TOPIC 3 - OVERVIEW

1. INVESTMENT CONCEPTS

1.1 What is Return?

- A fund's return can be measured in a variety of ways, as outlined below

1.1.1 Holding Period Return

- Reflects the actual profit for the investment period

HPR = (Price at end – Price at beg + dividend)/Price at beg

Holding Period Return Example
Calculate the holding period return for an investment that is priced at HKD100 at the beginning of the period and HKD130 at the end of the period. A dividend of HKD10 is paid during the period.

Answer
HPR = (130 – 100 + 10)/100
= 0.4 or 40%

1.1.2 Combining Returns

- Two ways of combining returns: **arithmetic** average and **geometric** average
- **Arithmetic average** is used to combine a number of returns over the same period to arrive at an average

  Average return = $(R_1 + R_2 + R_3 + ... + R_n)/n$

- **Geometric average** is used to combine a number of returns from the same source over a number of periods to arrive at an average return

  Average return = $[(1 + R_1) \times (1 + R_2) \times (1 + R_3) \times ...(1 + R_n)]^{1/n} - 1$

Combining Returns Example
Calculate the arithmetic and geometric average returns for the following three returns

- *5.50%*
- *5.75%*
- *6.00%*

Answer

Arithmetic average = (5.5 + 5.75 + 6.0)/3 = 5.75%

Geometric average = $[(1.055) \times (1.0575) \times (1.06)]^{1/3} - 1$
= $(1.1826)^{1/3} - 1$
= 0.05749 = 5.749%

- The geometric average can never be greater than the arithmetic average.
- The two combined returns will be equal if all the individual returns are equal

1.1.3 Simple and Compound Interests

- Interest is calculated in one of two ways:

Simple Interest

- Interest is calculated on a constant principal amount throughout period of loan

Formula: Interest earned over a number of periods

= loan principal x interest rate per period x number of periods

> ***Simple Interest Example***
> *Calculate the amount of simple interest and the total amount obtained at maturity on a deposit of HKD500,000 after four years with an interest rate of 3%*
>
> ***Answer***
> Interest = 500,000 x 3% x 4 years
>
> = HKD60,000
>
> Deposit at maturity = 500,000 + 60,000
> HKD560,000

Compound Interest

- Interest is calculated assuming all interest income earned is reinvested at the same interest rate and with the principal growing each period

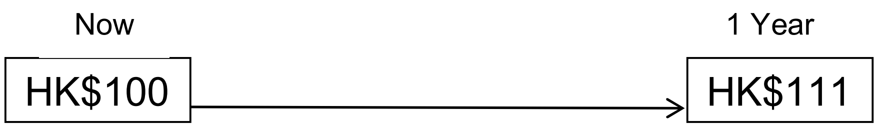
Formula: Amount received at maturity

$$= \text{loan principal} \times \left(1 + \frac{\text{interest rate per period}}{\text{int payments per period}}\right)^{\text{periods x payments per period}}$$

> ***Compound Interest Example***
> *HKD10,000 is invested for three years at a compound interest rate of 10% per annum. What will the deposit be worth at the end of the three-year period and how much interest will have been earned?*
>
> ***Answer***
> FV $= 10{,}000 \times (1 + (0.10/1)^{3 \times 1}$
>
> $= 10{,}000 \times 1.1^3$
>
> = HKD13,310
>
> Interest = 13,310 – 10,000
>
> = HKD3,310

1.1.4 Future Value Calculation

- Money deposited now will grow in value over time due to interest accumulation
- HK$100 invested now at 11% per annum will be worth HK$111 in one year's time



$$FV = PV\left(1 + \frac{\text{Interest rate}}{\text{Periods in year}}\right)^{\text{Payments per period x no of periods}}$$

$$FV = 100\left(1 + \frac{0.11}{1}\right)^{1 \times 1}$$

$$= 111$$

$$S = P \times (1 + r/m)^{tm}$$

S = future value
P = present value
t = number of years
r = interest rate per period
m = number of payments per year

1.1.5 Quoting Interest Rates

- There are three common methods of quoting interests:
  - **Nominal interest rates:** the most common method where no account is taken of compounding
  - **Real interest rates:** does not include the inflation element of nominal interest rates

    (1 + nominal rate) = (1 + real rate) x (1 + inflation rate)
  - **Effective interest rates**: includes the effect of compounding. To compare nominal interest rates with different compounding periods, the following formula is used:

    Formula: Effective interest rate

    $$= \left(1 + \frac{\text{nominal interest rate}}{\text{int payments per year}}\right)^{\text{payments per year}}$$

Effective Interest Rate Example
Calculate the effective annual interest rate (EAR) for the following three nominal interest rates.

- *5.50% paid monthly*
- *5.75% paid quarterly*
- *6.00% paid semi-annually*

Answer
5.50% paid monthly
EAR $= (1 + (0.055/12)^{12} - 1$

$= 5.64\%$

5.75% paid quarterly
EAR $= (1 + (0.0575/4)^{4} - 1$

$= 5.88\%$

6.00% paid semi-annually
EAR $= (1 + (0.06/2)^{2} - 1$

$= 6.09\%$

1.1.6 Time-weighted Return

- Time-weighted return is used to measure a fund's performance
- Requires a clear distinction between "new" money being paid into the fund and income/capital gain arising from previous investments
- Dollar weighted return gives greater weight to relevant yields when a fund is at its largest
- Time-weighted is preferred to dollar weighted to measure a fund's return, although both could be used

$$R_q = [(1 + R_1) \times (1 + R_2) \times (1 + R_3)] - 1$$

R_q = return for a quarter
R_i = percentage return for month i

1.1.7 Performance Period

- The longer the time period, the more measurement points are used, making the measure more statistically reliable
- The same performance period should be used when comparing the performance of different funds

1.2 What is Risk?

- Risk is the **uncertainty** that **actual investment** returns will vary from **expected returns**
- For an individual, risk usually refers to the **possibility of incurring a loss** – in finance, risk refers to both **downside risk and upside potential**
- Risk of an investment asset is measured by **standard deviation**

1.3 How to Calculate the Expected Return

- To measure expected return and risk of an investment, the **probabilities** of different possible investment returns will be required. The expected return is the weighted mean return
- Although the actual return for an investment almost always differs from the expected return, there is generally a **close relationship between** actual and expected returns in the long run

Calculation of Expected Return

$$ER = \Sigma p_i r_i$$

ER = expected return
p_i = probability of return i
r_i = % return i

Example

Dead Certainty Limited has the following return probabilities for the next year. Calculate the expected return

Probability	**Return**
30%	4%
50%	8%
20%	10%

Solution

Probability	**Return**	**Expected Value**
30%	4%	1.2%
50%	8%	4.0%
20%	10%	2.0%
Expected return		**7.2%**

1.4 Risk and Return Concepts

- There is a risk when an investment's actual return is different from its expected return
- Risk can be measured by **variance and standard deviation**
- Standard deviation is the square root of the variance
- The greater the variance/standard deviation, the greater the level of risk for the security

$$Var = \Sigma p_i(r_i - ER)^2$$

$$SD = \sqrt{\Sigma p_i(r_i - ER)^2}$$

SD = standard deviation
Var = variance
ER = expected return
p_i = probability of return i
r_i = % return i

Example

Dead Certainty Limited and Good Chance Limited have the following return probabilities for the coming year. Calculate, for each stock, the expected return, variance and standard deviation

Dead Certainty		Good Chance	
Probability	**Return**	**Probability**	**Return**
30%	4%	40%	2%
50%	8%	40%	10%
20%	10%	20%	20%

Solution

Dead Certainty

Probability (p)	Return (r)	Expected Value	$p(r - ER)^2$
30%	4%	1.2%	0.0003072
50%	8%	4%	0.000032
20%	10%	2%	0.0001568
Expected return		**7.2%**	
Variance			0.000496

$$SD = \sqrt{0.000496}$$
$$= 0.0223$$
$$= 2.23\%$$

Good Chance

Probability (p)	Return (r)	Expected Value	$p(r - ER)^2$
40%	2%	0.8%	0.0018496
40%	10%	4%	0.0000576
20%	20%	4%	0.0025088
Expected return		**8.8%**	
Variance			0.004416

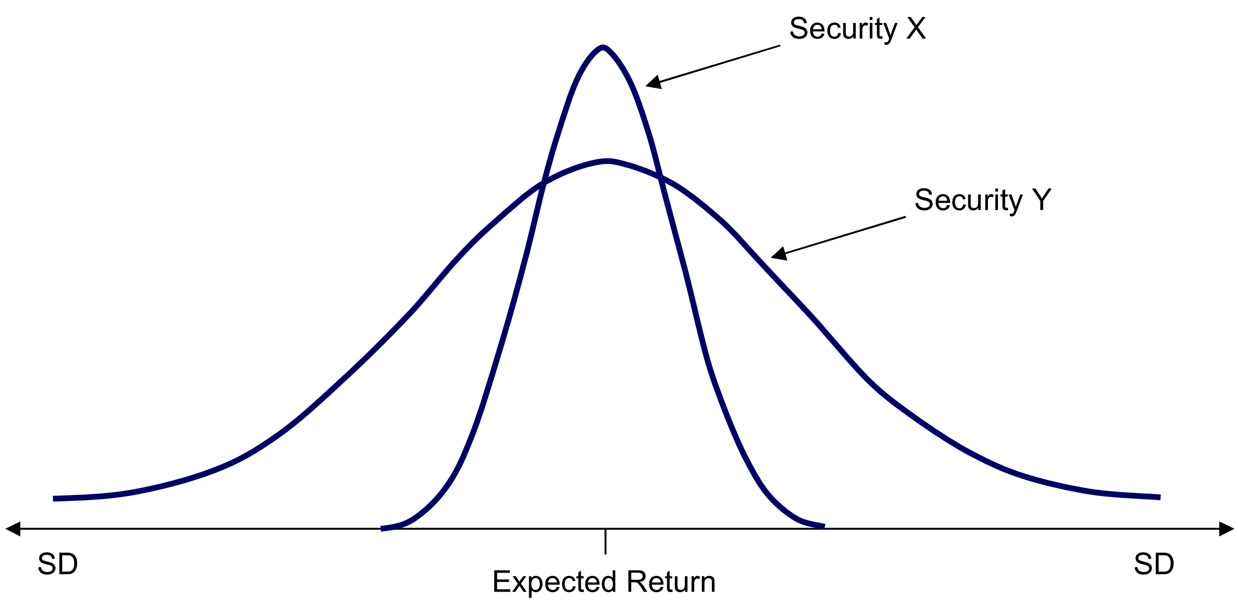
$$SD = \sqrt{0.004416}$$
$$= 0.0665$$
$$= 6.65\%$$

Conclusion: Good Chance, compared to Dead Certainty, has a higher expected return, but at a higher risk

1.5 The Normal Distribution Curve

- The normal distribution illustrates the **dispersion of a security's return** around the expected return
- As shown below, the lower SD of security X means that the likely returns are more tightly clustered around the expected return. Security Y, with the greater SD, is riskier

The Normal Distribution Curve



- Statistically, there is a **68% probability** of a security yielding a return within **one standard deviation either side of the mean**, assuming possible returns are normally distributed
- Statistically, there is a **95% probability** of a security yielding a return within **two standard deviations** either side of the mean, assuming possible returns are normally distributed (the actual measure is 1.96)

1.6 The Risk/Return Trade Off

- The risk-return trade-off is the level of **additional risk** an investor is prepared to take in the expectation of a higher return
- The standard deviation can help investors in this decision-making process
- An investor requires extra compensation for bearing higher risk, known as the risk premium

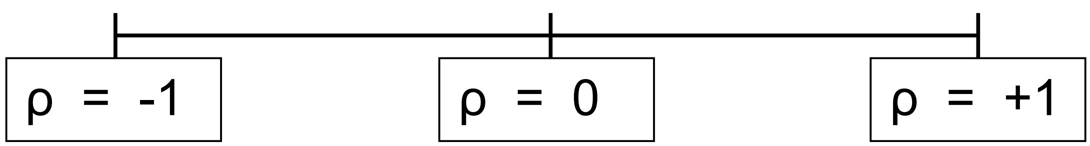
Required return = risk-free rate + risk premium

1.7 Principles of Portfolio Theory

- Portfolio theory was developed by **Harry Markowitz** in the 1950s – a breakthrough in looking at risk in the context of a portfolio
- The development of Portfolio Theory was followed by William Sharpe's Capital Asset Pricing Model (**CAPM**) in the 1960s, which in turn was followed by the development of Arbitrage Pricing Theory in the 1970s (Roll, Rosenburg and Ross)
- In the 1980s, the P/E-ROE was proposed by Jarrod Wilcox
- Markowitz, in introducing the concept of **expected risk**, concluded that a higher expected risk should yield a higher expected return
- Markowitz was also the first to introduce the concept of **correlation**

1.7.1 Correlation

- Correlation is the relationship between the expected returns of two assets
- Assets whose returns move in the same direction are known to be **positively correlated** (umbrella company and raincoat company)
- Assets whose returns move in the opposite direction are known to be **negatively correlated** (umbrella company and sunglasses company)
- The **correlation coefficient** measures the relationship between the returns of two assets and lies anywhere between -1 and +1



- **Perfect positive correlation** has a correlation coefficient of +1
- **Perfect negative correlation** has a correlation coefficient of -1
- **Zero correlation** applies to two assets with no relationship
- Combining assets in a portfolio with less than perfect positive correlation will **reduce overall portfolio risk**

Calculation of Standard Deviation for a Two Asset Portfolio

$$\sigma_p = \sqrt{w_a^2\sigma_a^2 + w_b^2\sigma_b^2 + 2w_a w_b \rho_{a,b}\sigma_a\sigma_b}$$

σ_p = portfolio standard deviation

w_a = portfolio weight of asset **a**

w_b = portfolio weight of asset **b**

σ_a = standard deviation of asset **a**

σ_b = standard deviation of asset **b**

$\rho_{a,b}$ = correlation coefficient

Example

You are given a two-asset portfolio with 70% invested in asset A (expected return 12%, standard deviation 1.3%) and 30% invested in asset B (expected return 20%, standard deviation 1.6%) and a correlation coefficient between the two asset return of -0.9%

Calculate the expected return and standard deviation for the portfolio

Expected Return

$E(R_p) = w_1E(R_1) + w_2E(R_2)$

$E(R) = (0.70 \times 12\%) + (0.3 \times 20\%)$

$= 8.4\% + 6\%$

$= 14.4\%$

Standard Deviation

$$\sigma_p = [w_a^2\sigma_a^2 + w_b^2\sigma_b^2 + 2w_aw_b\rho_{a,b}\sigma_a\sigma_b]^{½}$$

$\sigma_p^2 = (0.7^2 \times 1.3^2) + (0.3^2 \times 1.6^2) + (2 \times 0.7 \times 0.3 \times -0.9 \times 1.3 \times 1.6)$

$= 0.8281 + 0.2304 – 0.78624$

$= 0.27226$

$\sigma_p = \sqrt{0.27226}$

$= 0.52179$

If the correlation coefficient = -1

$\sigma_p^2 = (0.7^2 \times 1.3^2) + (0.3^2 \times 1.6^2) + (2 \times 0.7 \times 0.3 \times -1 \times 1.3 \times 1.6)$

$= 0.8281 + 0.2304 – 0.8736$

$= 0.1849$

$\sigma_p = \sqrt{0.1849}$

$= 0.43$

If the correlation coefficient = 0

$\sigma_p = \sqrt{1.0585}$

$= 1.0288$

If the correlation coefficient = +1

$\sigma_p = \sqrt{1.9321}$

$= 1.39$

Weighted average: $(0.7 \times 1.3) + (0.3 \times 1.6) = 1.39$

- The above example shows that portfolios with the same expected return of 14.4% have **different levels of risk**, depending upon the correlation between individual asset returns. More specifically:

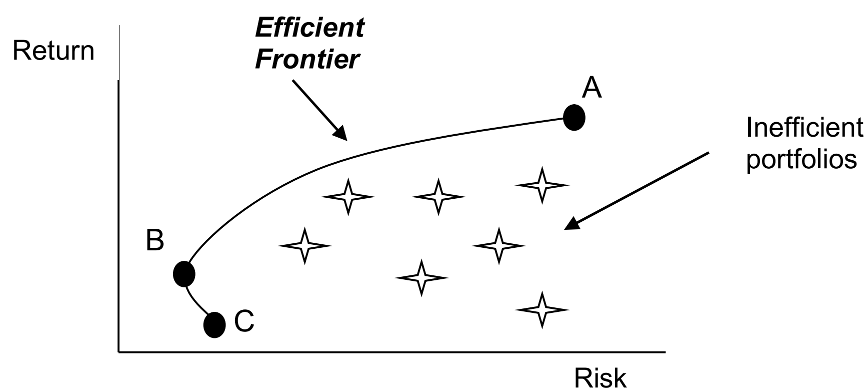
Least risk when there is perfect negative correlation

Moderate risk when there is zero correlation

Most risk (weighted average of individual risks) when there is perfect positive correlation

1.7.2 The Efficient Frontier

- Markowitz plotted all securities and portfolios of securities according to their expected return and risk
- Rational investors would prefer portfolios offering the greatest return for a given level of risk
- Portfolios that maximise return for a given level of risk lie on the efficient frontier, as shown below



- The minimum-variance frontier, **A-B-C**, represents the lowest level of risk for each possible level of return
- The efficient frontier **A-B**, represents the set of portfolios that will give an investor the highest return for each level of risk assumed
- Note that the **B-C** section of the line is "inefficient" as an investor may achieve a higher return for the same level of risk by moving vertically upwards
- Portfolio B is the global minimum-variance portfolio

$$\sigma_p = (w_a^2\sigma_a^2 + w_b^2\sigma_b^2 + 2w_aw_b\rho_{a,b}\sigma_a\sigma_b)^{½}$$

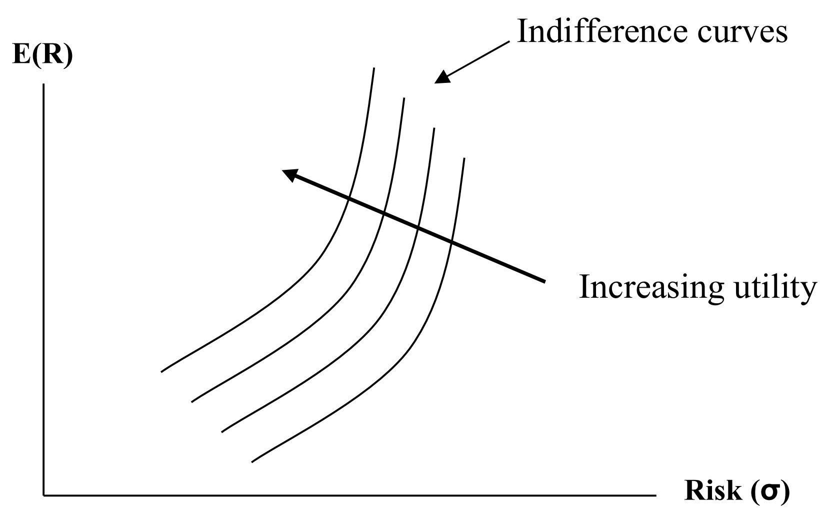
2. INVESTORS' PREFERENCES

- Which portfolio on the efficient frontier would an investor **prefer**?
- To be able to answer this question, we need to understand an investor's **individual preferences** regarding risk and return
- To help us, we need to explore **indifference curves**

2.1 Indifference Curves

- Indifference curves are a set of utility curves showing different levels of satisfaction or utility for each investor
- An investor is indifferent to choosing one portfolio rather than another lying along the same indifference curve
- As an indifference curve moves upwards, an investor enjoys higher utility
- Investors prefer portfolios with higher expected returns for the same level of risk

Risk Aversion and Indifference Curves

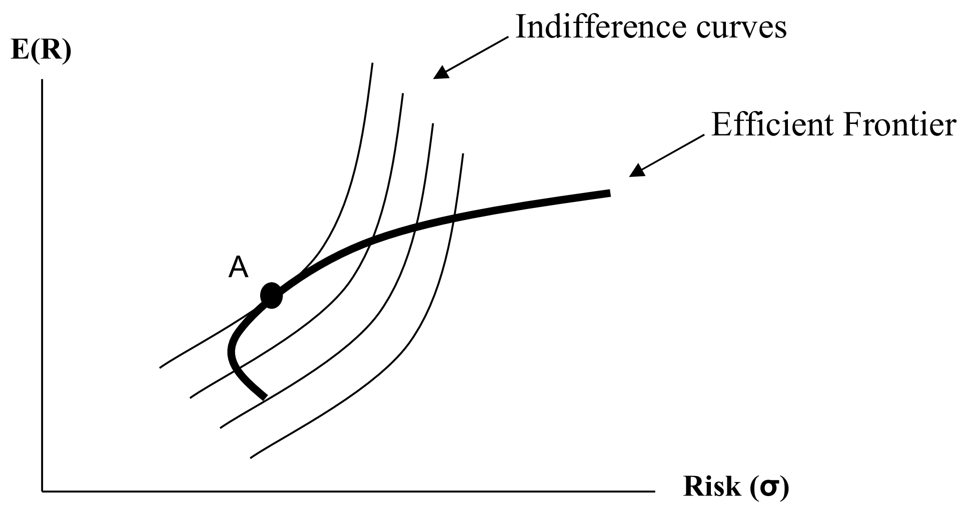


- The **slope of an indifference curve** reflects the degree to which an individual is risk averse
- The flatter the curve, the **more risk tolerant** the investor is
- The steeper the curve, the **more risk averse** the individual is
- The aggressive investor is more risk tolerant than the conservative investor

2.2 Combining Investor's Preferences with the Efficient Frontier

- By combining the efficient frontier with an individual's indifference curves, we can establish which portfolio an investor will select

Optimal Portfolio



- The optimal portfolio (A) is on the highest indifference curve that is **tangential** to the efficient frontier – it is the investable portfolio with the highest utility
- The choice between optimal portfolios will ultimately depend on each investor's **risk/return appetite**
- The **more risk averse an investor**, the lower the risk (and therefore expected return) of the optimal portfolio

3. CAPITAL ASSET PRICING MODEL (CAPM)

3.1 Overview

- CAPM seeks to measure a security's or a portfolio's return, relative to a benchmark – the benchmark being the **market portfolio**

3.2 The CAPM Formula

- CAPM provides the expected return on an equity, given the risk-free return and the risk-weighted market premium of the stock in question
- Beta (β) is a measure of the sensitivity of company's return on equity to a change in the overall market return

$$E(r_i) = r_f + \beta_i(r_m - r_f)$$

where

$E(r_i)$ = expected return of security i
r_f = risk-free rate of return
β_i = beta (systematic risk) of security i
r_m = return of market portfolio

Capital Asset Pricing Model Example
What is the expected return on shares of Growco Limited if:

Expected market return	*5%*
Risk-free rate of return	*1%*
Company beta of Growco	*1.5*

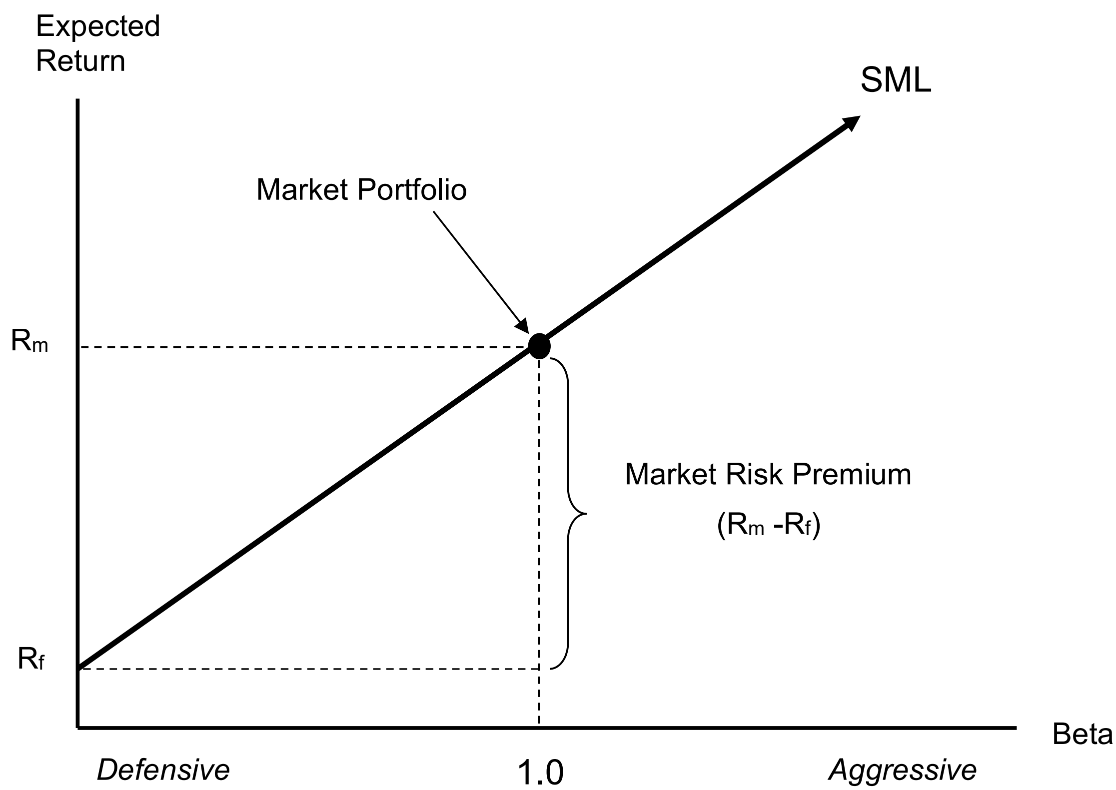
Answer
Expected return = 1% + 1.5(5% - 1%)
= 7%

3.3 The Security Market Line (SML)

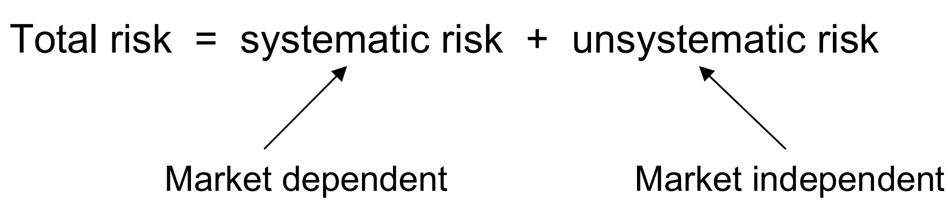
- SML is a graphical depiction of the CAPM
- SML is a linear relationship, beginning at the risk-free rate with an upward slope
- The slope indicates that expected returns increase as beta increases
- Securities or portfolios lying on the SML are relative to the position of the market portfolio
- The market portfolio consists of all risky assets in the market, where each security is held in the same proportion as its market value
- Market portfolio has a beta 1.0

- If an investor estimates a stock's expected return as higher than the required rate of return estimated using CAPM (ie above the SML), then the stock is undervalued and should be bought
- If it lies below the SML, then the stock is overvalued and should be sold short

Security Market Line



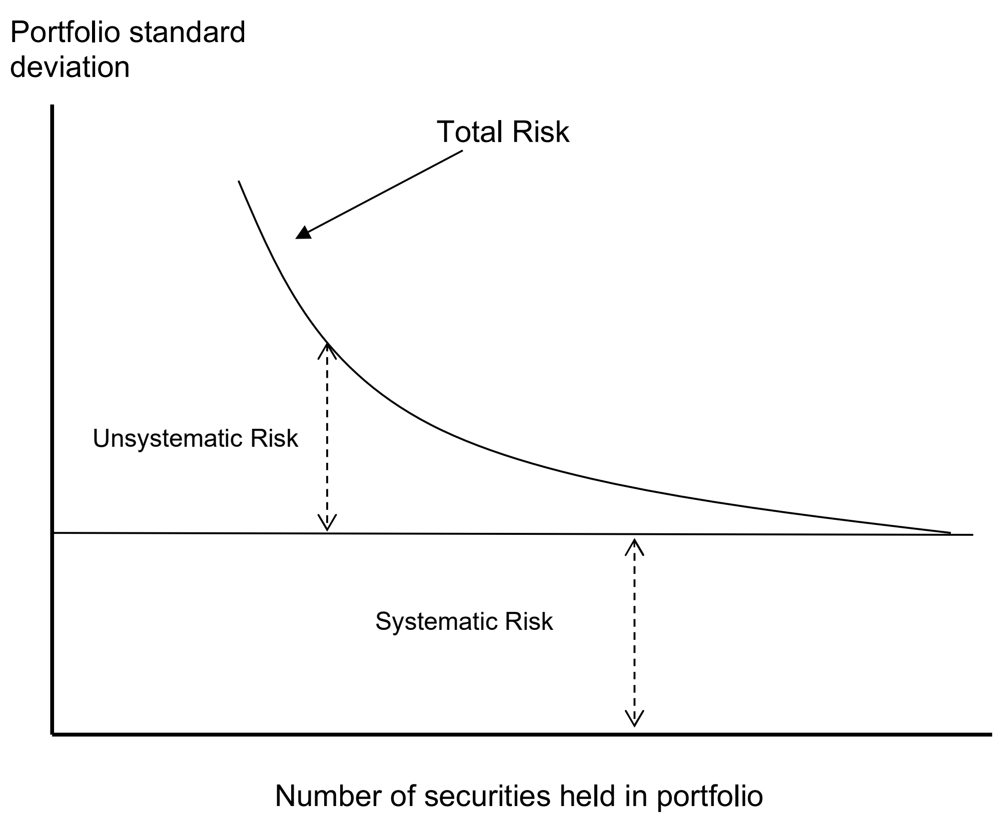
3.4 Systematic Risk and Unsystematic Risk



- CAPM assumes full portfolio diversification resulting in zero unsystematic risk
- CAPM assumes that the market will pay a risk premium for bearing systematic risk

Key Differences between Systematic and Unsystematic Risk

	Systematic Risk	**Unsystematic Risk**
Dependent on the market	Yes, also known as market risk	No, also known as non-market risk
Risk events	Fluctuations in the total market performance	Specific events of the industry and firm have effects on individual share prices
Examples	General economic conditions, impact of monetary or fiscal policies, inflation	Strikes, product development, competition affecting a particular company's project or activity
Diversifiable	Non-diversifiable	Diversifiable
Measurement	Measured through the beta of a security (β_i)	Not measured, assumed zero under CAPM

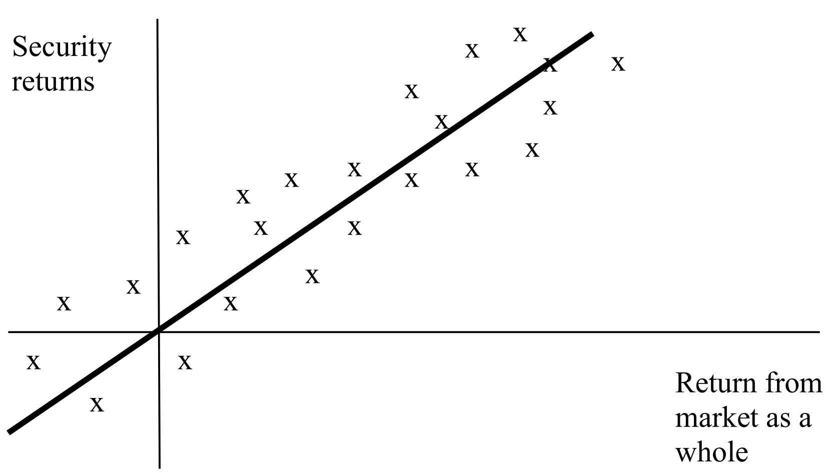


Note: ***systemic risk*** is very different from systematic risk. Systemic risk relates to instability of financial systems due to major negative events occurring within or outside the financial systems

- CAPM focuses on **measuring systematic risk** by measuring beta. Consequently, CAPM proposes that:
  - Investors require a return greater than the risk-free rate as **compensation** for taking on systematic risk
  - Investors do not require a premium for unsystematic risk because this can be **diversified away** by holding a wide portfolio of securities; and
  - Investors require a higher return from securities that have a greater systematic risk than the "market average" (ie securities with a beta > 1)

3.5 Beta

- Beta is the measure of a security's **systematic risk**
- Given that the **market portfolio has a beta of 1**, we can deduce that:
  - A security with a beta of 0.5, is half as risky as the market
  - A security with a beta of 2, is twice as risky as the market
  - A security with a beta of 0, is risk-free
- Factors that affect the level of beta:
  - ***Nature of a company's activities***: the riskier the activity, the higher the beta
  - ***Level of leverage***: the more highly geared a company, the higher the beta
  - ***Cyclical nature of a company's earnings***: the more sensitive a company's earnings are to the business cycle, the higher the beta
- A security's beta is calculated by regressing the returns of the security against an investment in a market index on a daily or weekly basis over a certain number of years – see below for an illustration of the resulting regression line, known as the **Characteristic Line**



- **The slope of the Characteristic Line is the security's beta (β)**

3.6 Applications of CAPM

- **Portfolio construction and rebalancing**
  - A portfolio with **high betas** would be suitable for an **aggressive investor**
  - A portfolio with **low betas** would be suitable for a **conservative investor**
  - A portfolio will need to be **rebalanced** when the portfolio beta moves away from the intended portfolio beta

> ***Portfolio Beta Rebalancing Example***
> *A portfolio is constructed with two shares:*
>
> *HK$1m worth of Coy A shares with a beta of 0.5*
>
> *HK$1m worth of Coy B shares with a beta of 1.0*
>
> *What should be done to rebalance the portfolio if the Coy A share price doubles and the Coy B share price trebles and the share betas remain constant?*
>
> ***Answer***
> Original portfolio beta:
> [(1m x 0.5) + (1m x 1.0)]/(1m + 1m) = 1.5m/2m = 0.75
>
> New portfolio beta:
> [(2m x 0.5) + (3m x 1.0)]/(2m + 3m) = 4m/5m = 0.8
>
> To bring the portfolio beta down from 0.8 to 0.75, Coy B stock will need to be sold and Coy A stock will need to be purchased.

- **Market timing**
  - In the lead up to a bull market, securities with high betas will be sought

- **Corporate finance**
  - CAPM's main benefit is that it produces a required return (or **discount rate**) based on the systematic risk of the individual investment

3.7 Limitations of CAPM

- **Variability of beta**: betas are calculated using historic data, which may not be applicable to future returns
- **Unsystematic risk exposure**: CAPM states that unsystematic risk is zero, based on the three following assumptions. If they do not hold, unsystematic risk will be present.
  - Portfolios are well diversified
  - Capital markets are efficient
  - Bankruptcy costs are zero

4. ARBITRAGE PRICING THEORY (APT)

- **CAPM** prices expected returns for a security on a **single factor** – market risk measured by beta
- **APT**, developed by the academic community, takes **a more complex view** of risk and return by assuming a security's return is based on several independent economy-wide factors
- The **challenge faced when using APT**, is to identify the factors relevant to the security in question. Chen, Roll and Ross identified the following four factors that did a reasonable job:
  - ➢ Surprises in inflation
  - ➢ Surprises in industrial production
  - ➢ Surprises in the default premium of corporate bonds
  - ➢ Shifts in the yield curve

5. PRICE-TO-BOOK RATIO-RETURN ON EQUITY VALUATION MODEL

- **P/B ratio** is a price or value multiple indicating how many times the book value of equity an investor is willing to pay to acquire a stock

$$P/B = \frac{\text{Stock Price}}{\text{BV of equity}}$$

- Used as a value multiple for companies with **significant capital** such as banks, manufacturing companies or airlines
- The P/B ratio of a stable company is determined by the difference between the **return on equity (ROE)** and its cost of equity
- ROE is a **measure of profitability** from a shareholder's perspective
- ROE also determines a company's long-term sustainable growth rate (g)

$$g = ROE \times \text{earnings retention rate}$$

- The relationship between P/B ratio and ROE can be derived using the dividend growth model, resulting in the following relationship:

$$P/B = \frac{ROE - g}{r_e - g}$$

Note:

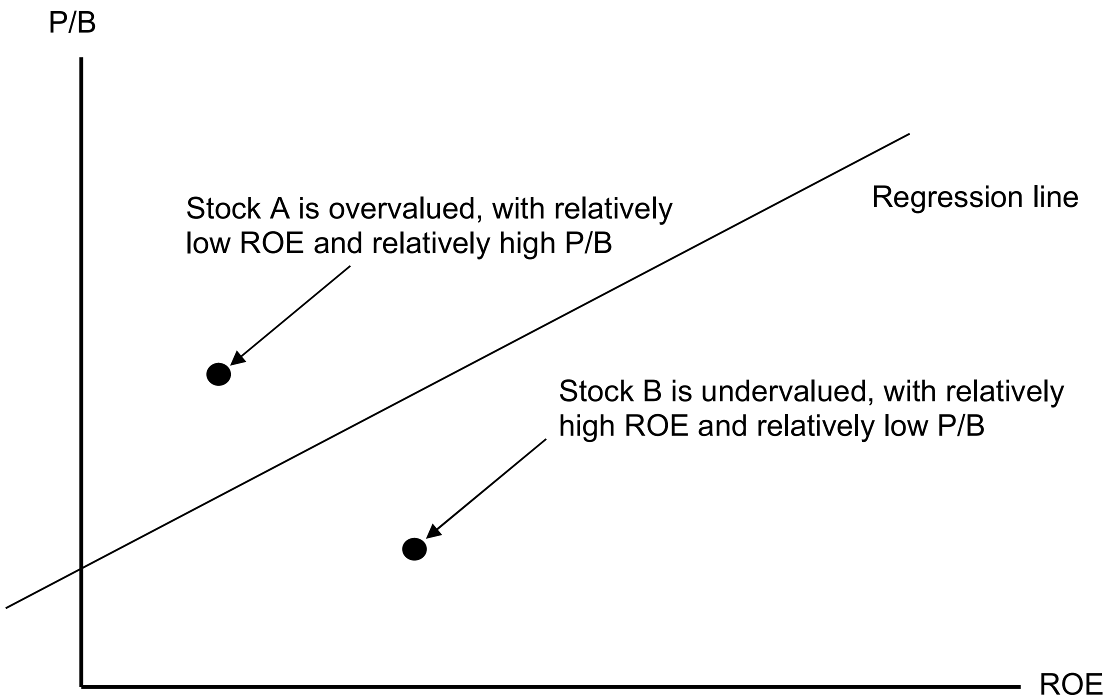
If ROE > r_e, P/B > 1

If ROE = r_e, P/B = 1

If ROE < r_e, P/B < 1

- If a simple linear regression model is run, **regressing P/B ratio against ROE** for many stocks, a positive relationship is expected, based on the above

Regression of P/B against ROE



- If a stock lies above the regression line with a relatively low ROE and relatively high P/B ratio (Stock A above), it is overvalued
- If a stock lies below the regression line with a relatively high ROE and relatively low P/B ratio (Stock B above), it is undervalued

P/B + Return on Equity Example

An asset manager runs a regression of the P/B of companies in the airline industry against their ROE, resulting in the following model:

P/B = 0.96 + 9.28 x ROE

That is, for ever 1% increase in the ROE of an airline, its P/B increases by 0.0928

The asset manager now identifies two airlines with the following P/Bs and ROEs

Airline A: P/B = 2.58 and ROE = 14%

Airline B: P/B = 1.86 and ROE = 12%

From the above information, should the manager invest in these two airlines?

Answer

Airline A

P/B should be: 0.96 + 9.28 x 14% = 2.26

Actual P/B is 2.58 making the stock too expensive – buying is not recommended

Airline B

P/B should be: 0.96 + 9.28 x 12% = 2.07

Actual P/B is 1.86 making the stock relatively cheap – buying is recommended

6. EFFICIENT MARKET HYPOTHESIS (EMH)

- An efficient market fully reflects information about securities in their prices
- New information is quickly reflected in prices
- EMH implies that share analysis and active investment strategies cannot deliver better performance
- Efficient capital markets is an inherent assumption of the CAPM

6.1 Types of Market Efficiency

- A capital market can be efficient in one or more of the following ways:
  - ***Operationally efficient***: information from around the world is transmitted to the market rapidly and cost-effectively
  - ***Informationally efficient***: all information is absorbed quickly into market prices
  - ***Allocationally efficient***: the market allocates capital so as to maximise the present and future capacity of an economy's capital
- **EMH refers to informational efficiency** and theorists have identified three forms of the hypothesis: weak form, semi-strong form and strong form

Weak Form Efficiency

- Prices fully reflect **historical market data** (past price movements and volumes traded)
- It is not possible to make an abnormal profit by using historical prices and volume data
- A conclusion is that **technical analysis** cannot produce trading profits

Semi-strong Form Efficiency

- Prices fully reflect **all public information**, including earnings announcements, government economic policies, share exchange disclosures and all security market information
- Publicly available information cannot be used to "beat the market"
- A conclusion is that **fundamental analysis** cannot produce trading profits

Strong Form Efficiency

- Prices fully reflect all information from public and private sources
- It is not possible to make an abnormal profit by using any information about the security
- A conclusion is that inside information cannot produce trading profits

- **Implications of the above** are
  - Technical analysts do not believe in weak form hypothesis
  - Fundamental analysts do not believe in semi-strong form hypothesis
  - Fund managers who believe the market is efficient will not pursue active investment strategies

6.2 The Random Walk Hypothesis

- A **statistical hypothesis** that assumes:
  - Successive returns are statistically independent, that is there is no correlation between the returns in one period and the next
  - The distribution of returns in all periods is identical, that is the chance of gain or loss is the same in each period
- The assumption is that share prices which move at random are **unpredictable**
- Studies have identified the impact of specific events on share price behaviour. Specifically, some of these **findings show consistent share price patterns**:
  - **The January Effect**: January returns are consistently higher
  - **The Monday Effect**: Monday returns are consistently lower
  - **The Small Firm Effect**: small firms earn higher returns