



Financial market institutions

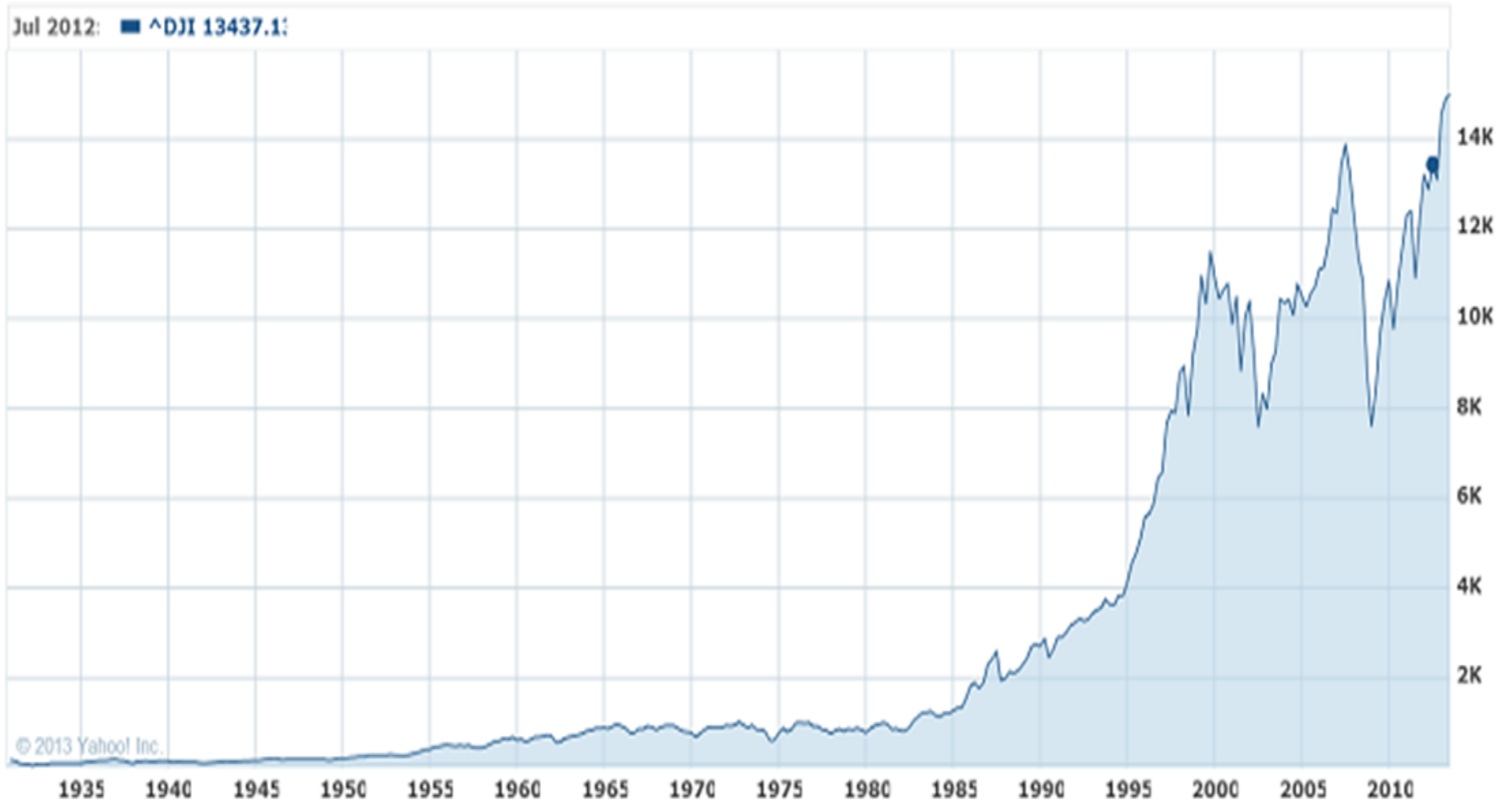
11. Properties and Pricing of Financial Assets



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FINANCIAL ASSETS

- An asset is any possession that has value in exchange.
- Tangible-intangible asset
- Financial assets (securities) are intangible assets. Such as common stock and bond.



- Issuer: The entity that agrees to make future cash payments.
- Investor: The owner of the financial asset.



Examples of Fin. Assets

- The bond issued by the Turkish government
- The bond issued by İş Bank
- An automobile loan.
- A home mortgage.
- Common Stock issued by a company.



Debt vs Equity Claims

- Debt Claims (Debt Instruments)= Fixed Income securities= Bonds
- Equity Claims (Residual claims)=Common Stock
- There are also preferred stock, convertible bonds.



The Value of a Financial Asset

Estimate the Cash Flow
(interest, principal
repayment, dividends,
expected sale price of asset)

Determine the appropriate interest
Rate for discounting the cash flow
. Min int. Rate
. Plus premium required for
perceived risk

Value of Fin Asset = PV of Future CFs



Principles of Pricing Fin. Assets

- The **market** price of an asset equals:

$$P = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \dots + \frac{CF_N}{(1+r)^N}$$

where: P = the price of the financial asset

CF_t = **cash flow at end of** year t

($t=1,2,\dots,N$)

N = maturity of the financial asset

r = appropriate discount rate



Appropriate Discount Rate

The appropriate discount rate is equal to:

$$r = RR + IP + DP + MP + LP + EP$$

where: RR = the real rate of interest

IP = the inflation premium

DP = the default risk premium

MP = the maturity premium

LP = the liquidity premium

EP = the exchange-rate risk premium



The Role of Financial Assets

- Financial Assets has two economic functions;
 1. Transferring of funds from those who have surplus of funds to those who need funds to invest in tangible assets.
 2. Transferring funds in such a way that redistributes the unavoidable risk associated with the CF generated by the tangible assets among those seeking and those providing the funds.



Properties of Financial Assets

1. Moneyiness
2. Divisibility
3. Reversibility (round-trip cost)
4. Term to Maturity
5. Liquidity
6. Convertibility
7. Currency
8. CF and Return Predictability
9. Complexity
10. Tax Status



- Moneyness: the ability to transfer a financial asset into money at little cost, delay or risk. Some examples are cash and checking accounts.
- Divisibility : is related to the minimum size in which a financial asset can be liquidated and exchanged for money.



- Reversibility (round-trip cost): refers to the cost of investing in a financial asset and then getting out of it and back into cash again.
- Term to maturity: this is the length of the interval until the date at which the instrument is scheduled to make its final payment, or the time until the owner is entitled to demand liquidation.



- Liquidity: how much the seller stands to lose if he wishes to sell immediately rather than allowing some time to pass.
- Convertibility: refers to the notion that some financial assets can be converted into other assets, e.g., a convertible bond



- Currency: this refers to the foreign exchange value or foreign exchange currency denomination of the financial asset.
- Cash flow and return predictability: this is the cash yield of a financial asset per unit of time and consists of all the cash distributions that the financial asset will pay to its owners.



- Complexity: this involves combinations of two or more simple assets. For instance, a callable bond can be valued as a straight bond plus the value of the put option to the issuer.
- Tax status: refers to the taxability of interest income generated from a financial asset.



Price and Asset Properties

- The price of a financial asset is *inversely* related to its discount rate.
 - As the discount rate rises, the price falls.
 - As the discount rate falls, the price rises.
- Reversibility in the form of commissions and transfer fees reduce the price of the asset.



Effect of Asset Properties on the Discount Rate

Asset Properties	Discount Rate
Default Risk	Positive
Liquidity Risk	Positive
Convertibility	Negative
Currency Risk	Positive



FINANCIAL MARKETS

- Financial markets consist of
 - sellers (fund suppliers-lenders)
 - buyers (fund demanders-borrowers)
 - financials instruments (fin assets, securities)
 - financial institutions (intermediaries)



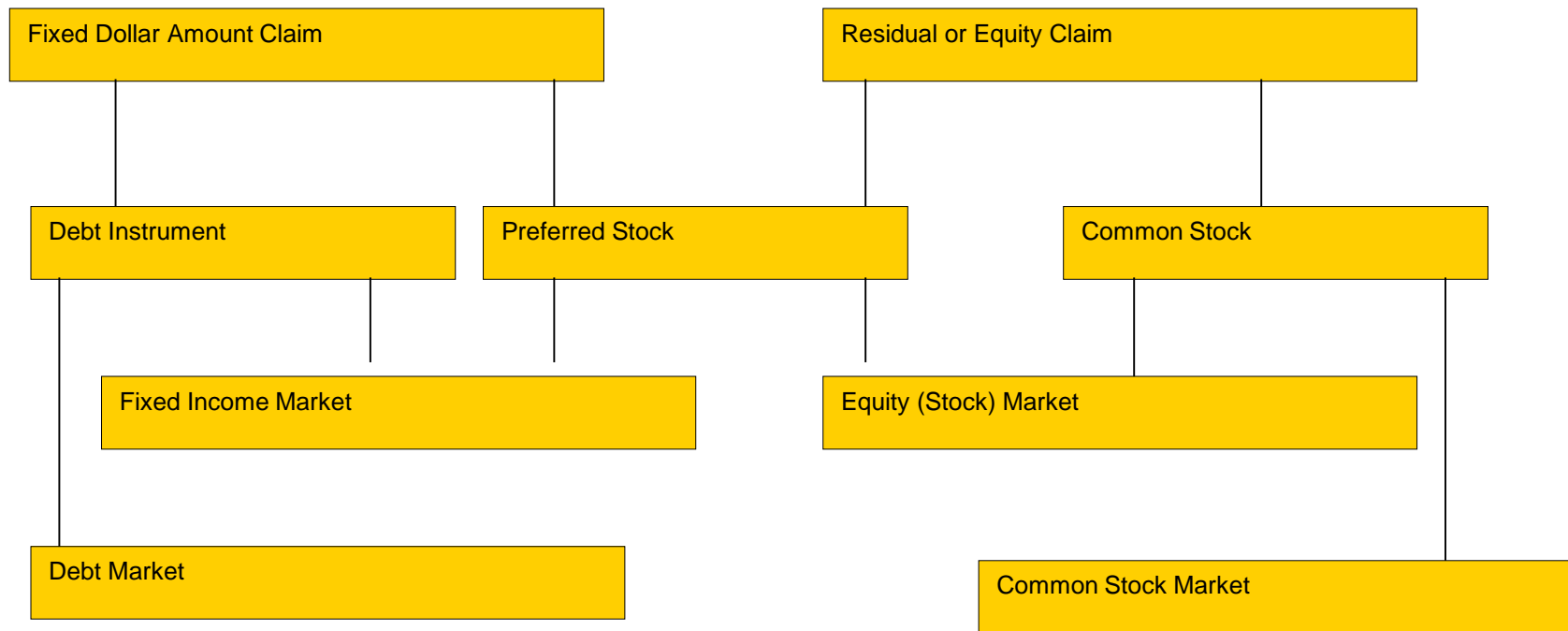
The Role (Economic Functions) of Financial Markets

1. They provide a mechanism for determining the price of financial assets: Price discovery process, Efficiency of Financial Markets.
2. They make assets more liquid.
3. They reduce cost of exchanging assets: Search costs, Information costs.



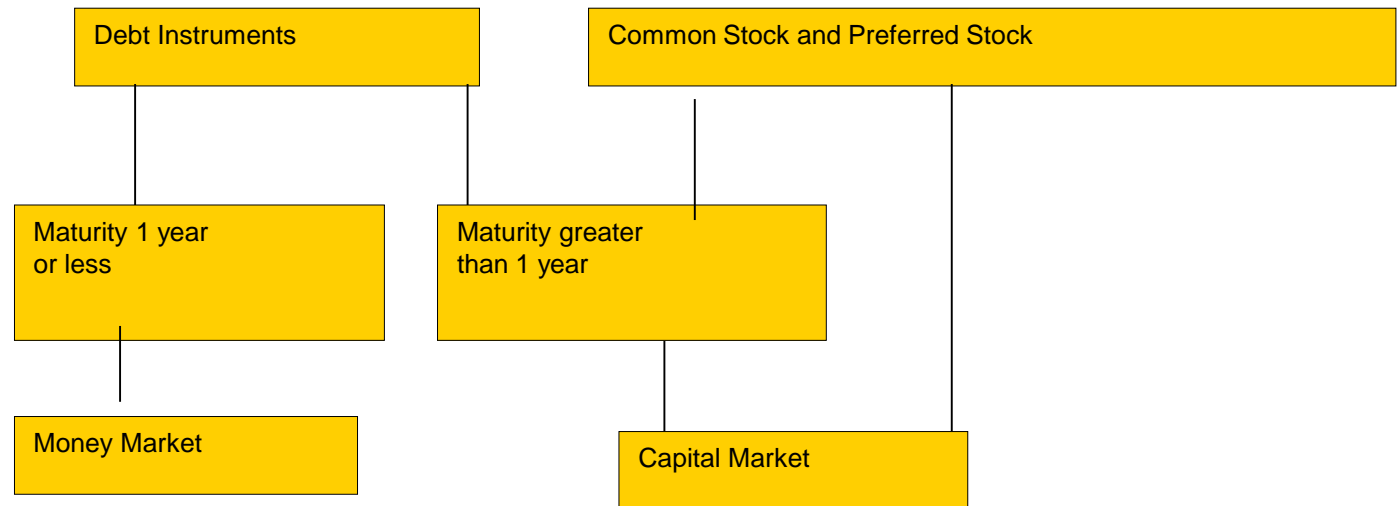
Classification of Financial Markets

- By type of financial claims





- by Maturity of the claims;



- Money Market-Capital Market



Differences	Money Market	Capital Market
Due-date	Short-term	Medium and Long Term
Fin. Instruments	Commercial Papers, Treasury Bills etc.	Securities (Common Stock, Bonds etc.)
Sources of Funds	Individual Savings	Individual and Institutional Savings
Uses of Funds	Working Capital (Current Assets)	Investment Capital (Fixed Assets)



- whether the financial claims are newly issued or not

PRIMARY MARKET	SECONDARY MARKET
<ul style="list-style-type: none">- firstly issued securities are traded- Issuers raise new capital	<ul style="list-style-type: none">- existing securities are traded- Issuers does not raise new capital



-by its organizational structure

ORGANIZED MARKET

OTC MARKET

Have central physical location	No physical location
Commission	No commission
Registration is required	No need for registration
Controlling system	Any controlling system. They are informal
Customers orders provide liquidity	Buying and selling transaction of financial intermediaries on their portfolios provides liquidity
Listing	No listing (except NASDAQ)





Organized and OTC Markets in Turkey

Organized

- Central Bank Open Market
- Central Bank Interbank Money Market
- Central Bank Foreign Exch Market
- Borsa Istanbul

OTC

- Interbank Money Market
- Interbank Repo Market
- Interbank Bonds Market
- Interbank Foreign Exchange Market
- Free Gold Market





Globalization of Financial Markets

Factors contributing to the integration of financial markets;

1. Deregulation or liberalization of markets and activities of participants.
2. Technological advances for controlling world markets, executing orders and analysing financial opportunities.
3. Increased institutionalization of financial markets (participation of financial institutions in global markets).



Classification of Global Financial Markets

Internal Market
(National Market)

Domestic Market

Foreign Market

External Market
(International Market,
Offshore Market
Euro Market)



Internal (Domestic and Foreign Mrks)

- Foreigners can issue securities in other country markets, subject to national regulations. For example, Japanese firms can issue dollar-dominated securities in the United States but they must follow U.S. regulations, which apply to nationals and foreigners alike.



External Mrks

- Securities are offered simultaneously to investors in a nr. of countries and issued outside the jurisdiction of any country.
- Dollar denominated bonds issued in Europe or Asia, not subject to US regulations.
- The motivation for foreign and Eurodollar many underdeveloped nations simply do not have a sizable capital market to meet their funds needs. Also Eurodollar loans are often less expensive since institutions holding such funds are not hampered by regulations.



Derivative Markets

- Futures
- Options
- Forward
- Swaps



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