

Inside Financial Markets

Khader Shaik

Agenda

- Overview of Financial Markets
- Market Types by Product
- Market Players & Roles
- Overview of Capital Markets
- Bond Markets
- FX Markets
- Derivatives Markets & Products
- Brokerage Firm and Roles
- Regulatory Agencies (SEC, FINRA)
- Overview of Indices

Audience

- This course (video) is designed for beginners to give some insight into financial markets and the structure

Note:

This material can also be used as a supplement to video “Introduction To Financial Markets”

<http://www.ksvali.com/videos/>

Financial Markets

- A marketplace where financial products can be bought and sold
- Financial Products
 - Securities
 - Stocks, bonds
 - Commodities
 - Derivatives
 - Equity derivatives, credit derivatives etc
 - Currencies
 - Insurance etc.

Market Types by Product

- **Capital Markets / Securities Markets**
 - Raise capital
 - Trade Securities
- **Commodities Markets**
 - Trade commodities (metals, grains etc)
- **Derivatives Markets**
 - Trade Derivatives
- **Money Markets**
 - Trade short-term Debt instruments

Market Types by Product

Cont..

- Foreign Exchange Markets /FOREX
 - Trade Currencies
- Insurance Markets
 - Trade Insurance products

Market Players

- Borrowers
- Lenders / Investors
- Brokerage/Intermediary Firms
- Banks
- Exchanges

Borrowers

- Individuals
 - Personal loans
 - Mortgages etc
- Corporations – private and public
 - Capital for business expansion
 - Cash flows etc
- Governments – federal, municipalities, foreign
 - Bonds

Lenders or Investors

- Individuals
 - Savings accounts, Pension Accounts
 - Securities, mutual funds, hedge funds
 - Insurance etc
- Large Corporations
 - Stock buy back
 - Money Market
 - Hedging etc
- Professional Institutions, Hedge Funds
 - Asset Management etc

Banks

- Mostly provide loans etc
- Play key role in Money Markets
- Serve Individuals and Corporations
- Individuals
 - Savings Accounts
 - Pension Accounts
 - Investment Account
- Corporations
 - Money Lending, etc

Exchanges

- Organizations that facilitate trading
- Provide Trading Floor that allows face-to-face trading
- Also provide Electronic Crossing Engines

Marketplace

- Trading Venues
- Exchange Markets
 - Physical facilities that facilitate trading
 - Face to face trading
 - Only members can trade
 - Only listed products trade
 - NYSE, ASE, NYFE, NYMEX etc
- OTC (Over-the-counter) Markets
 - No physical locations, mostly electronic
 - Facilitate direct trade between two parties
 - Firms Trade as Market Makers
 - Market Makers, Broker-Dealers are players

Exchange Markets

- Trade Listed Products only
 - Company stock listed with certain exchange
- Only registered members are allowed to trade
- Specialist – facilitates the trade for specific product
- Floor Brokers – represent firms and their clients
- Traders – trade their own accounts
- Commission Brokers – trade for commission

Popular Exchanges

- New York Stock Exchange (NYSE)
- American Stock Exchange
- Boston Stock Exchange
- Chicago Board Options Exchange
- Chicago Stock Exchange
- Philadelphia Stock Exchange etc.

OTC Markets

- Mostly Electronic Markets
- Virtual Exchanges
- OTC Bulletin Board – US quotation service that lists quotes from Market Makers
- Regulated by appropriate agencies
- Products
 - Stocks, Bonds, Municipal Securities, US Gov Securities, etc
- Participants
 - Market Makers
 - Brokers

Market Makers / Broker-Dealer

- Financial Institution or Individual willing to BUY and SELL instrument at the same time
- Provide continuous quotes for instruments
- Profit or lose money from the bid/offer SPREAD (difference b/w buy and sell price)
- Trade for their own accounts
- Risk their own money
- Same security can be traded by multiple Market makers at different prices
- OTCBB publishes the quotes for more than 3000 instruments from more than 200 Market Makers

Capital Markets

Capital Markets

- Raise Long-term capital
 - To expand business
 - For additional Cash flow
 - Reduce holdings
 - Private use
- Long-term debt obligation products
 - More than one year debt
- Products
 - Securities
- Regulated by SEC and related SROs under the guidance of SEC
 - FINRA, MSRB
- Also known as Securities Market

Security

- Kind of interest or note that has some financial value
- Tradable/Transferable
- Types of products
 - Equity Securities – Stocks
 - Debt Securities – Bonds
- Stock
 - Value may increase or decrease, may return dividend
 - Trade in Stock Market
- Debt/Bond
 - Produce fixed interest income
 - Trade in Bond Market

Stock Market

- Stock (also referred as Share)
 - Equity in Corporation
- Types of Stock
 - Common Stock
 - Preferred Stock etc
- Stock Derivatives
 - Contract with or without obligation
- Types of Equity Derivatives
 - Futures
 - Options

Common Stock

- Also referred to as
 - Just Stock
 - Share
 - Common Share
 - Ordinary Share
- Least preferred stock among others
- Holders have the right to vote in certain corporate decision making
- When corporation liquidated may or may not get any money
- Riskier than other securities

Preferred Stock

- Has priority over Common Stock
- Special voting right on some key decisions
 - Acquisition and Mergers
 - Issuing new Equity
- May get some money when corporation liquidated
- Less riskier than Common Stock

Hybrid Securities

- Products defined with selected characteristics from both Debt and Equity securities
- Some examples
- Preferred Stock
 - Have right to collect interest/capital prior to common stock holders when corporation is liquidated
- Convertibles
 - Bond/Preferred Stock that can be converted into a common stock after certain period

Securities Markets

- Primary Market
 - Trades Initial Offerings
 - Allows to raise capital for corporations
 - NYSE, NASDAQ etc
 - Syndicate – work on release of IPOs (usually Brokerage Firms)
- Secondary Market
 - Trades already owned securities
 - Exchanges, OTC

Bond Markets

Debt Products

- Debt Products are two types
 - Short-term debt – Money Markets
 - Long-term debt – Bond Markets
- Debt – investor or lender loans the money to borrower for a certain period of time. In return he expects the fixed amount of interest amount in periodic intervals and principle amount at the end.
- Key terms
 - Principal amount – Amount loaned
 - Coupon rate – interest rate
 - Maturity date – Date on which principal amount is due

Debt products cont..

- Periodic interest amount
 - Coupon rate * principal amount
- Since these products return fixed amount they are referred to as **FIXED INCOME** products
- Less riskier than Stock
- In case of liquidation, debt holder may get full or partial principal amount before stock holders

Money Markets

- Short-term debt obligations
- Less than a YEAR maturity
- Very low risk
- Instruments are
 - US Treasury Bills (T-Bills)
 - US Gov Agency Notes (Notes)
 - Municipal Notes
 - Bank Certificate of Deposit (CDs)

Bond Markets

- Long-term debt obligations
- More than a year maturity (may go up to 30 to 50yrs)
- Fixed flow of returns
- Instruments
 - US Treasury Bonds
 - Municipal Bonds
 - Corporate Bonds

FX Markets

FX(Foreign Exchange) Markets

- No Physical Exchanges
- Traded mostly using Telephonic and Electronic Communication (OTC – Over-the-counter)
- Mainly Traded between Financial Institutions
- 24-hour Market
- Quoted on Dealing System (FX Trading Systems)
 - Reuters and Bloomberg are popular
- World's average DAILY FX Trading volume is more than \$1800 billions
- Also referred to as Currency Markets

- London, New York and Tokyo are popular FX Markets
- London is the largest in the World
- Top 5 currency traders (according to 2006 numbers)
 - Deutsche Bank
 - UBS
 - Citi
 - Barclays Capital
 - Royal Bank of Scotland

FX Market Players

- Large Banks
- Central Banks (from various countries)
- Investment Management Firms
- Retail FX Brokers (FOREX Brokers)
- Hedge Funds
- Large Corporations
- Governments
- Individuals can trade FX through any FX Brokers

Most Traded Currencies

- USD
- EUR
- JPY
- GBP
- CHF (Swiss Frank)
- AUD

FX Trade Types

- Spot Trades
 - Immediate needs
 - Usually delivered in 2 business days (settlement time)
- Forwards Trades (Derivative)
 - Future date settlement (delivered in future on some date)

Derivatives Market

Khader Shaik

Derivatives Market

- Derivative
 - Instrument whose value derived from the underlying asset
- Example - Equity Option
 - Option is not a security by itself
 - It is right (agreement/contract) to sell or buy an underlying security
 - Only premium is paid to buy an option NOT the price of the underlying equity
- Traded on Exchanges as well as OTC Markets

Derivatives Product Categories

- Main Categories are
 - Options
 - Eg: equity options, bond options
 - Futures
 - Eg: index futures, commodity futures
 - Forwards
 - Eg: FX forwards
 - Swaps
 - Eg: interest rate swaps, currency swaps

Option

- Right to buy or sell an underlying instrument
- Just premium is paid to buy the option not the value of the underlying asset
- It is just a **RIGHT** not an **OBLIGATION**
 - Holder may not execute his right at all
- Popular Options
 - Stock option
 - Bond option
 - Commodity option
 - Interest Rate option
 - FX option etc.

Future

- Standard contract to buy or sell an underlying instrument on some future date
- Traded on Futures Exchanges
- Contract is an obligation, holder must exercise
- On delivery date, holder may actually deliver the instrument or pay the price difference
- Popular Futures Contracts
 - Commodity
 - FX etc

Forward

- Similar to Futures Contract but not Standard
- Traded between two private parties (usually in OTC Markets)
- On delivery date, holder may actually deliver the instrument or pay the price difference
- Riskier than Futures

SWAP

- Is an agreement between two parties to swap one set of CASH FLOW with another set
- For example, holder of Fixed interest rate loan may exchange his cash flow (return stream) with a party who holds Variable rate loan cash flow
- Traded in OTC Derivatives Markets
- Various SWAPs
 - Interest Rate Swap
 - Currency Swap etc

Why Derivatives?

- Hedging / Insurance
 - Transfer the RISK
 - Ex: Farmer selling a crop before its harvest to protect from any future fluctuations in prices
- Arbitrage
 - Buying an instrument in one market and selling in another and profiting from the difference
- Speculation
 - Speculating the price variation in instrument and buying futures or options of that instrument

Brokerage Firms

Brokerage Firm

- Intermediary institution in financial markets
- Provide various different services
- Primary objective is to channel the funds between lenders and borrowers
- Firms specialize intermediary (brokerage) services in various different areas
 - Banking
 - Capital Markets
 - Wealth Management
 - Insurance etc.

Brokerage Firm cont..

- Large firms serve in multiple areas
- Brokerage services may also be provided by
 - Banks
 - Insurance Companies
 - Mutual Funds
 - Credit Unions etc
- Individuals can also be Brokers, but may have to obtain appropriate licenses
 - Financial Advisor
 - Insurance Agent etc.

Services

- Investment Banking
- Wealth Management
- Asset/Investment Management
- Banking
- Insurance
- Trading etc

Note: These are usual names. Sometimes different terms are also used.

Investment Banking

- Help private and public corporations to raise funds
 - Capital Markets
 - Equity and Debt
- Advise in mergers and acquisitions (M&A)
 - Strategic Partners
- Corporate Finance
 - Loans to corporation

Wealth Management

- Beyond basic Financial Planning
- Serving high net worth clients
 - Asset Management
 - Investment Advisory
 - Portfolio management (distribution of investment products)
 - Insurance
 - Banking Services

Wealth Management

- Simpler versions of Wealth Management are
 - Portfolio Management
 - Private Banking
 - Asset Management /Investment Management

Prime Brokerage

- Services to Hedge Funds
- Collective Services
 - Custodial Services (clearing, custody etc)
 - Financing
 - Securities Lending
 - Technology Services (Trading/portfolio apps)
 - Operational Services (facilities etc)
- Full Service to startup hedge funds
- Other Services
 - Risk analytics
 - Advisory Services etc

Capital Markets

- Primary Markets
 - Work as Syndicate in releasing IPOs
- Secondary Markets
 - Provide Trading Services
 - Usually hold memberships on most of the exchanges
 - Trade instruments for commission
 - Trade instruments for their own accounts to profit from market movements

Insurance Services

- Insurance helps individual and corporations in managing the risk
- Some brokerage firms provide insurance for corporations

Research

- Some firms provide research services as well
- Evaluation of Financial Information of Corporations
- Securities Price Evaluations
- Market research and predictions
- Rating Stock and Bonds etc

Large Brokerage Firms

- Goldman Sachs
- Citi
- JPMorganChase
- Merrill Lynch
- Lehman Brothers
- Bear Sterns
- Morgan Stanley
- UBS
- Bank of America
- Barclays Capital
- ABN AMRO
- Deutsche Bank
- CSFB and many more

Regulatory Agencies

SEC

- US Securities and Exchange Commission
- Founded in 1934
- Objective is to protect the public investment
- Regulates Stock Market and Corporate Reporting
- Independent and US Government Agency
- Has power to license and regulate Stock Exchanges
- Agency to enforce Federal Securities Laws
- Has authority to impose fines and take legal actions against the non-complying corporations

SEC cont..

- All Public companies must submit quarterly and annual reports to SEC
- Works with SROs and other federal state agencies in implementing and enforcing regulations
- Run by five commissioners appointed by US President

FINRA

- FINRA - Financial Industry Regulatory Authority
- The largest non-governmental regulatory agency
- Regulates all securities firms doing business in the United States
- FINRA oversees nearly 5,000 brokerage firms
- Has approximately 665,000 registered securities representatives
- Founded in 2007 consolidating NASD and some functions of NYSE
- Follows and enforces SEC regulations
- SRO – Self Regulatory Organization
 - Holds an authority to introduce its own regulations
 - Adds its own regulations or clarifies SEC regulations
 - Usually done to complete the missing items in SEC regulations

- Regulates the Trading and Brokerage practices
 - Equities
 - Bonds
 - Securities Futures
 - Options
- Every Firm dealing in securities must be a member of some SRO or Regulatory Agency
- Member Types are
 - Brokerage Firms
 - Securities Representatives / Independent Brokers

- Primary Functions
 - Define Regulatory Rules
 - Impose Rules
 - Audit and monitor member firms and individuals involved in markets
- Can even impose fines or take legal action against non-complying corporations
- Primarily funded by
 - Member firms
 - Membership fees
 - Fines



NYSE

NYSE

- New York Stock Exchange
- Owned by NYSE Euronext
- NYSE initially started in 1792, operated as not-for profit organization until 2006
- Went public in 2006 as NYSE Group, Inc. after purchase of ARCA ECN
- Turned into NYSE Euronext in 2006 after merger with Euronext
- Euronext – European Stock Exchange based in Paris

NYSE cont..

- Nation's largest Stock Exchange
- Also known as BIG BOARD
- Lists/trades more than 2000 companies stock
- NYSE has capitalization of \$23+ trillion
 - Capitalization : stock worth
- NYSE Composite Index
 - Benchmark index that reflects the performance of all the stocks traded on NYSE Exchange (more on following session)

NYSE cont..

- NYSE Exchange is located on Wall Street in New York City
- Provides Physical Floor for Trading
- Uses popular Continuous Open Outcry Auction Format
- Only Exchange Members are licensed to trade on the Floor
- Individuals known as Specialists act as AUCTIONEERs (middleman)
- Specialist is not an employee of NYSE
- Each listed stock trades at one specialist
- Buyers and Sellers of the stock are gathered at Specialist

More on NYSE ...

- More details will be covered in course on Securities Market
 - NYSE Organization Structure
 - Trading Model
 - Floor Operations
 - Settlement Process
 - Regulatory Operations etc

Indices

Indices

- Index
 - Single statistical number that is calculated for a group of components
- Used to measure the overall performance of the components involved
- Example - Stock Market Index
 - DJIA – Dow Jones Industrial Average
 - Single number that reflects the overall performance of Industrial Stocks
- Indices are available for all different markets and products

Indices – Benchmark Indices

- Benchmark indices are used to measure performance of major markets
- DJIA – Dow Jones Industrial Average
 - Performance of major Industrial stock listed on NYSE
 - Include companies like GE, IBM, MSFT etc
- S&P 500
 - Performance of 500 Large-Cap stocks
- FTSE 100 (Futsie 100)
 - 100 Large companies listed on LSE
- Nikkei 225
 - 225 Large corporations listed on TSE
- Hang Seng
 - Major companies listed on Hong Kong Stock Exchange

Indices - Specialized

- iShares MSCI EAFE
 - Index of selected foreign stock
- Morgan Stanley Biotech
 - Index of selected biotech companies
- Interest Rate Indices
- Consumer Price Index (CPI)
- Many more...

Thank you
Khader Shaik
khaderv@yahoo.com
www.ksvali.com