03 Personal Financial Planning and Investment

Learning Objectives

Teacher's Guide
Powerpoint and E-textbook

This chapter helps you:

- Identify the basic characteristics and the relationship between risk and return for the following investments: savings / term deposits, bonds / debentures and stocks
- Explain the importance of personal financial planning at different life stages
- Describe the rights and responsibilities of employees and self-employed persons under the Mandatory Provident Fund (MPF) System
- Describe the rights and responsibilities of individual investors and consumers of financial services

Let's Get Started

Peter, Tom and Mary are going to graduate from secondary school next month. They will step into the next stage of their life. Now, they are sharing their life goals with others.

Discussion Questions

1. Peter, Tom and Mary need lots of money to achieve their goals. How could they could get enough money to do so?
2. Would you share your life goal(s)?

Suggested Answers

1. They can set a monthly savings target and strictly follow it.
2. Open-ended question.

Overview

We always have some life goals and needs, such as travelling, studying at universities, purchasing a house. Furthermore, we have different goals and needs at different life stages.

To achieve our goals, we need personal financial planning[1]. According to the Institute of Financial Planners of Hong Kong[2] (IFPHK), **financial planning is 'the process of setting, planning, achieving and reviewing your life goals through the proper management of your finances'.**

Appropriate investments can allow us to have enough money to achieve our goals. There are different types of investments, such as bank deposits[3], bonds[4] and stocks[5]. An investor has rights, as well as responsibilities.

To help Hong Kong citizens save for their retirement, the Mandatory Provident Fund[6] (MPF) System was launched in December 2000.

Web Resources

The Institute of Financial Planners of Hong Kong
http://www.ifphk.org/

Activities

Ask students to discuss what investment strategy they might adopt to achieve their life goals.

Fig 3.1 The MPF System was launched in December 2000.

3.1 Forms of investment

DSE Reminder

Students are expected to be able to explain:

- Investors should expect higher risks of investments for higher return
- Higher risks of investments do not necessarily bring higher returns

Learning Objective

Identify the basic characteristics and the relationship between the risk and return for the following investments: savings / term deposits, bonds / debentures and stocks

A. Deposits

1. Characteristics of saving and term deposits

Deposits are the most common form of investment. Investors, who are known as the depositors, receive interest income from the bank.

Savings deposits[7] and term deposits[8] are two common forms of deposits. A term deposit requires depositors to lock up the deposits for a period of time, while a savings deposit does not. Therefore, **a savings deposit has higher liquidity than a term deposit.**

DSE Reminder

Refer to HKDSE Exam 2013 paper 1A Q.6. The question is about the features of investment.

1. personal financial planning 個人理財策劃 2. Institute of Financial Planners of Hong Kong 香港財務策劃師學會
3. bank deposit 銀行存款 4. bond 債券 5. stock 股票 6. Mandatory Provident Fund 強制性公積金
7. savings deposit 儲蓄存款 8. term deposit 定期存款

A savings deposit usually attracts a lower interest return than a term deposit. It is a result of the difference in liquidity. Table 3.1 shows the difference in the interest return between savings and term deposits.

	Deposit amount: HK$500,000 Deposit period: 1 year	
	Savings deposit interest rate	Term deposit interest rate
Bank of China	0.02%	0.2%
Hang Seng Bank	0.01%	0.2%
HSBC#	0.001%	0.15%
Shanghai Commercial Bank	0.01%	0.5%
Dah Sing Bank	0.05%	0.35%

Table 3.1 Interest rates of savings deposits and term deposits as in August 2013
#HSBC: The Hongkong and Shanghai Banking Corporation

In Hong Kong, there is no restriction on the interest rates that banks can offer to depositors. However, because of market forces, the interest rates offered by banks do not differ a lot.

Teaching Notes

Generally speaking, the risk and potential return of an investment are positively related, i.e., the higher the investment risk, the higher the potential investment return.

2. Risk and return of savings and term deposits

A bank deposit is considered a safe investment, especially because of the Deposit Protection Scheme[1] in Hong Kong. Therefore, **the risk is low for placing a deposit at a bank**.

Since the risk of deposit is low, **the return on a bank deposit is relatively low when compared with the returns from other forms of investment**. Sometimes the interest rates can be near zero for deposits, making deposits an unattractive form of investment.

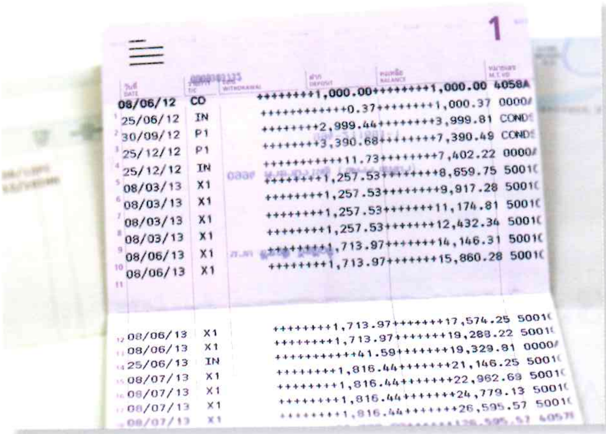

Fig 3.2 Passbooks were used to record the balance. They are replaced by savings cards now.

The following is a comparison between savings and term deposits.

	Savings deposit	Term deposit
Deposit period	Not Fixed	Fixed
Liquidity	Higher	Lower
Interest return	Lower	Higher

Table 3.2 Comparison between savings and term deposits

1. Deposit Protection Scheme 存款保障計劃

Finance in Life

Deposit Protection Scheme

The Deposit Protection Scheme (DPS), which is operated by the Hong Kong Deposit Protection Board, protects deposits placed in banks under the scheme statutorily[1].

All deposits denominated in Hong Kong dollars, Renminbi or any other currency deposits in Hong Kong are protected. The maximum amount is up to HK$500,000 per depositor per bank under the scheme.

Conventional deposits are protected by the DPS, e.g. savings deposits and term deposits. However, the scheme does not protect term deposits with a term more than 5 years, foreign currency linked deposits and equity linked deposits.

Web Resources

Hong Kong Deposit Protection Board
http://www.dps.org.hk/

Fig 3.3 The risk of holding deposits is low due to the Deposit Protection Scheme.

B. Bonds

1. Characteristics of bonds

Bonds (also known as debentures) **are debt contracts which represent claims for repayment at the maturity date**[2]. A bond is essentially a loan. Issuing institutions issue bonds to the market in order to obtain funds. They may be a government, banks or other private companies. In other words, **the bondholders are the creditors of the issuing institutions**.

Instead of getting repayment at the maturity date, bondholders can sell their bonds in the secondary market[3]. This provides liquidity[4] to the bondholders.

Note Card

Maturity date is the stated end period of the bond.

Teaching Notes

In addition to private companies, the government also issues bonds. For example:

- Inflation-linked bonds (iBonds) were issued by the HKSAR government in 2011-2013.
- RMB Bonds were issued by the Ministry of Finance of the People's Republic of China in 2013.

Fig 3.4 Retail Bonds issued by Hong Kong Link 2004 Limited[5] has allowed the Hong Kong government to borrow up to HK$6 billion.

1. statutorily 根據法律條文 2. maturity date 到期日 3. secondary market 第二市場 4. liquidity 流動性／變現能力
5. Hong Kong Link 2004 Limited 香港五隧一橋有限公司

(a) Par value

Each bond has a par value[1] or face value. **The par value indicates the nominal value of the debt issued.**

For example, Company A may issue a bond with a par value of $1,000, and a total of 1,000 bonds are issued. That means Company A has issued a total of $1,000,000 in debt in the form of bonds.

(b) Coupon rate

The bondholders receive periodic interest payments from the issuing institutions until the maturity date. **The interest payment is called a coupon payment**[2], which is calculated by multiplying the par value by the coupon rate[3].

For example, the par value of a bond is $1,000, and the coupon rate is 5%. The coupon payment will be $50 (= $1,000 × 5%).

Note Card

Coupon rate is the interest rate of a bond.

2. Risk and return of bonds

Bondholders can earn returns in two ways: the coupon payment and bond price appreciation[4].

The bondholders can receive periodic coupon payments until the maturity date. **The yield to maturity**[5] **(yield**[6]**) is the return on the bond investment if the investor holds the bond until its maturity.**

Bondholders can also sell their bonds in the secondary market. If the bond price appreciates in the market, bondholders can earn a premium[7].

Although there are still exceptions, **the risk on bonds is low generally.** The treasury bonds[8] issued by the US government are considered risk-free[9]. There are a few types of risk from holding bonds, including the issuing institution cannot repay the principal at the maturity date and bondholders are not able to sell their bonds in the market.

Note Card

Return on bonds includes:

- Coupon payments
- Bond price appreciation

Information Express

The inflation-linked bond issued in 2012 is a government bond with 3-year period. Dividends are paid every half year and the interest rate is either a floating rate (which is linked to the inflation rates of the 6 most recent preceding months) or a fixed rate of 1%. The higher rate of the two is the final rate.

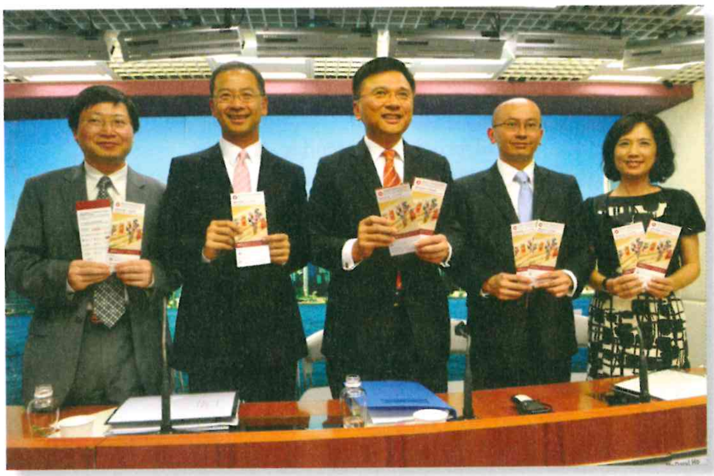

Fig 3.5 The Hong Kong government launched the inflation-linked bond (iBond) in 2012. The risk of holding this government bond is very low.

* In the 2014-15 Budget, the Hong Kong government proposes another iBond issue of up to HK$10 billion.

1. par value 面值	2. coupon payment 票面付款	3. coupon rate 票面利率	4. appreciation 升值	
5. yield to maturity 有效利率	6. yield 孳息／實際獲利	7. premium 溢價	8. treasury bond 國庫債券	9. risk-free 零風險

Knowledge Enrichment

Risk of bonds*

(a) Default risk

The main risk of holding bonds is **default risk[1], which means the issuing institution cannot repay the principal at the maturity date or pay the coupon payment as scheduled**.

Default risk can be reflected by the credit rating of the bonds, which shows the relative credit standing of the issuing institution. Credit rating is provided by credit rating agencies[2]. Moody's[3], Standard & Poor's[4] and Fitch Group[5] are the three major credit rating agencies in the world.

They have different ways to show the credit rating. For example, Moody's uses 'Aaa' to represent the highest credit rating, while Standard & Poor's uses 'AAA'.

An issuing institution with a low credit rating will either not be able to issue a bond, or issue a bond with a higher coupon rate to compensate for the default risk.

(b) Not able to sell in the market

Bondholders may need to sell the bonds in the secondary market for liquidity reasons (e.g. they need cash). There is a risk of not being able to sell the bonds in the market.

(c) Interest rate risk

Instead of appreciation, the bond prices may depreciate[6]. Then the investors will have a loss if they sell the bonds at a lower price.

The interest rate is a main factor in making the bond price fluctuate. The interest rate here is not the coupon rate, but the market interest rate. The bond price is negatively related to the market interest rate. Therefore, **if the market interest rate increases, the price of the bond will decrease and the investors will have a loss**. This is called interest rate risk.

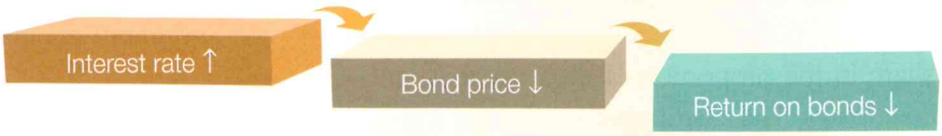

Fig 3.6 Interest rate risk

(d) Reinvestment risk

When an investor receives the coupon payment from the issuing institution, the investor needs to find another investment vehicle to invest the amount of money received.

The investment return from these vehicles may be different from that of the bond. **This risk of not able to obtain the same rate of investment as the original bond is called the reinvestment risk.**

* This section is for reference only. Classification of risks incurred in bonds trading is beyond the curriculum requirement.

1. default risk 違約風險
2. credit rating agency 信用評級機構
3. Moody's 穆迪
4. Standard & Poor's 標準普爾
5. Fitch Group 惠譽國際
6. depreciate 貶值

Activities
Ask students to list some of the listed companies in Hong Kong.

C. Stocks

1. Characteristics of stocks

Stocks, which are also known as shares, represent the ownership of a company. Therefore, the stockholder, who is also known as the **shareholder**[1], **is actually an owner of the company.** For listed companies[2], the shares can be traded in the stock market[3].

(a) Hong Kong Exchanges and Clearing Limited (HKEx)

(b) The New York Stock Exchange (NYSE)

Fig 3.7 HKEx and NYSE are two of the world's largest exchanges.

(a) Voting rights

Shareholders have the right to vote in the general meeting and elect directors. There are different forms of voting. The general rule is one share one vote. The major shareholder always win the vote.

Teaching Notes
Preference shareholders do not have voting rights.

If a shareholder cannot participate in voting, the shareholder can assign someone to be his representative (his proxy). This is known as **proxy right**[4].

(b) Share proportionally

Shareholders have the right to share in the proportion of their ownership in the distributed profits of the company. The distributed profits are also known as dividends[5].

Furthermore, in the case of the winding up of the company (bankruptcy), the shareholders can share the remaining assets in proportion of their ownership.

(c) Preemptive right

If a company decides to issue more capital, existing shareholders have the priority to subscribe to the newly issued shares so as to maintain proportional ownership if desired. This right is known as **preemptive right**[6].

Note Card
Preemptive right refers to the right of first subscribe to buy a new stock issue to maintain proportional ownership if desired.

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1. shareholder 股東 2. listed company 上市公司 3. stock market 股票市場 4. proxy right 代表權 5. dividend 股息
6. preemptive right 優先認股權

(d) Preference shares and ordinary shares

There are two common types of stock, namely preference shares[1] and ordinary shares[2]. They have the same features, but **preference shares have preference over ordinary shares**.

- Preference shareholders receive dividends before ordinary shareholders.
- The dividend rate[3] is specified on preference shares.
- When the company is liquidated, preference shareholders get back their investment before ordinary shareholders (but after bondholders).

Teaching Strategies
Teachers may remind students that the risk of stock investing is higher than that of bond investing.

2. Risk and return of stocks

The return from stocks is in two parts: dividends and share price appreciation.

Dividends are the distributed profits from the company. The amounts of dividends are not fixed. They are related to the company's profits and dividend policy. Normally dividends are distributed when a company makes profits.

Note Card
Return from stocks includes:
- Dividend
- Share price appreciation

Similar to bondholders, shareholders can sell their stocks in the secondary market. If the share price appreciates in the market, shareholders can earn a premium.

Generally, **holding stocks is more risky than holding bonds and having deposits**. Shareholders face a few types of risk.

Note Card
Risk of stocks includes:
- Dividend is not fixed
- Share price fluctuates
- Company goes bankrupt

(a) Dividend is not fixed

As the amount of the dividend is not fixed, this can become a risk. **Some companies may not declare a dividend for several years**. Previous dividend payout records can be used as a reference, but investors cannot assume that the companies will continue to have the same dividend payout records in the future.

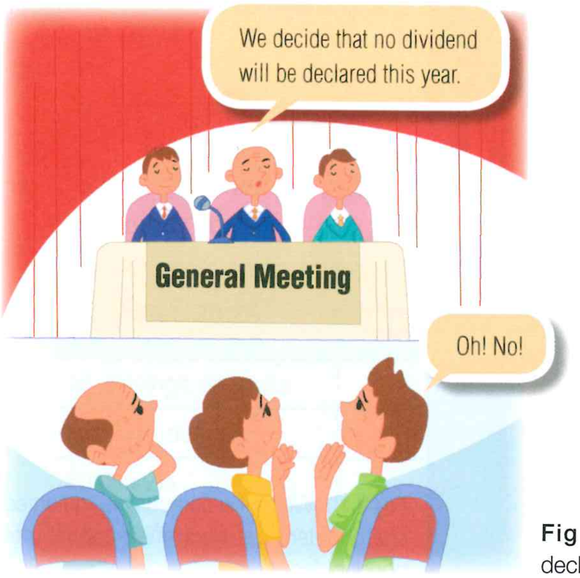

Fig 3.8 Some companies may not declare a dividend for several years.

1. preference share 優先股 2. ordinary share 普通股 3. dividend rate 股息率

(b) Share price fluctuates

Shareholders have a loss when the share price declines. There are many reasons for share price changes. Fundamentally, the share price reflects the profitability[1] of a company. Hence, investors should study the future potential of a company before they make investment decisions.

Nevertheless, **share prices are affected by many economic factors**, such as macroeconomic environment, interest rate changes and the political environment.

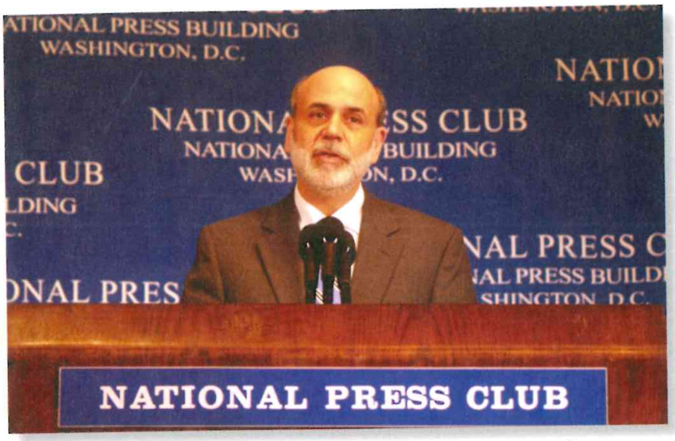

Fig 3.9 The Quantitative Easing (QE) monetary policies[2] adopted by the US have caused worldwide stock markets to have drastic movements. The picture shows the former Chairman of the Federal Reserve, Ben Bernanke.

Information Express

Ben Bernanke, Chairman of the Federal Reserve, finished his term of office in January 2014. Janet Yellen took over and become the first woman to lead the Federal Reserve.

(c) Company goes bankrupt

When the company is liquidated, investors may lose all of their investment. **The shareholders get back their capital after the bondholders if there are any assets left.**

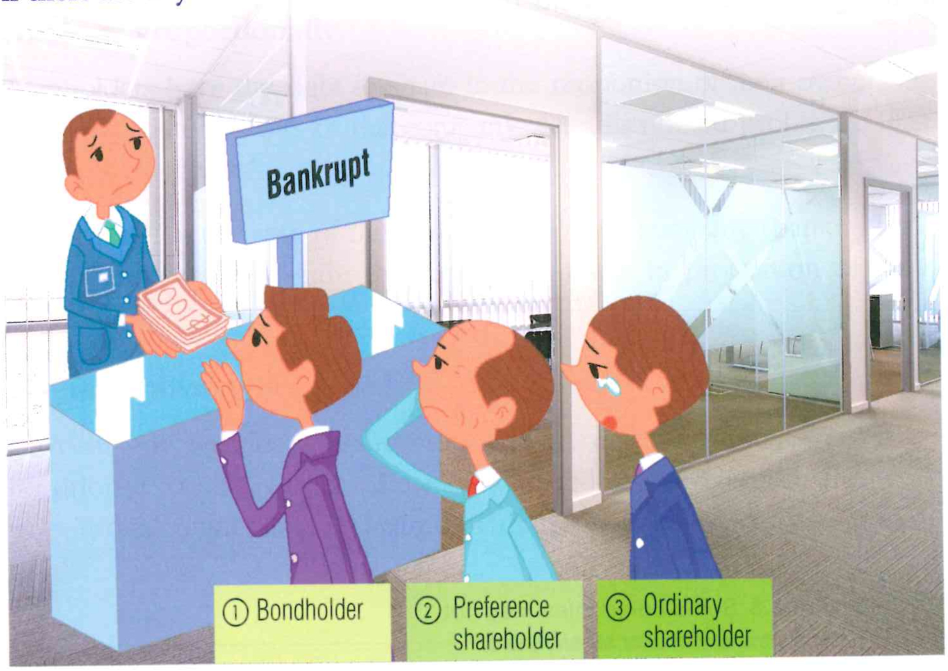

Fig 3.10 When the company is liquidated, shareholders get back their capital after bondholders.

1. profitability 盈利能力 2. Quantitative Easing monetary policy 量化寬鬆貨幣政策

Teaching Strategies

Teachers may ask students to summarise the differences between deposits, bonds and stocks.

D. Differences between bonds and stocks

The following table compares bonds and stocks. Although both bonds and stocks are the result of investors investing in institutions concerned, there are lots of differences between them.

	Bonds	Stocks
Investor's role	The creditor of firms	The owner of firms
Returns	• Coupon payments • Bond price appreciation	• Dividends • Stock price appreciation
Get back the capital	The bondholders have the priority to get back the capital when the company is liquidated.	
Voting right	No	Yes

Table 3.3 Comparison between bonds and stocks

E. Summary

Different forms of investment have been introduced in the section above. Generally, holding stocks is more risky than holding deposits and bonds. To compensate for the higher risk, stocks generally earn higher expected returns for investors. Therefore, **investors should expect higher risks of investments for higher returns.** However, **higher risks of investments do not necessarily bring higher returns**.

The following table compares the risk and expected return of deposits, bonds and stocks.

	Deposits	Bonds	Stocks
Risk	Very low	Lower	Higher
Expected return	Lower	Lower	Higher

Table 3.4 Comparison between deposits, bonds and stocks

Quick Quiz

1. Compare the risk and return of the following investments. Put a ✓ in the appropriate boxes.

Investment	Risk		Expected return	
	High	Low	High	Low
(a) Savings deposits		✓		✓
(b) Term deposits		✓		✓
(c) Bonds		✓		✓
(d) Stocks	✓		✓	

Exam Drill

1. Which of the following is / are the benefit(s) of buying a company's ordinary shares over buying its debentures?

   (1) Avoid total loss of investment
   (2) Have voting rights in the annual general meeting
   (3) Guarantee higher returns

   A (1) only
   B. (2) only
   C. (1) and (3) only
   D. (2) and (3) only

   B

   HKDSE Exam BAFS practice paper 2012 paper 1A Q.17

2. Which of the following statements are incorrect descriptions of the differences between bondholders and stockholders?

   (1) Stockholders are the owners of a company and bondholders are the creditors of a company.
   (2) Bondholders have voting rights and stockholders do not.
   (3) Stockholders receive fixed dividend income whereas bondholders receive variable interest at regular intervals.
   (4) Bondholders are repaid prior to stockholders when the company is liquidated.

   A (1) and (4) only
   B. (2) and (3) only
   C. (1), (2) and (4) only
   D. (2), (3) and (4) only

   B

   Adapted from HKDSE Exam BAFS sample paper 2009 paper 1A Q.2

3. Which of the following statements is correct?

   A A 6-month government bill is an investment instrument in the equity market.
   B. An investment instrument with a higher risk may yield a higher return.
   C. Market risk can be avoided by investing in various financial products.
   D. Investment in the preferred stock is more risky than in the common stock of a company.

   B

   HKDSE Exam BAFS 2013 paper 1A Q.6

Activities
Ask students to guess the financial needs at different life stages.

3.2 Personal financial planning at different life stages

Learning Objective
Explain the importance of personal financial planning at different life stages

An individual has different financial needs at different life stages. There are six stages in financial planning:

(i) Young single

(ii) Couple

(iii) Early family

(iv) Late family

(v) Pre-retirement

(vi) Retirement

Teaching Notes
A young single at this stage of life may have other financial burdens, including credit card debts, student loans and salaries tax.

A. Young single

An individual at this stage is a young single, who has just started his career. **The major financial need at this stage is to create and accumulate wealth** because **it is important for the young single to have good planning for later stages**.

He may save money for a home purchase, further education or marriage. Good planning makes financial needs at later stages easier to meet.

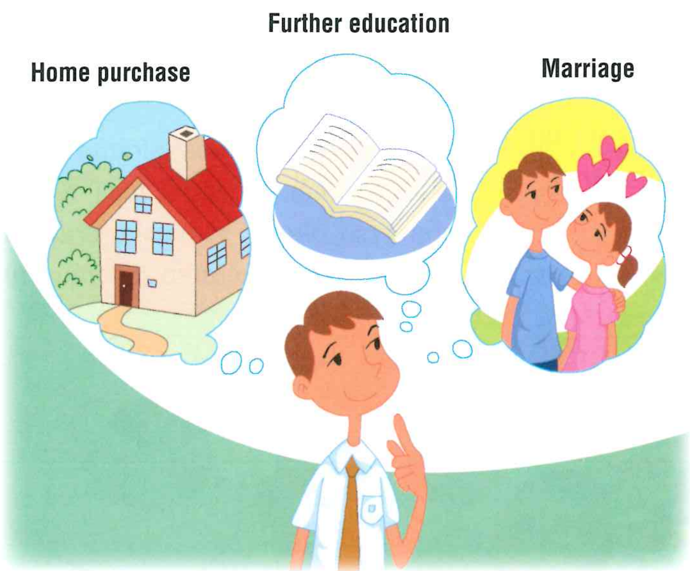

Fig 3.11 A young single should have good financial planning for the later stages.

B. Couple

At this stage, two individuals get married. One individual's financial needs are related to the other's. **The major financial need at this stage is preparing to have a family**.

The couple may plan ahead for raising children, saving up for a home purchase, insurance against accidents, and even retirement.

Fig 3.12 The major financial need of a couple is preparing to have a family.

Teaching Notes

If one of them wants to quit working in order to take care of their children, they should ensure that they can afford their monthly expenses with a single income, as the family income will drop greatly.

C. Early family

The stage of early family is characterised by the extension of the couple with a newborn child. The family's financial burden is greater. **The financial needs at this stage are planning for family expenses and stronger insurance coverage.**

A newborn brings financial burden. The couple needs to set up a fund for the child's education. Furthermore, family expenses are larger, such as saving for home purchase and retirement.

Fig 3.13 The family financial burden is greater. Planning for a child's education becomes important.

D. Late family

At this stage, the newborn is now a teenager and is more independent. The couple may have higher income levels due to the development of their careers. Therefore, **the financial burden for the late family is lower**.

Some late families may need to prepare money for their children's university education. As the couple is ageing, **the financial needs at this stage are saving for future medical expenses and planning for retirement**.

Fig 3.14 A late family has to save for future medical expenses and prepare money for children's university education.

Teaching Notes
Under the funding of the University Grants Committee, the tuition fee for a full-time degree programme for the 2013-14 academic year was $42,100 per annum.

E. Pre-retirement

When children become young singles and financially independent, **the couple can direct more financial resources to retirement planning and medical coverage.**

For example, some couples want to travel around the world when they retire. They need good financial planning to save enough money. The medical insurance should have been bought at an early stage as medical insurance is more expensive for the ageing couple.

Fig 3.15 At pre-retirement, the couple could spend more on retirement planning and medical coverage.

Teaching Notes
Since the elderly have a higher risk of sickness, they are charged a higher fee when purchasing medical insurance. Some insurance companies may even decline their applications.

F. Retirement

It is the final stage of financial planning. Ideally, the couple should have adequate financial resources to spend for their retired lives. This relies on good planning in the previous stages.

The major financial planning at this stage includes holding adequate health insurance and estate[1] planning. As one is approaching the end of his life, proper estate planning is needed. The purpose is to minimise potential tax payments or disagreements over inheritance[2].

Teaching Notes

In Hong Kong, the estate duty was cancelled in 2006.

Fig 3.16 Retired persons should hold adequate health insurance.

Stages	Characteristics	Financial needs / Importance of financial planning
Young single	Just starts his career	• Create and accumulate wealth • Plan for later stages
Couple	Two individuals get married.	Preparing to have a family
Early family	• Extension of a couple with newborn child • A newborn brings financial burden.	• Plan for family expenses, e.g. child's education fund • Stronger insurance coverage
Late family	• Newborn becomes a teenager. • Have higher income levels	• Prepare money for children's university education • Save for future medical expenses and retirement
Pre-retirement	Children become young singles and financially independent.	Direct more financial resources to retirement planning and medical coverage
Retirement	Final stage of financial planning	• Holding adequate health insurance • Estate planning

Table 3.5 Six stages of financial planning

1. estate 遺產 2. inheritance 繼承權