

# Markets: Equity

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FINM Intro: Markets

Equity Capital Markets

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## Outline

Equity Capital Markets

## Asset Classes

<b><u>Fixed Income</u></b>	<b><u>contracted payoff</u></b>
Money Market	short-term, liquid, safe
Bonds	long-term
<b><u>Equities</u></b>	<b><u>residual claimant</u></b>
Preferred	specified dividend
Common	junior stakeholder

## Stocks as residual claims

**Stocks** are equity claims on the net income and assets of a corporation.

- ▶ Stockholders have a junior claim on the assets and income of the firm.
- ▶ Namely, they receive whatever is left over after all other claimants (suppliers, tax collectors, creditors, etc.) have been paid.
- ▶ The firm can pay out the residual as dividends or reinvest it in the firm which increases the value of the shares.

## Limited liability

Limited liability means that shareholders are not accountable for a firm's obligations.

- ▶ Losses are limited to the original investment.
- ▶ Equity claim is similar to a call option on a firm's overall value.
- ▶ Compare this to unincorporated businesses where owners are personally liable.

## Market size and ownership

Of all types of capital market securities, stocks have the most market value.

- ▶ However, annual new issues are much smaller than that of corporate bonds.
- ▶ Annual new issues are less than 1% of the market value of equities.
- ▶ About half of stocks are held by individuals. The other half are held by institutional investors such as pension funds, mutual funds, and insurance companies.

## Data: Capital markets

Security type	Amount outstanding (\$ billions, end of year)				
	1980	1990	2000	2010	2015
Corporate stocks	1,601	4,146	17,627	22,962	35,767
Corporate bonds	366	1,008	2,230	4,560	5,348
Residential mortg.	1,106	2,886	5,463	11,371	11,081
Comm/farm mortg.	352	829	1,214	2,449	2,712
U.S. government (*)	407	1,653	2,184	8,841	13,182
U.S. government agency	193	435	1,616	7,598	5,100
State and local gov't	310	870	1,192	2,450	2,911

Table:

(\*) marketable, long-term

Sources: Federal Reserve Flow of Funds Accounts (2015).

## Types of stock

There are two types of stock.

- ▶ **Common stock** is a simple equity claim. It may or may not have voting rights.
- ▶ **Preferred stock** is a hybrid of equity and debt. Like debt, it has no voting rights. The next slide discusses some specifics.

If no specification is made, "stock" typically refers to common stock, a pure equity claim.

## Preferred stock - cash flows

Consider some ways preferred is like debt and also equity.

- ▶ It has a stated dividend rate, which is similar to a coupon rate on a bond.
- ▶ Unlike a bond, the dividend does not have to be paid.
- ▶ However, common stockholders cannot be paid dividends until preferred dividends are paid.
- ▶ In fact, usually the *cumulative* preferred dividend must be paid first.

## Preferred stock - tax treatment

Though preferred dividends are similar to debt interest, they are not tax-deductible to the firm.

- ▶ However, corporations may deduct 70% of dividends received from domestic corporations.
- ▶ Thus, *other* firms have relatively higher demand for investing in preferred shares.

## International stocks

American Depository Receipts (**ADR's**) are certificates traded in U.S. markets which represent foreign stocks.

- ▶ ADR's are used to make it easier for foreign firms to register securities in the U.S.
- ▶ Most foreign stocks traded in U.S. markets use ADRs.
- ▶ Sometimes, these are called American Depository Shares, or ADS.

## DJIA

Stock indexes are widely quoted as a measure of overall market performance. The Dow Jones Industrial Average (**DJIA**) is the most oft-cited in the news.

- ▶ The DJIA is an average of 30 large, high quality U.S. stocks. It has been computed since 1896.
- ▶ The stocks in the index change over time, to maintain a reflection of the overall market.
- ▶ The DJIA used to be computed simply as the average price of the 30 stocks. However, the formula keeps the DJIA constant anytime one of the stocks splits, pays a large dividend, or is switched.

On Aug 28, 2017, the DJIA was at 21,808.40.

## Data: DJIA



Figure: Source: [St. Louis Fed.](#)

## Stock indexes

Other stock indices are also widely quoted.

- ▶ S&P 500 goes beyond the DJIA in that it includes 500 firms, (often even a few more.) Also, it uses a market-weighted average. That is, each of the 500 firms receives weighting in the index proportional to its market value of outstanding equity.
- ▶ NYSE. A market-value-weighted composite index of all NYSE-listed stocks. NYSE also produce subindexes for specific industries.
- ▶ NASDAQ. An index of more than 3,000 firms traded on the NASDAQ market.

## S&P 500: Composition

- ▶ 16 firms have entered/exited the index from Jan-Sep of 2015.
- ▶ In 1958, average tenure of a member was 61 years. In 2012, average tenure down to 18 years. (Innosight, 2012, Foster.)

	weight (%)		weight (%)
Apple	3.68	Amazon.com	1.15
Microsoft	2.02	Pfizer	1.14
Exxon Mobil	1.75	Facebook Class A	1.11
Johnson & Johnson	1.49	Procter & Gamble	1.08
General Electric	1.44	Verizon	1.08
Wells Fargo	1.42	Google Class A	1.07
Berkshire Hathaway Class B	1.38	Google Class C	1.02
JP Morgan Chase	1.34	Bank of America	0.97
AT&T	1.17	Walt Disney	0.92

Table: Morningstar. Sep 2015.

## S&P 500: Sector Weighting

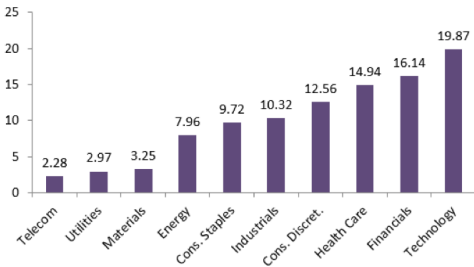


Figure: Bespoke Investment Group. March, 2015.



## International indexes

In recent years, international equity markets have grown larger and more globally accessible.

Some of the most oft-quoted international indexes are

- ▶ Nikkei (Japan)
- ▶ FTSE (United Kingdom)
- ▶ DAX (Germany)

Morgan Stanley Capital International (MSCI) publishes a [variety of international indexes](#) for different countries and regions of the world.

## Index funds

Many mutual funds are designed to track large, broad portfolios.

- ▶ Popular funds track indexes like the S&P 500, international stocks, ABS, etc.
- ▶ They allow exposure to the target portfolio without the impractical costs of trying to individually hold the many securities in the portfolio.
- ▶ Similarly, investors can buy exchange-traded funds (**ETF's**).
- ▶ A share in an ETF can be bought and sold like a share in a stock, but it represents a portfolio of stocks held by the fund.

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