

GE1202 Managing Your Personal Finance

Lecture 7 Investment





Investment

Investment

- A long-term perspective
- A process of purchasing securities wherein stability of value and level of return are somewhat predictable

Speculation

 Short–term buying and selling of securities in which future value and expected return are highly uncertain



Requirements for Investing

- Investment capital
 - Money you have accumulated above and beyond basic emergency savings
- Knowledge
 - Never invest in something you don't understand
 - Learn as much as you can about
 - Types of securities
 - The market
 - Trading strategies
 - Yourself
- Experience
 - Paper trades



Investment Capital

- The amount of money you will have to put into your investment program largely depends on how much you can earn from your investments
 - The higher their rate of return, the less you will have to put up
- A projected rate of return
 - Look at what the market has done over the past and then use the average return performance over various historical periods as your estimates
- Two ways of coming up with the capital needed to reach a targeted sum of money
 - Make a lump-sum investment up front and let that amount grow over time
 - Set up a systematic savings plan and put away a certain amount of money each year

Holding Period	Stock Returns (S&P 500)	U.S. Treasury Bond Returns (10-year)	Stocks and Treasury Bonds Together (1/2, 1/2)	Returns on Short-Term U.S. Treasury Bills	Stocks, Bonds, and T-Bills Combined (1/3, 1/3, 1/3)
5 years: 2010–2014	15.69%	5.82%	10.75%	0.07%	7.19%
10 years: 2005–2014	9.37%	5.31%	7.34 %	1.44%	5.38%
15 years: 2000–2014	6.00%	6.36%	6.18%	1.85%	4.73%
87 years: 1928–2014	11.53%	5.28%	8.40%	3.53%	6.78%



Common Stock

- A form of equity
 - Represent an ownership interest in a corporation
- A share of stock typically entitles the holder to equal participation in the corporation's earnings and dividends as well as an equal vote to elect the management of the corporation
- The return to stockholders
 - Dividends
 - Appreciation in share price
- Greater potential returns with a higher level of risk
- No maturity date



Bonds

- Liabilities
- IOUs of the issuer
- Issuer
 - Governments and corporations
- Pay a stated return
 - Interest
- Stable returns with a lower level of risk
- Fixed maturity date
 - Can be bought or sold prior to maturity at a price that may differ from its face value
 - Face values inversely related to changes in market interest rates



Preferreds and Convertibles

- Hybrid securities
 - A single financial security that combines two or more different financial instruments, generally combine both debt and equity characteristics
- Preferred securities
 - Represent an equity position in a corporation
 - A stated (fixed) dividend rate that is paid before the dividends to holders of common stock
- Convertible security
 - A fixed-income obligation
 - Permitting the investor to con vert it into common stock
 - Provides income and possible price appreciation



Mutual Funds, Exchange-Traded Funds, and Exchange Traded Notes

- Mutual fund
 - Professionally managed portfolio by an investment company
 - Returns and risk depend on portfolio
 - Can be bought or sold only at the end of the day
- Exchange-traded funds (ETFs)
 - Portfolios of securities
 - Designed to track a basket or index of equity securities
 - Investors can trade ETFs throughout the trading day
- Exchange-traded notes (ETNs)
 - Senior, unsecured, unsubordinated debt securities issued by an underwriting bank
 - Have a maturity date
 - Backed only by the credit of the issuer



Real Estate

- Investments in real estate can take many forms
 - Raw land speculation
 - Limited-partnership shares in commercial property
 - Real estate mutual funds
- Returns on real estate
 - Rents
 - Capital gains
 - Tax benefits



Securities Markets

- The marketplace in which stocks, bonds, and other financial instruments are traded
- Capital vs Money; Primary vs Secondary

Capital Market

- Long-term securities with maturities >1 year
- Stocks and bonds

Money Market

- Low-risk
- Short–term securities with maturities < 1 year
- Commercial paper and negotiable certificates of deposit



Primary Markets

- New securities are sold to the public
 - Initial Public Offering (IPO)
- Issued by a corporation or a governmental body
- Investment banking firm
 - Underwriting new security issues
- Prospectus
 - A document made available to prospective security buyers that describe the firm and a new security issue



Secondary Markets

- Old (outstanding) securities
- A market for investors
- Does not generate cash for the underlying company (issuer)
- Consists of two parts
 - Broker Markets
 - Dealer Markets



Broker Markets

- The buyer and the seller are brought together
- Party A sells his securities directly to Party B
- With the help of a broker, the securities change hands on the floor of the exchange
- Example
 - New York Stock Exchange (NYSE)



Dealer Markets

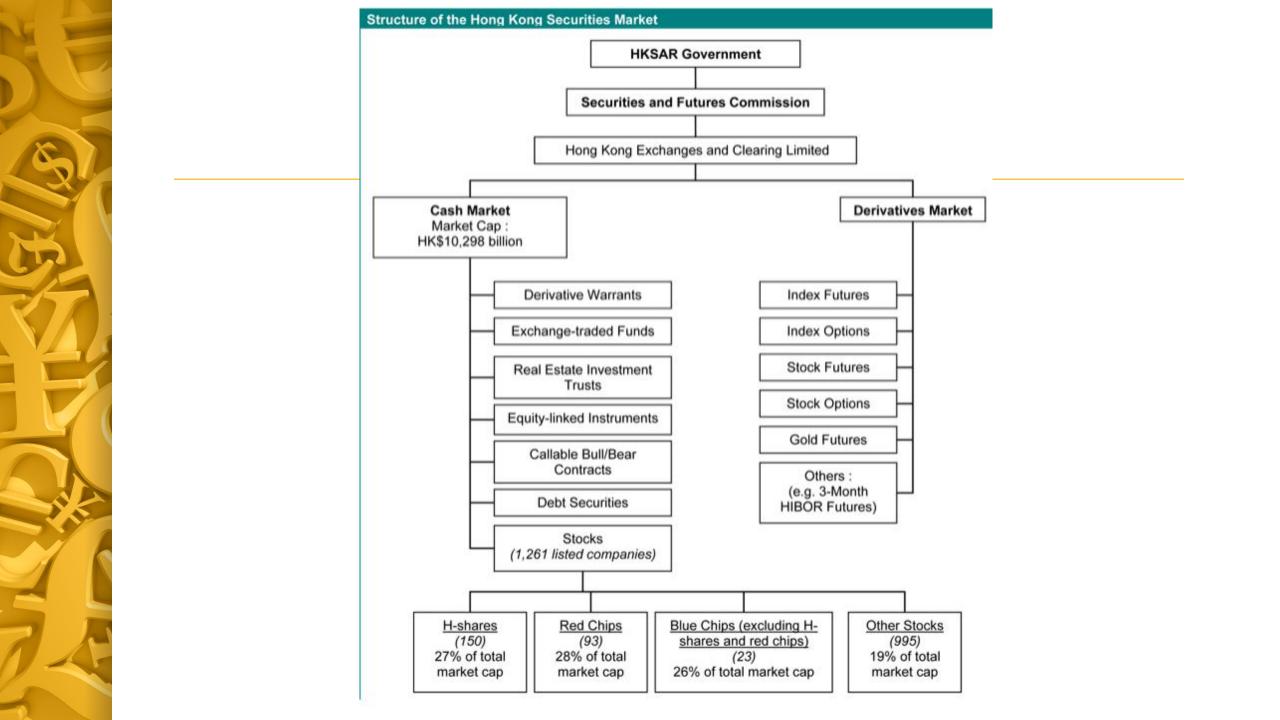
- The buyer and seller are never brought together directly
- Party A sells his securities indirectly to Party B
- Buy/sell orders are executed separately through securities dealers
 - Market makers
 - Party A sells his securities to one dealer, and Party B buys her securities from the same dealer or another dealer
- Doesn't have centralized trading floors
- Example
 - NASDAQ
 - OTC markets



- Financial terms used in securities markets
 - Bid Price
 - Price at which investor can sell a security
 - The highest price offered to purchase a given security
 - Ask Price
 - Price at which investor can buy a security
 - The lowest price at which the security is offered for sale
 - Bull Market
 - Rising securities prices for extended time period
 - Bear Market
 - Falling securities prices for extended time period



- Hong Kong Exchanges and Clearing Limited (HKEx) is the market operator of the securities trading and clearing systems
- It consists of a Main Board and the Growth Enterprise Market (GEM) board for stock trading
- In addition to stocks, HKEx's cash market also provides the trading for derivative warrants, exchange-traded funds (ETFs), real estate investment trusts (REITs), equity-linked instruments, callable bull/bear contracts (CBBCs) and debt securities
- HKEx also operates a very active derivatives market, which includes the trading of index futures, stocks futures, index options and stock options
- HKEx is regulated by the Securities and Futures Commission (SFC)





- As of the end of Sept 2016, a total of 1,929 companies (1,686 on Main Board and 243 on Growth Enterprise Market) were listed on The Stock Exchange of Hong Kong (SEHK)
- Their market capitalization reached HK\$31.6 trillion, the 8th largest in the world and 4th in Asia (after Tokyo, Shanghai and Shenzhen) as at end Jun 2016
- The total market turnover was HK\$26.1 trillion in 2015, or an average daily turnover of HK\$105.6 billion



H-share companies

- Companies incorporated in the PRC and approved by the China Securities Regulatory Commission for a listing in Hong Kong
- The par value of the shares is denominated in RMB, and the shares are subscribed for and traded in HKD or other currencies
- Example
 - CHINA TELECOM(00728.HK)
 - BANK OF CHINA(03988.HK)
 - ICBC (01398.HK)



Red chip companies

 Companies which are incorporated outside the PRC and controlled by Mainland entities

Example

- CHINA MOBILE (00941.HK)
- LENOVO GROUP(00992.HK)

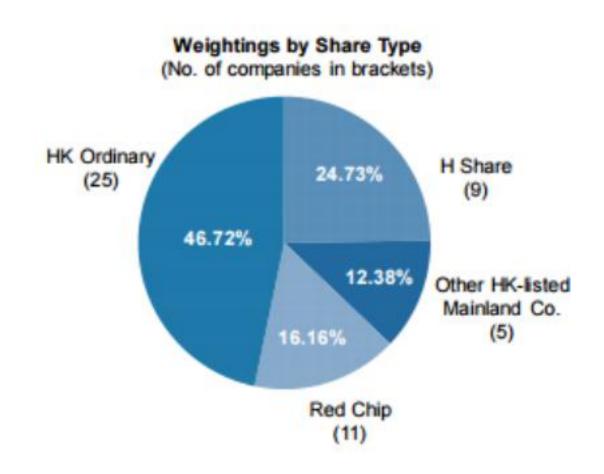
Blue chip

The constituents of the benchmark index – Hang Seng Index



Benchmark Indices

- Hang Seng Index (HSI)
 - The benchmark index commonly adopted for tracking the performance of the Hong Kong stock market
- As of August 2016, a total of 50 stocks are selected as the HSI constituents, including local stocks, red chips and H-shares





CONSTITUENTS

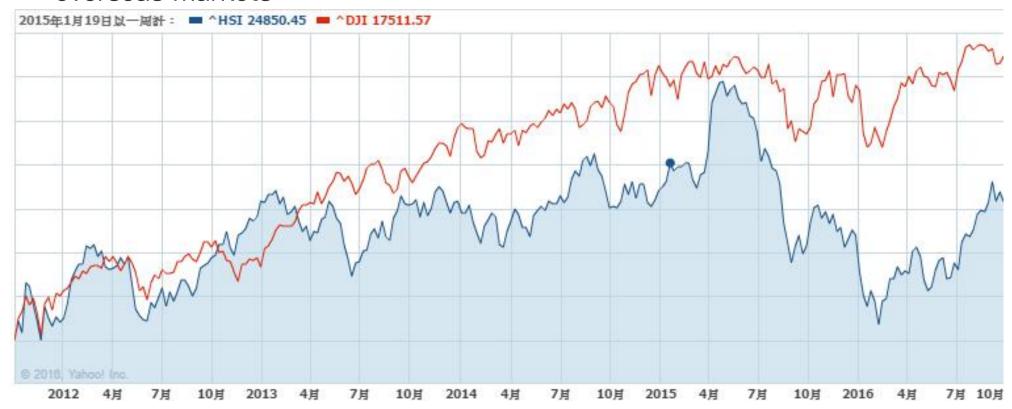
Stock Code	ISIN CODE	Company Name	Industry Classification	Share Type	Weighting (%)
700	KYG875721634	Tencent	Information Technology	Other HK-listed Mainland Co.	10.55
5	GB0005405286	HSBC Holdings	Financials	HK Ordinary	10.17
1299	HK0000069689	AIA	Financials	HK Ordinary	7.99
941	HK0941009539	China Mobile	Telecommunications	Red Chip	7.96
939	CNE1000002H1	CCB	Financials	H Share	6.60
1398	CNE1000003G1	ICBC	Financials	H Share	4.92
3988	CNE1000001Z5	Bank of China	Financials	H Share	3.75
1	KYG217651051	CKH Holdings	Conglomerates	HK Ordinary	3.64
388	HK0388045442	HKEx	Financials	HK Ordinary	2.95
2318	CNE1000003X6	Ping An	Financials	H Share	2.83
883	HK0883013259	CNOOC	Energy	Red Chip	2.30
16	HK0016000132	SHK Ppt	Properties & Construction	HK Ordinary	2.14
2	HK0002007356	CLP Holdings	Utilities	HK Ordinary	2.04
1113	KYG2103F1019	CK Property	Properties & Construction	HK Ordinary	1.99
386	CNE1000002Q2	Sinopec Corp	Energy	H Share	1.94
2628	CNE1000002L3	China Life	Financials	H Share	1.87
823	HK0823032773	Link REIT	Properties & Construction	HK Ordinary	1.71
3	HK0003000038	HK & China Gas	Utilities	HK Ordinary	1.53
857	CNE1000003W8	PetroChina	Energy	H Share	1.48
11	HK0011000095	Hang Seng Bank	Financials	HK Ordinary	1.41
6	HK0006000050	Power Assets	Utilities	HK Ordinary	1.39
688	HK0688002218	China Overseas	Properties & Construction	Red Chip	1.37
2388	HK2388011192	BOC Hong Kong	Financials	HK Ordinary	1.36
4	HK0004000045	Wharf Holdings	Properties & Construction	HK Ordinary	1.01
1928	KYG7800X1079	Sands China Ltd	Consumer Services	HK Ordinary	1.00
267	HK0267001375	CITIC	Conglomerates	Red Chip	0.96
66	HK0066009694	MTR Corporation	Consumer Services	HK Ordinary	0.84
1109	KYG2108Y1052	China Res Land	Properties & Construction	Red Chip	0.82
27	HK0027032686	Galaxy Ent	Consumer Services	HK Ordinary	0.80
17	HK0017000149	New World Dev	Properties & Construction	HK Ordinary	0.73
762	HK0000049939	China Unicom	Telecommunications	Red Chip	0.71
3328	CNE100000205	Bankcomm	Financials	H Share	0.71
1044	KYG4402L1510	Hengan Int'l	Consumer Goods	Other HK-listed Mainland Co.	0.70
12	HK0012000102	Henderson Land	Properties & Construction	HK Ordinary	0.67
1088	CNE1000002R0	China Shenhua	Energy	H Share	0.64
19	HK0019000162	Swire Pacific A	Condomerates	HK Ordinary	0.63
23	HK0023000190	Bank of E Asia	Financials	HK Ordinary	0.62
1038	BMG2098R1025	CKI Holdings	Utilities	HK Ordinary	0.58
83	HK0083000502	Sino Land	Properties & Construction	HK Ordinary	0.55
2319	KYG210961051	Mengniu Dairy	Consumer Goods	Red Chip	0.55
992	HK0992009065	Lenovo Group	Information Technology	Red Chip	0.51
151	KYG9431R1039	Want Want China	Consumer Goods	Other HK-listed Mainland Co.	0.48
101	HK0101000591	Hang Lung Ppt	Properties & Construction	HK Ordinary	0.48
1880	KYG097021045	Belle Int'l	Consumer Goods	Other HK-listed Mainland Co.	0.46
144	HK0144000764	China Mer Port	Industrials	Red Chip	0.39
836	HK0836012952	China Res Power	Utilities	Red Chip	0.35
494	BMG5485F1692	Li & Fung	Consumer Goods	HK Ordinary	0.32
135	BMG5320C1082	Kunlun Energy	Energy	Red Chip	0.32
322			Consumer Goods	Other HK-listed Mainland Co.	0.19
322	KYG8878S1030 HK0293001514	Tingyi Cathay Pac Air	Consumer Goods Consumer Services	HK Ordinary	0.19

100.00



Characteristics of Hong Kong Financial Market

- Highly externally-oriented market
 - The performance of the Hong Kong stock market moves in line with major overseas markets

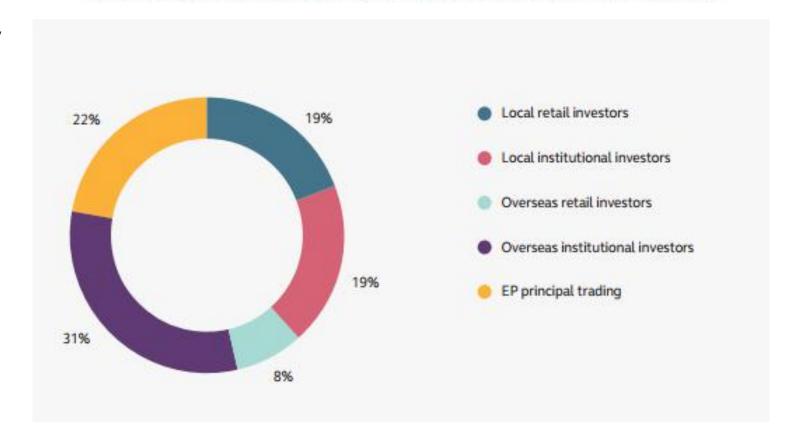




Characteristics of Hong Kong Financial Market

 Significant participation by overseas and institutional investors

Distribution of cash market trading value by investor type (Oct 2014 - Sep 2015)





Stockbrokers

- Account executives or financial consultants
- A person who buys and sells securities on behalf of clients and gives them investment advice and information
- Must be licensed by the exchanges and must abide by the ethical guidelines of the exchanges and SFC regulations
- Full-service broker
 - A broker offers a full array of brokerage services
- Discount broker
 - Low overhead operations, charges low commissions, offers little or no services to investors
- Online broker



Selecting a Broker

- Full-service broker
- Select someone who understands your investment objectives
- A good broker is someone who's more interested in your investments than in his or her own commissions

Brokerage Fees

- Brokerage firms receive commissions for executing orders
- Differ from one brokerage firm to another
- Typically charge a minimum fee



- Investor Protection
 - Protection against the loss of securities or cash held by your broker
- Lots
 - Security transactions can be made in either odd or round lots
 - Odd lot
 - Consists of fewer than 100 shares of stock
 - Round lot
 - Represents a 100-share unit or multiples thereof



 Investors may choose from several different kinds of orders when buying or selling securities

Market Order

 An order to buy or sell a security at the best price available at the time it is placed

Limit order

 An order to either buy a security at a specified or lower price or to sell a security at or above a specified price

Stop-Loss Order

 An order to sell a stock when the market price reaches or drops below a specified level



- You can buy securities by putting up your own money or by borrowing some of the money
 - Buying on margin
 - Magnifying both profits and losses
- Margin requirements
 - Specify the amount of equity that an investor must put up when buying securities
 - Maximum margin is around 40%
- Maintenance margin
 - Minimum amount equity in trading can be before additional funds must be put into the account
- Margin call
 - Notification from broker you must put up additional funds



- Example
- You plan to buy 1000 shares of "CityU" at \$70. Given that the initial margin is 50% and maintenance margin is 40%. What is your initial position?
- Initial Position
 - Stock value = \$70,000
 - Borrowed = \$35,000
 - Equity = \$35,000



- How will your position change if the stock price falls to \$60 per share?
- New Position
 - Stock value = \$60,000
 - Borrowed = \$35,000
 - Equity = \$25,000
 - Margin% = \$25,000/\$60,000 = 41.67%
 - No margin call yet



Investors can go long or short when they trade stocks

Long transactions

- Anticipating the stock prices will go up, buying at low and selling at high
- Maximum gain is unlimited; maximum loss is limited

Short sale

- Selling borrowed securities with the expectation that they can be replaced at a lower price at some future date
- Maximum gain is limited to the purchase price; maximum loss is unlimited
- Example
 - If you short-sells 100 shares of stock at \$50 a share and then some time later,
 after the price of the stock has dropped, buys them back at \$30 a share
 - then you will generate a profit of \$20 a share, or \$2,000 in total



Know Yourself

- Investment plan is unique to an individual
- The plan has to be setup according to the characteristics of the investor
 - Investment Objectives
 - Attitude to Risk
- Investment decisions are very often affected by the investor's emotion rather than rationality
 - Behaviour bias



Investment Objectives

- An investment plan is a way of translating an abstract investment target into a specific investment program
 - Find a way to obtain the targeted rate of return on your money
 - To specify the kinds of investment vehicles you intend to use
- Your goals tend to set the tone for your investment program, and they play a major role in determining how conservative (or aggressive) you are likely to be in making investment decisions
 - Your goals define the purpose for your investments



Investment Objectives

- The most frequent investment objectives
 - Accumulate funds for retirement
 - Review the amounts of income you can realistically expect to receive from Social Security and your employee pension plan
 - Based on your retirement goals, determine whether it is adequate to meet your needs
 - Save for a major purchase
 - Once you know about how much money you're going to need to attain one of these goals, you can specify the types of investment vehicles that you intend to use
 - Enhance current income
 - Want to live off their investment income
 - Seek shelter from taxes
 - Deductions against certain sources of income



Risk

- An important factor that needs to be considered when undertaking personal financial planning is an individual's attitude to risk
- There are some risks affecting the general investment environment
 - Inflation risk
 - Inflation erodes the value of savings and investments
 - Interest rates risk
 - Floating interest rate vs Fixed interest rate
 - Political risk
 - Governments and policies change
 - Market risk
 - · One type of asset is affected by particular circumstances and the value of all the



Risk

Some risks associated to a specific business or investor

Business risk

 Uncertainty associated with a firm's cash flows and with its subsequent ability to meet its operating expenses on time

Financial risk

 Associated with the amount of debt used to finance the firm and its ability to meet these obligation on time

Liquidity risk

Inability to liquidate an investment conveniently and at a reasonable price

Risk of a specific event

 Some major, unexpected event that occur that leads to a sudden and substantial change in the value of an investment



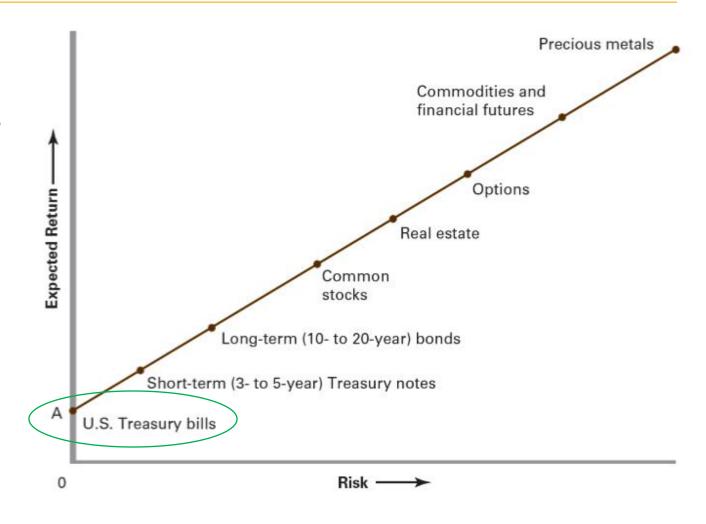
Attitude to Risk

- Attitudes to risk are linked to personality, age and personal circumstances
 - Risk-lover people who likes to take more risk
 - Risk-averser people who will avoid risk
- Will you take the following offer?
 - Flipping a fair coin, if a head is shown up, you win and I pay you \$20; if a tail
 is shown, I win and you pay me \$20
- Different people have different risk tolerance
 - Character
 - Age
 - Goal
- http://njaes.rutgers.edu:8080/money/riskquiz/

Risk and Return

- General principle
 - The greater the potential rate of return to be offered the riskier a financial product is
- If you want greater return you will most likely have to accept greater risk

Risk-free rate of return





Managing Your Investment Holdings

- Build a diversified portfolio based on goals and personal situation
 - Portfolio
 - A collection of securities assembled for the purpose of meeting common investment goals
 - Diversification
 - The process of choosing securities with dissimilar risk-return characteristics in order to create a portfolio that provides an acceptable level of return and an acceptable exposure to risk
- Allocate assets according to objectives

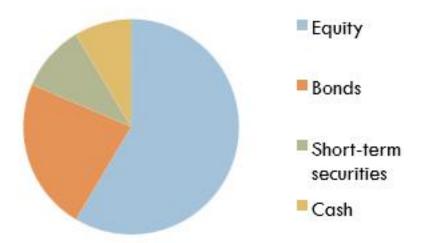


Portfolio Management

Asset allocation

- A plan for dividing a portfolio among different classes of securities in order to preserve capital by protecting the portfolio against negative market developments
- Asset allocation deals ir '
 individual securities to k







Portfolio Management

- The total return on a portfolio is influenced by its asset allocation than by specific security selections
- Track investments
 - How they have performed over time?
 - Whether they have lived up to your expectations?
- Rebalance portfolio as needed



Emotional Mind

- Eight Common Behavioural Bias
 - Representativeness
 - Disposition effect
 - Familiarity bias
 - Confirmation bias
 - Anchoring
 - Self-attribution bias
 - Hindsight bias
 - Trend-chasing bias



Representativeness

- Investors labeling an investment as good or bad based on its recent performance
 - Buy stocks after prices have risen expecting those increases to continue
 - Ignore stocks when their prices are below their intrinsic values
- Investors will evaluate an asset base on the most available information.



Disposition Effect

 The tendency of selling stocks that have appreciated in price since purchase ("winners") too early and holding on to losing stocks ("losers") too long

Regret (loss) aversion

- People often feel the pain of loss more than the joy of gains
- Investor reluctance to sell "losing" investments because it gives them feedback that they have made bad decisions
- Cut your losses and let your profits run" enables investors to engage in disciplined investment management that can generate higher returns



Familiarity Bias

 Investors have a preference for familiar investments despite the seemingly obvious gains from diversification

Local bias

Investors display a preference for local assets with which they are more familiar

Home bias

- Portfolios tilted toward domestic securities
- Investors hold suboptimal portfolios
- Cast a wider net and expand their portfolio allocation decisions to gain wider diversification and risk reduction



Confirmation Bias

- People are often drawn to information or ideas that validate existing beliefs and opinions
- An investor may have a belief about market conditions and gravitate toward information sources that confirm that belief
- Reduces diversification
 - Investing too much in the stock of a company
- To consider information from multiple sources



Anchoring

- The tendency to hold on to a belief and then apply it as a subjective reference point for making future judgments
- When an individual lets a specific piece of information control his cognitive decision—making process
- People often base their decisions on the first source of information to which they are exposed (e.g., an initial purchase price of a stock) and have difficulty adjusting or changing their views to new information



Self-attribution Bias

- Attribute successful outcomes to their own actions and bad outcomes to external factors
- A means of self-protection or self-enhancement
- Become overconfident
- Keeping track of personal mistakes and successes and developing accountability mechanisms
 - Seeking constructive feedback from others



Hindsight Bias

- "I knew that would happen."
- Humans tend to overestimate the accuracy of their predictions
- A false sense security when making investment decisions
- Excessive risk-taking behaviour



Trend-chasing Bias

 Investors often chase past performance in the mistaken belief that historical returns predict future investment performance

Herd mentality

- A person does not want to be left out of a trend or a movement
- Mutual funds take advantage of investors by increasing advertising when past performance is high to attract new investors
- Ask yourself why you are making this financial decision, and looking to see if it aligns with your financial plan



Becoming an Informed Investor

- First rule of investing
 - Never start an investment program, or buy an investment vehicle, unless you thoroughly understand what you are getting into!
- Before making any major investment decision, thoroughly investigate the security and its merits
 - Formulate some basic expectations about its future performance
 - Gain an understanding of the sources of risk and return
- Four types of investment information that you should follow on a regular basis
 - Economic developments and current events
 - Alternative investment vehicles
 - Current interest rates and prices
 - Personal investment strategies



Annual stockholders' report

- Includes a variety of financial and descriptive information about a firm's operations in the recent past
- Every publicly traded corporation is required to provide its stockholders and other interested parties
- Describe the firm's business activities, recent developments, and future plans and outlook
- Financial ratios describing past performance



- Common sources of financial news
 - The Internet and the local newspaper
- The Financial Press
 - The Financial Times, The Wall Street Journal
 - SCMP, HK Economic Times, HK Economic Journal
 - The behavior of the economy, the market, various industries, and individual companies



Market Data

- Describe the general behavior of the securities markets
- The averages and indexes
 - HSI, DJIA, S&P500, NASDAQ, Nikkei, FTSE, DAX, CAC 40
 - Used to capture the overall performance of the market as a whole
- Follow one or more to get a feel for how the market is doing over time and an indication of what lies ahead
- The absolute level of the index at a specific time is far less important than what has been happening to that index over a given period



Stock Quotes

https://hk.finance.yahoo.com/

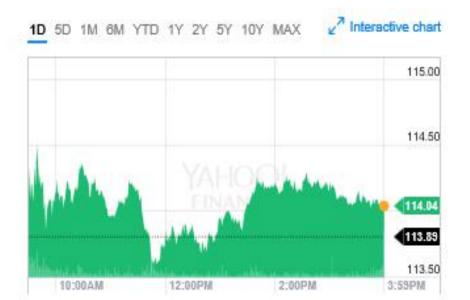
Apple Inc. (AAPL) Add to watchlist

NasdaqGS - NasdaqGS Real Time Price. Currency in USD

114.06 +0.17 (+0.15 %)

At close: 4:00 PM EDT

Open	114.43	Market Cap	614.61B
Prev Close	113.89	P/E Ratio (ttm)	13.30
Bid	113.91 x 500	Beta	1.55
Ask	113.93 x 3800	Volume	22,665,009
Day's Range	113.51 - 114.56	Avg Vol (3m)	35,386,218
52wk Range	89.47 - 123.82	Dividend & Yield	2.28 (2.02%)
1y Target Est	125.86	Earnings Date	Oct 25, 2016





Brokerage Reports

- Reports produced by the research staffs of major (full-service) brokerage firms
- Economic and market analyses to industry and company reports, news of special situations, and reports on interest rates and the bond market
- Recommendations for the type of investment returns expected and whether to buy, hold, or sell specific securities

Advisory Services

 Subscription advisory services provide information and recommendations on various industries and specific securities