



Global Securities Markets

Target Audience:

This course is focused primarily at non – Finance majors who are seeking to acquire an overview of Finance, and more specifically a foundation in capital markets, products, and institutions.

The course covers the entire gamut of financial products, namely, equities, debt, money markets, mortgages, foreign exchange, futures, and options. It also covers the important topics of mutual funds, and brokerage operations. The issues of market structures and the intricacies of order-driven markets are also covered in this course. The course does not pre – suppose any knowledge of the subject and all that is expected is that the student be comfortable with the fundamental principles of Finance which are covered in the first year Finance courses.

Objectives:

The course, as the name suggests, gives students an overview of the securities markets and the various products that are available in the markets. It is a course that will cover almost all aspect of the financial markets but will not go too much in to the details of each of the functions. This may work out to be an informative course for those who want to have an idea about financial markets and products but may not want to pursue a career in finance. In particular, the broad objectives of this course are:

1. To describe the intricacies of financial products such as stocks, bonds, foreign exchange, and derivatives.
2. To understand the operations of mutual funds, exchange traded funds, and pension funds.
3. To understand the structure and operations of a brokerage house.
4. To apply the knowledge of financial products and markets to study real-life issues faced by traders and financial institutions.

Learning Outcomes:

At the end of this course students should be able to:

1. Understand the similarities and differences between various securities products such as stocks, bonds, and derivatives.
2. Understand the mechanics and working of financial markets for various products.
3. Understand the operational aspects of mutual funds, pension funds, and brokerage houses.
4. Appreciate the mechanics of order placement and execution.
5. Appreciate the uses, risks, and limitations of such products in an actual business context.

Primary Text:

- “Fundamentals of Financial Instruments”; Sunil Parameswaran, Wiley India

Additional Readings:

- “Futures Markets: Theory and Practice”; Sunil Parameswaran; Tata McGraw Hill Publishing Company Limited
- “Options and Other Derivatives”; John C. Hull and Sankarshan Basu; 7th Edition; Pearson Education
- “Bond Markets, Analysis and Strategies”; Frank Fabozzi
- “Fixed Income Securities and Their Derivatives”; Suresh Sundaresan

Handouts:

- Relevant handouts for every part of the course will be handed out in due course and students are expected to refer to the material covered in the handouts during the course

Evaluation:

The evaluation pattern will be as follows:

- **Mid Term:** The midterm shall have 40% weightage and shall be an in class multiple choice questions based exam
- **End Term:** The end term shall have 40% weightage and shall be an in class multiple choice questions based exam
- **Group Based Homeworks:** Group based homeworks shall contribute to 20% of the course evaluation. The first assignment will be an essay on a topic in Financial Economics. The second will consist of numerical problems.

Content to be covered in the course

The detailed content with the time allotted to each topic is as follows:

Financial Institutions, Instruments and Markets: 4 Hours

- Why financial markets?
- Categories of economic units
- Financial Claims – Assets & Liabilities
- The concept of a balance sheet
- Types of securities
 - Debt
 - Equity
 - Preferred Shares
 - Derivatives
 - Foreign Exchange
 - Mortgages
- Concept of return or yield
- Concept of risk
- Concept of liquidity
- Classification of markets
 - Primary vs. secondary markets
 - Direct vs. indirect markets
 - Money vs. capital markets
- Market Intermediaries

- Brokers
- Dealers
- Investment Bankers
- Concept of bid and ask prices
- Concept of underwriting of public issues
- The Glass – Steagall and Gramm – Leach – Bliley Acts
- Stock Exchanges
- Listing of securities
 - Listing vs. registration
- The third market
- The fourth market
- Bond markets
- Derivative markets
- The concept of long and short positions
- Sell-side traders vs. Buy-side traders
- The concept of a specialist
- Clearing and settlement
- Depositories and custodians
- The principle of arbitrage
- The Eurocurrency market
- Floating rate loans
- Eurobonds and Foreign bonds
- Globalization of equity markets
 - Dual listing of shares
- ADRs and GDRs
 - The Concept of fungibility
- International Banking Facilities

Types of Orders and Market Structures: 2 Hours

- Introduction to orders
- Why orders?
- Order related terminology
- Continuous markets with electronic rule based order matching
 - Price and Time priority rules and order matching
 - Market vs. Limit orders
 - Size as a priority rule
 - Stop-loss orders and Stop-limit orders
- Block trades
- Time conditions
- Spread Orders
- Markets structures
- Trading sessions
 - Call markets vs. Continuous markets
- Trading hours
- Execution systems
 - Quote driven
 - Order driven

- Brokered
- Hybrid
- Types of order driven systems
 - Oral auctions
 - Continuous electronic auctions
 - Crossing networks
 - Single price vs. multiple price auctions
- Market Information Systems
 - Collection
 - Distribution
- Ticker symbols
- The concept of transparency
- Order routing systems
- Order presentation systems

Equity Markets – An Introduction: 4 Hours

- Nature of common stock
- Voting rights
- Preferred shares
- Dividends
 - Ex-dates and record dates
- Margin trading & Short selling
 - Federal regulations
 - Concept of owner's equity
 - Concept of maintenance margin
 - Short selling and the uptick rule
- Valuation Models
 - Constant growth Model
 - Two-stage Model
 - Three-stage Model
 - H-Model
- Corporate Actions
 - Stock splits and reverse splits
 - Stock dividends
 - Rights issues
 - Stock indices
 - Types of indices
 - Price weighted
 - Value weighted
 - Equally weighted
 - Forming mimicking portfolios
- Portfolio rebalancing

The Brokerage Industry: 4 Hours

- Functions of a broker

- Why do we need a broker?
- Structure of a brokerage firm
- The front office
- Research
- Customer Service
- The back office
- Street name securities
- Market data
- FIX protocol
- OFX protocol
- Credit management
- Compliance
- Stock lending and borrowing
- Opening an account
- Types of accounts
- Cash accounts
- Margin accounts
- The Truth-in-lending Act
- Advisory accounts
- Discretionary accounts
- DRIPs
- Brokerage commissions
- The impact of deregulation
- Discount brokers
- Soft commissions
- Directed brokerage
- Interest income
- Short interest rebate
- Transaction Types
- Securities Transaction Types
- Cash Transaction Types
- Overview of Transaction Types
- Automation
- Trade Cash Value Calculations
- Gross cash value calculations
- Additional trade amounts
- Net settlement value
- Static Data
- Trading companies
- Counterparties
- Trading books
- Currencies
- Securities
- Timing of data set-up
- Sources of static data
- Management of static data

Mutual Funds and Pension Funds: 2 Hours

- Definition of a mutual fund
- Why invest in such funds?
- Advantages and disadvantages of investing in such funds
- Open-end vs. closed-end funds
- The concept of NAV
- Unit Trusts
- Loads
 - o Front-end loads
 - o Back-end loads
 - o Level loads
 - o No-loads
- Multiple share classes
- Expense ratio
 - o Management fees
 - o 12b-1 fees
 - o Other expenses
- Categorization of funds
 - o Money market funds
 - o Debt funds
 - o Equity funds
 - o Hybrid funds
- Taxation issues
- Exchange Traded Funds

The Macroeconomics of Fixed Income Markets: 2 Hours

- o Aggregate Demand
- o Consumption
- o Residential Investment
- o Capital Expenditure
- o Government Spending
- o Inventories
- o Foreign Trade
- o Inflation
- o Unemployment
- o Interest Rates

Fundamentals of Money Markets: 2 Hours

- The role of the central bank
- Key dates for cash market instruments
- The Inter-bank market
- ICE LIBOR
- Interest Computation Methods
- Term Money Market Deposits

- T-bills
 - o Re-openings
 - o Discount Yields
 - o Bond Equivalent Yields
 - o Money Market Yields
 - o Concept of Carry
 - o Concept of a Tail
- Repos
- Negotiable CDs
- Commercial Paper
- LCs and Bank Guarantees
- Yankee Paper
- Credit Rating of Paper
- Bills of Exchange
- Bankers' Acceptances
- Eurocurrency Deposits

Fundamentals of Mortgage Loans: 2 Hours

- Mortgage origination
- Mortgage servicing and insurance
- The traditional mortgage
- Variable-rate mortgages
 - o Rate caps
 - o Payment Caps
 - o Negative Amortization
- Graduated Payment Mortgages

Foreign Exchange Markets: 2 Hours

- Purchase and Sale Transactions
- Direct and Indirect Quotations
- The Spot Market
- Merchant Rates & Exchange Margins
- The Forward Market
- The No-Arbitrage Forward Price
- Option Forwards

Futures Markets: 2 Hours

- The Economic Role of Derivatives
- Reasons for the Rapid Growth of Derivative Markets
- Derivative products – a primer
- Cash / Spot versus Forward / Futures Contracts
- Forward Contracts versus Futures Contracts
- Types of Underlying Assets
- Types of market participants
- Standardization and the Role of the Exchange

- The Clearinghouse
- Margins and Marking-to-Market
- Delivery
- Trading Volume versus Open Interest
- Profit Profiles
- Arbitrage
- Spot – Futures Convergence at Expiration
- Leverage
- Growth of derivatives in the global context

Options Markets: 2 Hours

- Option definition, types and uses
- European and American options
- Put-Call Parity
- Long calls & puts
- Writing calls & puts
- Writing covered calls
- Bull Spreads
- Bear Spreads
- Butterfly Spreads
- Straddles
- Strangles

Hedging & Speculation: 2 Hours

- Selling and Buying Hedges
- Options and Hedging
- Futures versus Options
- Ex-post Regret
- Cash Versus Delivery Settlement
- A Perfect Hedge
- Basis Risk
- Selecting a Futures Contract
- A Rolling Hedge
- The Minimum Variance Hedge Ratio
- Estimating the Hedge Ratio
- Tailing a Hedge
- Speculation with Futures
- Speculation with Options

EXCEL Exercises: 6 Hours

- 1. Equity Markets**
- 2. Money Markets**
- 3. Mutual Funds**
- 4. Mortgage Loans**

5. Foreign Exchange
6. Hedging & Speculation

Movies: 4 Hours

1. How Wall Street Works
2. 100 Years of the US Economy seen through the Dow Jones Index
3. Life History of JP Morgan
4. How The Bond Market Works