speculation and to hedge against market movements.

- **Retail Investors**: Access ETD markets for investment and hedging but with limited flexibility.

2. OTC Derivatives

OTC derivatives are customized contracts traded directly between counterparties. Unlike ETD contracts, OTC derivatives offer flexibility and customization but also carry higher counterparty risk.

OTC derivatives can be divided into two types:

- **Cleared OTC**: These trades are processed through a clearinghouse, similar to ETD contracts, to reduce counterparty risk.
- **Bilateral OTC**: These are non-standardized contracts between two parties without a clearing intermediary.

Cleared OTC

Cleared OTC trades are subject to central clearing, where a clearinghouse steps in as the counterparty for both parties. Cleared OTC is increasingly common due to regulatory reforms, such as Dodd-Frank and EMIR, which encourage or mandate clearing for standardized OTC derivatives.

- **Benefits**: Reduces counterparty risk, as the clearinghouse assumes the credit risk.
- **Users**: Primarily banks, hedge funds, and large financial institutions seeking risk mitigation.

Bilateral OTC

Bilateral OTC derivatives are privately negotiated, allowing parties to tailor contracts to specific needs. These derivatives are not cleared, so the counterparties bear credit risk, which requires careful credit assessment and collateral management.

- **Benefits**: Full customization for specific needs (e.g., unique maturities, exotic products).
- **Challenges**: Higher counterparty risk and complex risk management requirements.

Common Users of OTC Markets

- **Banks**: Use OTC contracts for customized risk management and client-specific products.
- **Corporations**: Hedge risks specific to their business, such as currency or interest rate exposures, often through OTC contracts.

3. Key Market Participants and Their Interactions

Financial Institutions

Financial institutions, including banks and hedge funds, are among the largest users of derivatives. They engage in both ETD and OTC markets based on their needs.

- **ETD Use**: Engage in standardized ETD contracts for ease of trading and high liquidity.
- **OTC Use**: Use OTC markets for complex hedging strategies, client solutions, and bespoke instruments.

Corporations

Corporations use derivatives to hedge against operational risks, including currency, interest rate, and commodity price exposures.

- **ETD Use**: Some corporations may use futures for simple hedging needs, such as locking in commodity prices.
- **OTC Use**: Corporations often turn to OTC markets for contracts that match their specific risk profile, like customized swaps or forwards.

Retail Investors

Retail investors represent a smaller portion of the derivatives market and primarily use ETD products.

- **ETD Use**: Access standardized options and futures for investment or hedging individual portfolios.
- **OTC Use**: Generally limited, as OTC derivatives are less accessible to retail investors.