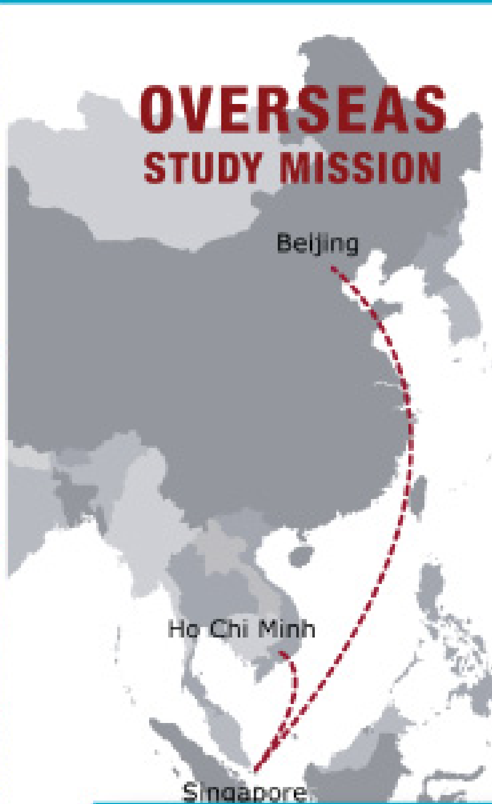

GSP177
Fundamentals of Investing

Centre for Continuing and Professional Education

Study Guide

SUSS
SINGAPORE UNIVERSITY OF SOCIAL SCIENCES

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Course Guide

Fundamentals of Investing

1. Welcome

Presenter: Harry Tong

This streaming video requires Internet connection.
Access it via Wi-Fi to avoid incurring data charges on your personal mobile plan.

Click here to watch the video. [i]

Welcome to the course *GSP177 Fundamentals of Investing*, a 2.5 credit unit (CU) course.

This Study Guide will be your personal learning resource to take you through the course learning journey. The guide is divided into two main sections – the Course Guide and Study Units.

The Course Guide describes the structure for the entire course and provides you with an overview of the Study Units. It serves as a roadmap of the different learning components within the course. This Course Guide contains important information regarding the course learning outcomes, learning materials and resources, assessment breakdown and additional course information.

[i] https://d2jifwt31jjehd.cloudfront.net/GSP177/IntroVideo/GSP177_Intro_Video.mp4

2. Course Description and Aims

The world of investing may look and sound simple to the uninitiated but, in reality, it is much more complicated. Since the great world depression of the 1930s and the onset of the recent global stock market meltdown in 2009, investors have seen more economic uncertainties. As individuals, we are all affected, directly or indirectly, by investment decisions made on a daily basis by the vast array of individuals, corporations, institutions and governments on a worldwide scale. As students, you too will have to make investment decisions sooner or later at some point of your lives if you have not already done so.

This course provides you with the fundamental knowledge associated with investing and is aimed at equipping you with the basic tools needed in understanding investing. Guided by the conceptual tools and exposures to the different financial products learnt from the course, students will be able to discuss and evaluate the various aspects of investing.

At the end of the course, students are expected to have working knowledge of the investment decision making process, with the ability to evaluate the merits and demerits of various investment products. You will also have gained broad understanding of the legal framework and ethical issues and hazards affecting your rights and obligations as investors in the Singapore context.

To summarise, the objectives of the course are to give students:

a. Understanding of the conceptual tools in investment covering supply and demand theory, economic life cycle, time value of money, risk and return, liquidity, diversification and asset allocation, investor profiling and stages of life cycle investing

b. Knowledge of the investment environment including broad legislative framework and ethical, social and moral considerations

c. Exposure to the wide spectrum of investment products and opportunities available in both publicly and non-publicly traded markets

Course Structure

This course is a 2.5 credit unit course presented over 6 weeks.

There are three Study Units in this course. The following provides an overview of each Study Unit.

Study Unit 1 – Conceptual Tools and Investment Environment

This unit helps you understand the basic concepts and tools used in the investment decision making process and provides an overview of the legal framework and various ethical, moral and social issues of investing.

Study Unit 2 – Investment Products and Instruments

This unit will focus on evaluating securities in publicly traded markets such as equities and fixed income instruments and explain the characteristics, classification, merits and demerits of mutual funds and REITS in an investment portfolio.

Study Unit 3 – Foreign Currency, Alternative and Real Estate Investments

The aim of this unit is to explain the roles of foreign currency, alternative investment products such as options, futures, commodities and hedge funds in an investment portfolio. Real estate investments, both direct and indirect, are discussed and evaluated in detail.

3. Learning Outcomes

By the end of this course, you should be able to:

- Describe the fundamental concepts of investing covering basic supply and demand theory, economic life cycle analysis, time value of money, risk and return, market liquidity, diversification and asset allocation in an investment portfolio
- Describe the process of investor profiling and the different stages of life cycle investing with reference to an investor's portfolio
- Evaluate the investment environment issues and hazards in the context of legal framework and ethical, social and moral considerations
- Explain the workings of various basic investment products, evaluate their relative merits and demerits in terms of their suitability in investment portfolios
- Evaluate the role, risk and reward of foreign currency as an investment instrument and in the context of an investment portfolio
- Discuss the alternative investment opportunities covering options, futures and commodities and the role of hedge funds
- Evaluate both direct real estate and indirect real estate investments (through equities and REITS) and recognise their roles in an investment portfolio

Key Skills (Practical Component)

By the end of this course, you should be able to:

- Evaluate and explain investment decisions
- Use conceptual tools, knowledge of investment products, information and date from various sources to make informed and rational investment decisions
- Compare and contrast investment proposals and make choices that are appropriate in building an investment portfolio

4. Learning Material

The following is a list of the required learning materials to complete this course.

Required Textbook(s)

Smart, S. B., Gitman, L. J., Joenhk, M. D. (2017). *Fundamentals of Investing*. Pearsons Education Inc.

Other recommended study material (Optional)

The following learning materials may be required to complete the learning activities:

Website(s):

1. https://wikipedia.org
2. http://www.moneysense.gov.sg
3. https://investopedia.com
4. https://internationalinvest.about.com
5. https://www.hedgeweek.com
6. https://www.pearsonmylabandmastering.com/global/myfinancelab
7. http://www.mas.gov.sg
8. https://fidrec.com.sg
9. https://sias.org.sg
10. https://propertyguru.com.sg

5. Assessment Overview

The overall assessment weighting for this course is as follows:

Assessment	Description	Weight Allocation
Assignment 1	Pre-class Quiz	20%
Assignment 2	TMA01	40%
Assignment 3	TMA02	40%
TOTAL		100%

The following section provides important information regarding Assessments.

Continuous Assessment:

There will be continuous assessment in the form of one pre-class quiz and two tutor-marked assignments (TMAs). In total, this continuous assessment will constitute 100 percent of overall student assessment for this course. The three assignments are compulsory and are non-substitutable. If you did not attempt any one of the assessments, it will be deemed that you have been withdrawn from the course. These assignments will test conceptual understanding of both the fundamental and more advanced concepts and applications that underlie investing. It is imperative that you read through your Assignment questions and submission instructions before embarking on your Assignment.

Passing Mark:

To successfully pass the course, you must obtain a minimum passing mark of 40 percent for each of the two TMA components and 60 percent for the pre-class quiz component. To obtain a pass grade for the course, you must achieve at least 40 percent for the overall combined assessments. For detailed information on the Course grading policy, please refer to The Student Handbook (‘Award of Grades’ section under Assessment and Examination Regulations). The Student Handbook is available from the Student Portal.

Three attempts are allowed up to the closing deadline of the Pre-class Quiz. The highest marks out of all attempts will be the final score. If a student fails to meet the minimum passing mark for the Pre-class Quiz, or if he/she fails to attempt the Pre-class Quiz by the stipulated deadline, he/she will be deemed to have withdrawn from the course, and will receive a ‘W’ for the course.

Non-graded Learning Activities:

Activities for the purpose of self-learning are present in each study unit. These learning activities are meant to enable you to assess your understanding and achievement of the learning outcomes. The type of activities can be in the form of Quiz, Review Questions, Application-Based Questions or similar. You are expected to complete the suggested activities either independently and/or in groups.

6. Course Schedule

To help monitor your study progress, you should pay special attention to your Course Schedule. It contains study unit related activities including Assignments, Self-assessments, and Examinations. Please refer to the Course Timetable in the Student Portal for the updated Course Schedule.

Note: You should always make it a point to check the Student Portal for any announcements and latest updates.

7. Learning Mode

The learning process for this course is structured along the following lines of learning:

a. Self-study guided by the study guide units. Independent study will require ***at least 3 hours per week.***

b. Working on assignments, either individually or in groups.

c. Classroom Seminar sessions (3 hours each session, 2 sessions in total).

iStudyGuide

You may be viewing the iStudyGuide version, which is the mobile version of the Study Guide. The iStudyGuide is developed to enhance your learning experience with interactive learning activities and engaging multimedia. Depending on the reader you are using to view the iStudyGuide, you will be able to personalise your learning with digital bookmarks, note-taking and highlight sections of the guide.

Interaction with Instructor and Fellow Students

Although flexible learning – learning at your own pace, space and time – is a hallmark at SUSS, you are encouraged to engage your instructor and fellow students in online discussion forums. Sharing of ideas through meaningful debates will help broaden your learning and crystallise your thinking.

Academic Integrity

As a student of SUSS, it is expected that you adhere to the academic standards stipulated in The Student Handbook, which contains important information regarding academic policies, academic integrity and course administration. It is necessary that you read and understand the information stipulated in the Student Handbook, prior to embarking on the course.

Study Unit 1

Conceptual Tools And Investment Environment

Learning Outcomes

By the end of this Study Unit, you should be able to:

1. describe the basic conceptual tools, such as supply and demand theory, and economic cycle analysis when investing
2. recognise the role of time value of money and risk and return considerations in analysing the suitability of an investment product or instrument
3. explain the role of investor profiling and the use of stages of life-cycle investing when evaluating investment decisions
4. identify the role of market liquidity, diversification and asset allocation in planning an investment portfolio
5. evaluate the broad legal framework in investments in the context of the Singapore environment, and recognise the ethical and moral hazards and issues when investing

Chapter / Topic	**Learning Outcomes**
Chapter 1, Topic 1 Supply and Demand Theory and Economic Cycle	At the end of this study topic, students will be able to: 1. identify the supply and demand factors in explaining pricing equilibrium 2. describe the stages of economic cycles and explain the impact on investment decisions
Chapter 1, Topic 2 Time Value of Money and Risk and Return	At the end of this study topic, students will be able to: 1. recognise the role of simple and compound interest rates, and time value of money in investments

	2. describe the components of risk and return, their trade-offs and roles in the investment decision-making process
Chapter 1, Topic 3 Investor Profiling and Stages of Life Cycle Investing	At the end of this study topic, students will be able to: 1. describe the profiling process for an individual investor based on criteria such as investment objectives, risk adversity, liquidity needs, tenure and personal circumstances 2. recognise the different stages of life cycle investing, and evaluate their relevance in investments 3. explain the use of the concepts learnt in identifying suitable investments
Chapter 1, Topic 4 Market Liquidity, Diversification and Asset Allocation	At the end of this study topic, students will be able to: 1. recognise the role of market liquidity in the investment decision-making process 2. explain the diversification process and the use of asset allocation concepts in building an investment portfolio
Chapter 2, Topic 1 The Legal Framework of Investing	At the end of this study topic, students will be able to: 1. outline the basic legal framework and its implications when investing in Singapore 2. identify the resources available for further investigations into investor rights and obligations
Chapter 2, Topic 2 Ethical and Related Issues in Investing	At the end of this study topic, students will be able to: 1. discuss the ethical implications covering legal, moral and social issues, and hazards when

	investing in selective securities, instruments and products

Overview

Chapter 1 gives students a firm understanding of the basic concepts and tools used in the investment decision-making process. These concepts and tools are the fundamental building blocks that will help investors understand the wide array of investment products and instruments that are available today, and their suitability for investment..

Chapter 2 provides students with an overview of the legal framework when investing in Singapore. The topics cover the roles and functions of organisations such as the Monetary Authority of Singapore (MAS) and the Singapore Stock Exchange Ltd. (SGX) amongst others that have an impact on investors. Ethical considerations covering legal, moral and social issues, and hazards when investing in selective securities, instruments and products will also be covered.

Chapter 1: Conceptual Tools

The basic conceptual tools in investing consist of analysing supply and demand, understanding the economic cycle and its impact on investing, understanding time-value of money, evaluating risk and return, carrying out investor profiling, analysing the stage of life-cycle investing of an investor, understanding market liquidity, as well as diversification and the proper allocation of investments according to asset classes.

1.1 Supply and Demand Theory and Economic Cycle

Lesson Recording

Supply and Demand Theory and Economic Cycle

You should now watch this video which explains the supply-and-demand concepts, and the theory and stages of economic life cycle in greater detail.

1.1.1 Aggregate Supply And Demand for Goods, Services and Securities

Demand for goods and services is the fundamental reason for economic activity in any market or country.

The supply activity in an economy fulfils that demand by making available goods and services through production of goods and provision of services.

The aggregate supply and aggregate demand of a product represent the total supply available from suppliers and the total demand sought by buyers respectively at different price levels.

The dynamics of supply and demand conditions that affect prices can be illustrated by using a simple example of a product through either of the following:

a. A schedule or table which lists down the quantity demanded at different prices, bearing in mind that if prices are lower, the higher the quantity of the product will be demanded by buyers. Similarly, a schedule or table can be drawn up to represent the supply situation with different quantities of the same product made available at different price levels. For suppliers, the assumption is that at higher prices, they will be willing or be encouraged to sell more of the products.

or

b. A graph to show both the quantities of a product that is in demand at different price levels, and the supply of the same product with different quantities available at different price levels.

1.1.2 Simple Relationship between Demand, Supply and Price

One basic assumption of the supply-and-demand theory is that the higher the price, the lower will be the demand for a product, service or security. This is because there will be fewer buyers who are willing or able to buy at higher prices. Such a relationship between price and quantity demanded is said to be "inverse".

On the other hand, the higher the price of a product, the higher the quantity will be supplied or made available by suppliers. Additional supply will be provided at higher prices by suppliers whose cost of production is higher. Hence, at higher prices, the quantity supplied will increase accordingly. Such a relationship between supply quantity and price is said to be "direct".

1.1.3 Concept of Equilibrium Pricing

When the exact quantity of demand meets the exact quantity of supply, the price is then said to be the "equilibrium price". In the supply-and-demand theory, at equilibrium pricing, the maximum quantity that is demanded by buyers willing to buy at that price matches that of the quantity willingly supplied by the sellers.

1.1.4 Factors Affecting Aggregate Supply and Aggregate Demand

Some of the factors that affect the aggregate or the total demand of a product or service are as follows:

1. Stage of economic cycle and the level of business activity
2. Income level of the population and their disposable income available for consumption
3. Cyclical or seasonal demand for certain products and services
4. Availability of substitute product or service that affects its demand

Some of the factors affecting the aggregate or total supply of a product or service are as follows:

1. Physical constraints that limit the availability and supply of certain goods and services
2. The "time lag" in procuring the necessary supply
3. Changes in technology as well as governmental policies that play direct roles in influencing the level of supply in the marketplace

Some of the assumptions of supply and demand theory are as follows:

1. The marketplace is perfect with information made readily available to all participants, regardless of whether they are buyers or sellers
2. The product or service is homogenous, i.e. of the same type or quality which cannot be differentiated
3. There is perfect competition without any governmental or unfair interventions and regulations
4. All market participants act and behave rationally in their decision-making process

Just as for goods and services, the concepts and factors mentioned above can be similarly used to analyse and apply to all securities and financial assets, based on the supply and demand theory.

1.1.5 Economic Cycle and Its Impact On Investing

Under the economic cycle theory, an economy develops through distinct stages of activity due to the physical constraints of supply and demand, and to the time lag effects of production and demand on economic activity.

The four (4) stages in the business cycle can be broadly categorised as follows:

1. Recovery – high unemployment rate begins to fall as more jobs are created. Economic growth and investments in business activity start to steadily increase.
2. Growth – this is the boom or expansion stage, when recovery gathers full steam with very high employment rate usually accompanied by increasing concerns over inflation and rising prices.
3. Maturity – growth in the economy begins to taper off as the boom can no longer be sustained due to the supply constraints and the government introducing measures to contain inflation.
4. Decline – in a recession, the unemployment rate will increase drastically as investments by businesses fall to a low due to the lack of confidence.

Government policies on budget spending and interest rates determination that affect the economy are being increasingly used to impact the economic cycle directly.

Investors need to take into consideration the stage at which an economy is in, as the conditions and sentiments of the financial market are directly affected by the prevailing economic cycle. Different investment instruments and products have different characteristics that make them more or less suitable for investment at different points of the economic cycle.

1.1.6 Impact of Industry and Product Life Cycle on Investment Decisions

Generally, most industries will undergo changes in life-cycle stages which are exclusive to them. An example is the shipping industry which goes through cycles of boom and bust as new ships are being ordered during good economic times to meet future expanded demand. However, by the time the new ships are built and ready for service, they are left to idle as over-capacity takes hold when the demand for ships cannot be sustained due to the economic downturn setting in.

Products, too, will undergo shifts in life-cycle stages from introduction to growth to maturity and decline. From the investment standpoint, the product life cycle stages need to be analysed and understood before decisions can be made concerning companies that sell such products.

Read

You should now read from:
Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017.

Chapter 7: Analysing Common Stocks
Pages 288 - 293
Pages 293 – 296

Chapter 1: The Investment Environment
Pages 50 – 51

Other online materials from:
www.wikipedia.org
www.investopedia.com
www.beginnersinvest.about.com

1.2 Time Value of Money and Risk and Return

Lesson Recording

Time Value of Money and Risk and Return

You should now watch this video that explains the workings of simple and compound interest computations, and present and future values. The concept of risk and return will be evaluated using a continuum of investment products and instruments.

1.2.1 Role of Interest as Basic Return to Investors (with Illustrations on Simple and Compound Interest Calculations)

Money as a form of commodity or product will have a price assigned to it and that price is the interest rate.

Suppliers of money (those who save or have surplus) are paid in the form of interest by those who demand or need the money (those who borrow) in the form of deposits or loan situations.

As an illustration of simple interest rate calculation, assume that a fixed deposit of SGD 1,000 is placed for six (6) months at 6% interest p.a. Upon maturity, six months later, the deposit will yield an interest payment of SGD 30 (SGD 1,000 X 0.06 X ½ year).

The simple interest rate earned on such an investment is the true rate of interest.

Compound interest, on the other hand, is calculated when the interest paid on the initial deposit placement also attracts further interest payments in subsequent periods of the deposit placement. Due to the continual repercussions, the compounding interest rate accumulated over a period of time can be quite different from a simple interest rate.

As an illustration of compound interest calculations, using the same example above, the period of placement is now increased to 12 months as the deposit is rolled over again for another six (6) months at the end of its initial six (6) months. The initial deposit will earn the same interest that amounts to SGD 30.

However, at the end of the first period of six (6) months, the deposit (which now comprises both the initial SGD 1,000 and the interest received of SGD 30) is now placed for another six(6) months at the same interest rate of 6 % p.a. This means that besides the initial deposit of SGD 1,000, the interest amount of SGD 30 will also attract interest payments.

The interest paid for the second period of six months will be calculated as follows: SGD 1,030 X 6 % X ½ year = S$ 30.90

Note that the second interest payment of SGD 30.90 is higher than the first interest payment of SGD 30 received at the end of the first period. Such then is the effect of compounding returns.

Investors need to understand the concept of simple interest and the compound interest, as these calculations are often used in valuing investment returns over a period of time and in deciding the suitability of the investment products.

1.2.2 Concept of Present Value (PV) versus Future Value (FV)

Present Value (PV) refers to the current value of a future amount yet to be received. PV basically answers the question of what amount is needed today that will grow to become "X" amount in the future, based on an assumption that the PV will grow continuously at a certain rate.

The basic PV calculation uses an interest rate calculation known as the "discount rate". The discount rate is the rate at which a present amount continually grows in order to reach a certain fixed amount at a future date.

Future Value (FV) in relation to time value of money is an extension of compounding effects on interest rates over a period of time. FV refers to the amount that will become available when a current amount grows over a period of time due to the accumulative effects of compounding returns.

Investors need to fully understand PV and FV concepts in discussing the investment returns of equities and fixed income instruments as such investments involve returns in the form of future stream of cash flows (in the form of dividends or interest payments) to the investors.

1.2.3 Risk and Return

Investors undertake investments to generate returns which come in two (2) forms:

1. Income in the form of dividends or interest payments
2. Capital gains or appreciation when the investments are sold or liquidated (even though losses or depreciation can occur)

Risk is defined as the degree of certainty to which an investment can generate returns over a given period of time.

The basic concept of risks and returns in investment can be summarised as follows:

1. The more uncertain the returns are, the higher the investor's expectation of future returns as compensation/reward for the uncertainty and risk taken
2. Investors need to analyse past or historical returns in terms of volatility or stability in order to ascertain the attractiveness and suitability of their investments

In terms of risk return assessments, the wide array of investment products can be represented as a continuum, ranging from relatively risk-free instruments (such as bank deposits which are indirectly guaranteed by the Singapore government through the Singapore Deposit Insurance Corporation and Treasury, and other related short-term instruments guaranteed by the US government) to highly risky and speculative products (such as commodity investments using futures and options, and land banking and land speculations).

Note that Treasury products in USD terms can be purchased (invested) by investors the world over with very little restrictions and are theoretically guaranteed by the US government as to their re-payments on the maturity dates.

There are trade-offs between risk and return in investment products, the key features of which are as follows:

1. The higher the risk an investor bears for an investment, the greater the demand for higher expected returns in order to compensate for the risk-taking behaviour
2. Risk in investments can be reduced through diversification and allocation of investments into different asset classes or types, while maintaining or increasing the overall expected returns of all the investments
3. Conversely, risk in investment is increased when there is concentration of investments into very limited types of securities or asset classes in a portfolio.

Read

You should now read Smart, Gitman and Joehnk, Fundamentals of Investing, 2017

Appendix 4 A, The Time Value of Money

Pages 187 – 189

Pages 190 - 194

Chapter 4 Return and Risk

Pages 152 – 155

Pages 168 – 171

Pages 174 - 176

Other online materials from:

www.wikipedia.org

www.investopedia.com

www.beginnersinvest.about.com

Activity 1

Additional practice:

1. MyFinanceLab Study Plan 4.2 on Time Value of Money
2. MyFinanceLab Study Plan 4.1 on Concept of Return
3. MyFinanceLab Study Plan 4.5 on Concept of Risk
4. MyFinanceLab Study Plan 1.3 on Types of Investments

1.3 Investor Profiling and Stages of Life Cycle Investing

Lesson Recording

Investor Profiling and Stages of Life Cycle Investing

You should now watch this video that explains the concepts of investor profiling and the stages of life-cycle investment. Their roles in helping investors plan their portfolios will also be covered.

1.3.1 What is Investor Profiling and Why is It Needed

Investor Profiling is the process of identifying the characteristics and requirements of an investor according to the circumstances that the investor is in.

It is based on criteria such as the investor's age, family needs, investment objectives, risk adversity, investment horizon or time frame, past investment experience, and level of sophistication. It is only after analysing the investor's unique situations that specific products and instruments can be suitably recommended to fit the investor's requirements.

Investor profiling also forms part of the process known as "Know Your Client" (KYC) rules that are adopted by financial institutions when recommending financial products to their clients.

1.3.2 Identifying the Stages of Life Cycle Investing and Their Application in Investments

Most individuals will undergo distinct phases or stages of development in their life time. By using the stage of life-cycle investing approach, investors can determine their investment objectives, requirements and needs which are uniquely theirs at each stage of the life cycle.

A simple breakdown of the stages of life-cycle investing into six (6) distinct phases include Youth, Young Adult with First Job, Newly Married with Young Family, Mid-life with Family Needs, Empty Nest, and Retirement Age.

At each stage of the life cycle, investors will need to know their cash flow requirements, funding for major activities or acquisitions and other liquidity needs.

Different products and instruments that have different risk levels, market liquidity, gestation or maturity period may not be suitable for all investors due to individuals' different objectives and needs at different stages of their life-cycle investment. Typically, an investor's portfolio of investments will transition towards higher quality securities towards the later part of their life cycle.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 1: The Investment Environment
Pages 49 - 50

Other online materials from:
www.wikipedia.org
www.investopedia.com
www.beginnersinvest.about.com

Activity 2

Additional Practice:

1. MyFinanceLab Study Plan 1.3 on Types of Investments
2. MyFinanceLab Study Plan 1.4 on Investing Over The Life Cycle

1.4 Market Liquidity, Diversification and Asset Allocation

Lesson Recording

Market Liquidity, Diversification and Asset Allocation

You should now watch this video which explains the concept of market liquidity, the roles of diversification, and asset allocation in an investor's investment portfolio.

1.4.1 Importance of Market Liquidity in Investment Decision

Market liquidity of an investment product or instrument is defined as the ease through which the product or instrument can be sold and converted into cash or its equivalent in the shortest time.

Since the great market crash in 2009, liquidity consideration has been given great emphasis in the investment decision-making process. Very often, when markets are under great stress during periods of high volatility, investment products and instruments that may have high "liquidity" during normal times become very illiquid and thinly traded.

For instance, certain illiquid investment products or instruments have huge differences in prices, making their trading difficult or even impossible in times of wide market fluctuations. Investors may therefore choose to avoid investing in such instruments in the first place.

Market liquidity can be represented as a continuum, ranging from very liquid instruments such as cash and cash equivalents – including deposits and money market instruments – to relatively illiquid investments, such as real estate due to their relatively long period of unwinding or sale before cash can be received by the seller.

The following factors can affect the liquidity of any investment product:

1. Volume and timing of transactions (insufficient quantity and whether regularly traded or not)
2. Number of market participants (the more participants, the more liquid the product or instrument to be traded)
3. Nature of the market trading the product
4. Geo-political risk considerations

1.4.2 Concept of Diversification and Asset Class in an Investment Portfolio

Diversification is an investment tool that reduces risk while maintaining or enhancing total returns in a portfolio of investments.

As illustration, assume that an investor chooses to invest in a company that produces only blue ink. The profits of this company will go up or down depending on whether the economy grows or declines. During an economic upturn, more blue ink will be required as companies turn in profits; whereas, in periods of decline, more red ink will be needed. However in periods of economic decline, red ink instead of blue ink will be in demand as more companies report losses.

Thus, instead of just a single concentration of investment in the blue ink company, the investor can choose to diversify by investing in another company that produces only red ink, so as to complement his holdings of the blue ink company. In good or bad times, the investor would have at least invested in a company that is profitable and less subjected to the vagaries of the economic condition.

Asset Class is a concept that groups similar investments or products into categories that are unique to that class according to risk, return and liquidity. Examples of asset classes are equities, fixed income instruments, commodities investments and real estate investments.

Just like the old proverb of not "putting all your eggs into one basket," an investor can diversify his investment portfolio by investing in more than one asset class to reduce the degree of correlation between them. Diversification refers not only to investing in two (2) or more different asset classes, but also to include different types of instruments or products within the same asset class.

1.4.3 Asset Allocation in Portfolio Planning

The role of asset allocation is to plan a portfolio of investments that comprises different products and instruments to fit the investment needs and objectives of the investor (which were discussed in detail in Topic 3 - Investor Profiling and Stages of Life-cycle Investing).

An investor can use simple weightings for each class of asset, when allocating funds for his portfolio. For example, an investor who is in the Retirement Age at his Stage of Life-cycle may wish to allocate his investments as follows: 70% in Fixed Income Instruments, 20 % in Equities, and 10 % in Cash or equivalents.

The weightings in the different asset classes in asset allocation are never fixed; the need to constantly monitor and adjust the weightings to take into consideration the changing environment and the investor's circumstances form part of active portfolio management and planning.

Read

You should now read Smart, Gitman and Joehnk, Fundamentals of Investing, 2017

Chapter 1: The Investment Environment

Pages 37 – 43

Pages 52 – 56

Chapter 5: Modern Portfolio Concepts

Pages 204 – 206

Chapter 13: Managing Your Own Portfolio

Pages 542 - 546

Other online materials from:

www.wikipedia.org

www.investopedia.com

www.beginnersinvest.about.com

Activity 3

Additional Practice:

1. MyFinanceLab Study Plan 5.1 on Portfolio Objectives
2. MyFinanceLab Study Plan 5.2 on Correlation and Diversification
3. MyFinanceLab Study Plan 13.1 on Asset Allocation

Chapter 2: Investment Environment

This chapter gives the students an overview of the investment environment in Singapore with regard to the legal framework. The various ethical, moral and social issues and hazards in investing will also be examined.

2.1 Legal Framework of Investing

Lesson Recording

Legal Framework of Investing

You should now watch this video that provides an overview of the legal framework of investing in Singapore. The roles of SGX, FIDREC and SIAS are further explained.

2.1.1 Understanding the Legal Framework in the Regulations of Investments

Investors need to understand the role of the Monetary Authority of Singapore (MAS) in the regulation and enforcement of banking and investment matters in Singapore.

Securities and Futures Act (SFA) Cap. 289 and Financial Advisers Act (FAA) Cap. 110 are the relevant legislations governing capital market products and instruments.

Capital Markets and Financial Advisory Services Examinations (CMFAS Exams.) are compulsory for financial advisers and representatives to pass before they can sell financial products and services to the investing public.

MAS provides and regularly updates the Financial Institutions Directory and Investor Alert List (which highlights unregulated firms or individuals who, based on information received by MAS, may have been wrongly perceived as being licensed and authorised by MAS).

In the investment context, investors need to understand the roles of the Singapore Stock Exchange (SGX) and other related bodies such as SIAS and FIDREC.

There are guidelines on complaints procedures as well as limitations.

Read

You should now read online materials from:

www.mas.gov.sg

www.moneysense.gov.sg

www.fidrec.com.sg

www.sias.org.sg

www.sgx.com

2.2 Ethical and Related Issues in Investing

Lesson Recording

Ethical and Other Issues in Investing

This video provides an overview of the ethical, moral and social issues, and hazards when investing with particular emphasis on Singapore-based case studies for illustration purposes.

2.2.1 Case Studies

In the context of the current investment environment, the following case studies are especially relevant:

- Irregularities and frauds in public listed companies, page 301
- Insider trading involving Timothy McGee, page 133
- Cooking the books using "creative accounting ", page 301
- Stock analysts: Don't always believe the hype, page 340
- Mutual funds trading abuses, page 504
- Extraordinary good timing in gaining stock options for executive, page 591
- Trading energy futures at Enron, page 633

2.2.2 Social and Moral Issues and Hazards in Investing

Other considerations in ethics involve social, moral or legal issues and hazards such as gaming, entertainment, health related issues (caused by drinking and smoking), and the environment. These factors need to be evaluated for their suitability before investors can consider including these types of securities and products in their investment portfolios.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Case studies found on pages 51, 133, 301, 340, 427, 504, 591 and 633

And also search and read online materials on following cases:

1. LEW Chee Fai Kevin vs MAS (Court of Appeal decision on 10 Feb. 2012)
2. WANG Ziyi Able vs Public Prosecutor (High Court decision on 29 Nov. 2007)
3. TAN Chong Koay vs MAS (Court of Appeal decision on 22 July 2011)
4. Genneva Pte. Ltd. (gold trading company), The Gold Guarantee Pte. Ltd. and Profitable Plot Pte. Ltd.

Reflect

You have now come to the end of Study Unit 1 in which the basic fundamental tools of investing and the legal framework have been introduced to you. Based on what you have learnt, would you invest in BITCOINS which is the latest form of virtual currency that is now available worldwide for investors? Reflect on your decision(s) given the following assumptions:

a. You have just been given SGD 1million as a windfall gain
b. Consider your own profile with regard to your investment objectives, risk outlook, need for liquidity, etc.
c. Ponder carefully the stage of life-cycle investing you are in when making the investment decision(s)

Activity 4

Formative Quiz:

Students must complete a formative quiz to reinforce learning.

Summative Quiz:

Students must complete a summative quiz of 40 questions. This compulsory summative quiz carries 20% of the overall assessment.

Formative Assessment

1. In a simple relationship between demand and supply, the higher the price the less will be demanded for the product or service. Such a relationship between price and quantity demanded is said to be ________.
   a. direct
   b. inverse
   c. linear
   d. equilibrium

2. An investor needs to evaluate the stages of the country's economic cycle and industry life cycle of the companies he is investing in because the
   a. profits of companies are impacted differently at different stages of the industry life cycle and the economic cycle
   b. government's extra budget expenditures to counter cyclical effects will not affect the profitability of the companies concerned
   c. downturn in a particular industry will usually coincide with similar downturn in an economic cycle.
   d. technological changes can influence only the industry life cycle but not the economic cycle

3. Which of the following statements on time value of money is FALSE ?
   a. Future value refers to the amount of money in which a present amount will grow into over a fixed period of time
   b. The basic present value calculation uses an interest rate calculation known as the discount rate.
   c. An investor needs to understand time value concepts in order to evaluate the viability of fixed income investments.

d. For investments in equities, an investor need not evaluate future income streams even though there will be future dividend payouts.

4. In discussing the trade-offs between risk and return in investment products, which of the following statement is TRUE ?
   a. The higher the risk an investment product has, the greater the demand for higher return to compensate for the risk taking behaviour.
   b. Risks in speculative investments can be completely eliminated by an investor's skilful diversification
   c. The purpose of allocating investments into different asset classes is to increase the expected returns while at the same time allowing the risk level to increase.
   d. Bank deposits should generate higher returns in the short term than property investments to compensate investors for the greater risks assumed.

5. Before recommending any investment products to investors, an investment adviser such as a wealth manager needs to carry out investor profiling of his clients to :
   a. Identify the unique characteristics and circumstances of the individual investor
   b. construct an investment portfolio in accordance to his or her gender
   c. determine the investor's residence type and location in order to ascertain product suitability
   d. understand his or her likes or dislikes of specific stocks based on the feelings of the investor

6. When assessing investment product suitability at different stages of their life cycle, investors would need to
   a. achieve maximum returns throughout the different life stages
   b. reduce risk to the minimum at all costs and choose such investment products accordingly
   c. consider cash flow and liquidity requirements such as funding for living expenses, children's education and purchasing a home

d. stick to the same investment products throughout to maintain the consistency of returns which had been achieved in the past

7. If the liquidity of investment products is are ranked on a continuum, which of the following ranking is based on most illiquid to most liquid is correct?
   a. Local currency cash deposit, bonds, stocks and real estate
   b. Stocks, bonds, real estate and foreign currency deposit
   c. Real estate, stocks, bonds and local currency deposit
   d. Real estate, bonds, stocks and foreign currency deposit

8. The purpose of diversification of investment products or holdings in an investment portfolio is to
   a. enhance capital appreciation and reduce uncertainties in liquidity
   b. maintain total returns and avoid total risks
   c. increase further the investment in specific investment products or asset classes that provide the best returns in the portfolio thus far.
   d. reduce risk and maintain or improve the total returns.

9. Which of the following regarding asset allocation in investment portfolio planning is FALSE ?
   a. Role of asset allocation in planning an investment portfolio is to provide for adjustments to changes to the investor's objectives and needs
   b. Investors need to monitor and adjust the weightings in each category of the asset classes in response to the changing environment
   c. Investment products and holdings can be categorized into different asset classes according to risk and return expectations.
   d. Simple weightings cannot be used in making asset allocation decisions for products such as stocks, fixed income instruments and cash equivalents.

10. In putting the names of companies on its Investor Alert List, MAS intends to alert the investing public of companies that

a. have been or are about to be prosecuted for fraudulent security practices
b. have their operations audited, raided upon or even closed down by MAS
c. have been wrongly perceived as being duly authorized and / or licensed by MAS.
d. have investment products that are readily available and promising exceptionally high returns

Solutions or Suggested Answers

Formative Assessment

1. In a simple relationship between demand and supply, the higher the price the less will be demanded for the product or service. Such a relationship between price and quantity demanded is said to be ________.

    a. direct

    Incorrect. Direct relationship refers to the relationship between price and supply i.e. the higher the price the more a product or service will be supplied. Review Study Notes on Chapter 1, Topic 1: Supply and Demand Theory

    b. inverse

    Correct. An inverse relationship is one in which for a higher price, less will be demanded by buyers. Review Study Notes on Chapter 1, Topic 1: Supply and Demand Theory

    c. linear

    Incorrect. Linear is a straight line relationship which applies between price and supply. Review Study Notes on Chapter 1, Topic 1: Study and Demand Theory

    d. equilibrium

    Incorrect. In supply and demand theory, equilibrium refers to the price in which quantity demanded equals the quantity supplied. Review Study Notes on Chapter 1, Topic 1: Supply and demand Theory

2. An investor needs to evaluate the stages of the country's economic cycle and industry life cycle of the companies he is investing in because the

    a. profits of companies are impacted differently at different stages of the industry life cycle and the economic cycle

Correct. Review Study Notes on Chapter 1, Topic 1: Economic Cycle

b. government's extra budget expenditures to counter cyclical effects will not affect the profitability of the companies concerned
Incorrect. Government expenditures will directly affect the demand for goods and services and companies' profitability. Review Study Notes on Chapter 1, Topic 1: Economic Cycle

c. downturn in a particular industry will usually coincide with similar downturn in an economic cycle.
Incorrect. It is incorrect because stages of the economic cycle and industry life cycle may not always happen in tandem. Review Study Notes on Chapter 1, Topic 1: Economic Cycle

d. technological changes can influence only the industry life cycle but not the economic cycle
Incorrect. Technological changes can affect both industry life cycle and economic cycle by hastening changes in the market place. Review Study Notes on Chapter 1, Topic 1: Economic Cycle

3. Which of the following statements on time value of money is FALSE ?

a. Future value refers to the amount of money in which a present amount will grow into over a fixed period of time
Incorrect. This is the true definition of future value. Review Study Notes on Chapter 1, Topic 2: Time Value of Money

b. The basic present value calculation uses an interest rate calculation known as the discount rate.
Incorrect. The statement on discount rate is true. Review Study Notes on Chapter 1, Topic 2: Time Value of Money

c. An investor needs to understand time value concepts in order to evaluate the viability of fixed income investments.

Incorrect. The statement is true as time value of money concepts are used in evaluating fixed income investments that generate future income streams. Review Study Notes on Chapter 1, Topic 2: Time Value of Money

d. For investments in equities, an investor need not evaluate future income streams even though there will be future dividend payouts.
Correct. The statement is false. With future income streams in the form of dividends payout, an investor will need to evaluate the effect of these future income receipts. Review Study Notes on Chapter 1, Topic 2: Time Value of Money

4. In discussing the trade-offs between risk and return in investment products, which of the following statement is TRUE ?

   a. The higher the risk an investment product has, the greater the demand for higher return to compensate for the risk taking behaviour.
   Correct. The higher the risk, the greater will be the demand for expected return by a rational investor as compensation for the greater risk assumed. Review Study Notes on Chapter 1, Topic 2: Risk and Return

   b. Risks in speculative investments can be completely eliminated by an investor’s skilful diversification
   Incorrect. This statement is false as risks can be reduced but NOT completely eliminated by diversification. Review Study Notes on Chapter 1, Topic 2: Risk and Return

   c. The purpose of allocating investments into different asset classes is to increase the expected returns while at the same time allowing the risk level to increase.
   Incorrect. Asset allocation serves to increase the expected returns while maintaining or reducing the existing risk, not increasing the risk. Review Study Notes on Chapter 1, Topic 2: Risk and Return

d. Bank deposits should generate higher returns in the short term than property investments to compensate investors for the greater risks assumed.
Incorrect. Statement is false as bank deposits generate lesser returns than property investments since the latter require investors to assume much greater risks. Review Study Notes on Chapter 1, Topic 2: Risk and Return

5. Before recommending any investment products to investors, an investment adviser such as a wealth manager needs to carry out investor profiling of his clients to :

a. Identify the unique characteristics and circumstances of the individual investor
Correct. In identifying the unique characteristics and needs of the investor through profiling, the adviser is then able to recommend appropriate investment products. Review Study Notes on Chapter 1, Topic 3: Investor Profiling

b. construct an investment portfolio in accordance to his or her gender
Incorrect. Gender issue of whether the investor is male or female would not be a factor affecting investment decisions affect an investor's profiling process and the outcome or suitability of an investment product. Review Study Notes on Chapter 1, Topic 3: Investor Profiling

c. determine the investor's residence type and location in order to ascertain product suitability
Incorrect. Residence location and type alone based on outward appearances do not reveal the unique circumstances of each investor. An expensively built house in an exclusive location may have been rented or heavily mortgaged by the investor staying there. Review Study Notes on Chapter 1, Topic 3: Investor Profiling

d. understand his or her likes or dislikes of specific stocks based on the feelings of the investor

Incorrect. Investor profiling should be done on an objective basis with reasoning and not just based on investor " feelings" in order to be an effective tool. Review Study Notes on Chapter 1, Topic 3: Investor Profiling

6. When assessing investment product suitability at different stages of their life cycle, investors would need to

   a. achieve maximum returns throughout the different life stages
   Incorrect. Achieving maximum returns is not the only objective of investing at all the different life stages. Other objectives such as liquidity needs and capital preservation are important at different stages. Review Study Notes on Chapter 1, Topic 3: Stages of Life Cycle Investing

   b. reduce risk to the minimum at all costs and choose such investment products accordingly
   Incorrect. Reducing risk to the minimum is not the only factor as other needs such as returns and liquidity are important too. Review Study Notes on Chapter 1, Topic 3: Stages of Life Cycle Investing

   c. consider cash flow and liquidity requirements such as funding for living expenses, children's education and purchasing a home
   Correct. Cash flow, funding and liquidity needs are major considerations for investors making decisions on the suitability of any investment products. Review Study Notes on Chapter 1, Topic 3: Stages of Life Cycle Investing

   d. stick to the same investment products throughout to maintain the consistency of returns which had been achieved in the past
   Incorrect. At different stages of his life cycle, an investor would have different needs and objectives. An investment that serves him well in the past when he first started investing may not necessarily be able to meet his objectives

as he grows older. Review Study Notes on Chapter 1, Topic 3: Stages of Life Cycle Investing

7. If the liquidity of investment products is are ranked on a continuum, which of the following ranking is based on most illiquid to most liquid is correct?
    a. Local currency cash deposit, bonds, stocks and real estate
    Incorrect. Real estate is one of the most illiquid investment vehicles and should be ranked first while local currency cash deposit should be ranked last. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

    b. Stocks, bonds, real estate and foreign currency deposit
    Incorrect. Stocks are considerably more liquid than real estate investments. Their rankings should be interchanged in this list. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

    c. Real estate, stocks, bonds and local currency deposit
    Incorrect. It is incorrect because in general stocks are more liquid than bonds. In this list, stocks and bonds should be interchanged. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

    d. Real estate, bonds, stocks and foreign currency deposit
    Correct. The most illiquid is real estate, followed by bonds and stocks. Currency deposit is considered the most liquid in the list given here. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

8. The purpose of diversification of investment products or holdings in an investment portfolio is to
    a. enhance capital appreciation and reduce uncertainties in liquidity
    Incorrect. Diversification reduces risks and maintains or enhances returns in a portfolio. It is not a tool for reducing uncertainties in the liquidity of

an investment product. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation

b. maintain total returns and avoid total risks
Incorrect. Risks in most investment products cannot be avoided entirely but can be reduced. Even with portfolio diversification, risks cannot be eliminated or avoided entirely. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

c. increase further the investment in specific investment products or asset classes that provide the best returns in the portfolio thus far.
Incorrect. Putting more money into existing product or asset class will result in more concentration and not diversification. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

d. reduce risk and maintain or improve the total returns.
Correct. Portfolio diversification is a tool that aims to reduce risk while maintaining or enhancing returns in an investment portfolio. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

9. Which of the following regarding asset allocation in investment portfolio planning is FALSE ?

a. Role of asset allocation in planning an investment portfolio is to provide for adjustments to changes to the investor's objectives and needs
Incorrect. This statement is true. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

b. Investors need to monitor and adjust the weightings in each category of the asset classes in response to the changing environment

Incorrect. It is true that an investor needs to constantly monitor and adjust the weightings of each asset class. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

c. Investment products and holdings can be categorized into different asset classes according to risk and return expectations.
Incorrect. Risk and return expectations as well as liquidity of the underlying investment products are used to categorize them into classes such as cash, fixed income and stocks. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

d. Simple weightings cannot be used in making asset allocation decisions for products such as stocks, fixed income instruments and cash equivalents.
Correct. It is not true that simple weightings of the asset classes cannot be used. In fact weightings of asset classes is not an exact science and can be arbitrary. There is no hard and fast rule of what correct weightings should be. Review Study Notes on Chapter 1, Topic 4: Market Liquidity, Diversification and Asset Allocation.

10. In putting the names of companies on its Investor Alert List, MAS intends to alert the investing public of companies that

a. have been or are about to be prosecuted for fraudulent security practices
Incorrect. Being put on the list is no indication or proof of any wrong doings by such companies. Review Study Notes on Chapter 2, Topic 1: Legal Framework of Investing

b. have their operations audited, raided upon or even closed down by MAS
Incorrect. MAS does not raid or audit companies that do not fall under its purview unless there are evidences of frauds and offences relating to securities and banking laws. . Review Study Notes on Chapter 2, Topic 1: Legal Framework of Investing

c. have been wrongly perceived as being duly authorized and / or licensed by MAS.

Correct. This is the purpose of the Investor Alert List – to alert the public that such companies are NOT authorized or licensed by MAS. Review Study Notes on Chapter 2, Topic 1: Legal Framework of Investing

d. have investment products that are readily available and promising exceptionally high returns

Incorrect. MAS does not use its Investor Alert List to highlight companies and their investment products or rates of returns. Review Study Notes on Chapter 2, Topic 1: Legal Framework of Investing

Study Unit 2

Investment Products And Instruments

Learning Outcomes

By the end of this Study Unit, you should be able to:

1. discuss the concept of equity investing in publicly traded markets and appraise the role of fundamental analysis in evaluating equity investments
2. recognise the role of fixed income instruments and analyse their suitability in an investment portfolio
3. evaluate the characteristics, classifications, merits and demerits of mutual funds and REITs (Real Estate Investment Trusts) in an investment portfolio

Chapter / Topic	**Learning Outcomes**
Chapter 1, Topic 1 Characteristics of Equity Investments	At the end of this study topic, students will be able to: 1. recognise the characteristics of equity investing including earnings, dividends, risk and return, liquidity and their appeals to investors 2. evaluate the relative merits and demerits of equity investments as an asset class
Chapter 1, Topic 2 Fundamental Analysis in Equity Investments	At the end of this study topic, students will be able to: 1. describe the basic process of fundamental analysis and strategy in investment making decisions 2. evaluate the role of financial statements and ratio analysis in making equity investments
Chapter 2, Topic 1	At the end of this study topic, students will be able to: 1. discuss the investment features of fixed income instruments, the different instruments

Fixed Income Instruments – Characteristics and Valuations	available such as bonds and convertibles, and the relative merits and demerits of such investments 2. evaluate the factors involved in valuing fixed income products to determine their investment suitability
Chapter 3, Topic 1 Investing In Mutual Funds	At the end of this study topic, students will be able to: 1. discuss the characteristics and classifications of mutual funds as an investment class 2. evaluate the merits and demerits of mutual funds in an investment portfolio
Chapter 3, Topic 2 Investing in REITs	At the end of this study topic, students will be able to: 1. discuss the characteristics and classifications of REITs in the Singapore context 2. evaluate the merits and demerits of REITs and their suitability in an investment portfolio

Overview

Chapter 1 helps students understand the basic characteristics of equity investments and demonstrates the role of fundamental analysis when investing in publicly traded equities.

Chapter 2 helps students understand the different types of fixed income instruments and the analytical process in making fixed income investment decisions.

Chapter 3 gives students an overview of the mutual funds (unit trusts) and REITs (Real Estate Investment Trusts) opportunities that can be part of an investment portfolio.

Chapter 1: Investing in Equities

The basic characteristics of equity investing are evaluated in this chapter, together with the use of fundamental analysis in the process of determining stock valuation.

1.1 Characteristics of Equity Investments

1.1.1 The Main Characteristics of Equity Investing

1. Investment in shares of publicly listed companies represent ownership of the equity in the companies, and with it all the rights such as entitlement to vote at annual general meetings and receive dividends which are declared by the companies, and other obligations.
2. Investors invest in shares as these generally increase in value over time as the companies grow, thereby generating capital appreciation for investors.
3. Equity investments can provide a source of income stream in the form of dividends distributed by companies over time.
4. Not all companies in the equity market will perform in the same manner. Hence, there will be differences between individual stock performance and that of the market as a whole.
5. In evaluating equity investments, one needs to take into account the concept of risk return characteristics of individual equity such as credit risk, level of liquidity in the trading of the company stocks, past performance and future expectations, volatility of the stock prices, the stages of the economic and industry cycle.

The Main Objectives of Equity Investments

- Generate capital appreciation as equities tend to outperform other investment classes over time.

- Provide constant stream of income in the form of dividends that are being paid out by listed companies to shareholders.
- Provide total returns (capital appreciation and income) that beat inflation.

When investing in equities, investors need to understand the following:

- Earnings of companies are based on generation of sales revenue and control of expenses, with surplus in the form of profit that can be distributed to shareholders as dividends
- Dividend payouts to owners of equities can be in the form of cash or additional shares in the company (in the form of bonus shares)
- Dividend policy of a company is an important consideration for investors to decide on whether to invest in the equities of a company or not

Some Investment Strategies in Equity Investments

- Buy-and-hold strategy is a conservative way to enhance capital values of equity investment over a period of time
- Current income strategy invests in equities that pay out high dividend yields to obtain high levels of current income
- Long-term growth strategy relies on capital gains from growth stocks as main source of investment returns
- Aggressive stock management strategy obtains high returns through aggressive trading of equities in a fully managed portfolio of investments
- Speculative and short–term trading strategy whereby, with capital gains as an objective, equities from different sectors or classifications are frequently traded for their short-term capital gains

Key participants in equity markets:

- Individuals, corporations, fund managers, institutions, and government bodies

- Other institutions such as pension fund managers may be restricted from investing in penny stocks (stocks whose traded prices are below the level of SGD 1-00), stocks that do not pay dividends or stocks that are influenced by ethical or moral hazards and considerations such as alcohol and gambling companies

1.1.4 Classification of Equities in An Investment Portfolio

Equities can be classified into the following:

a. Blue-chip equities – these are the best of available equities to invest in, with regard to returns, dividends and long-term stability of earnings. Blue-chip firms offer some of the largest and most stable long-term investments in a stock market. As a matter of interest, the best China-based blue chips have been given the name "red chips" as a reflection of their origins and status.

b. Income stocks – these provide constant or even increasing dividend payouts to reward investors, especially in periods of cyclical downturn of the economy.

c. Growth stocks – these are stocks that are expected to have high rates of growth in terms of sales, revenues, and earnings compared to their peers.

d. Tech stocks – these represent companies involved in the technology sector of the economy, which may be computer-related and Internet-based.

e. Cyclical stocks – these belong to companies that are involved in businesses which are cyclical in nature, such as manufacturers of capital goods and construction equipment, and of consumer durable goods such as houses or cars.

f. Defensive stocks – these are stocks whose prices remain relatively stable when business activity levels off or drops drastically, such as healthcare stocks and utility supply companies; as their products and services are still in demand even in times of economic hardship.

g. Speculative stocks – these stocks, as the name suggests, provide potential for substantial price appreciation over a relatively short period of time. This is due to specific situations, for example, a mining stock suddenly discovering gold deposits in its fields.

Stocks can also be classified based on the size of their market capitalisation:

"Market capitalisation" is simply the total number of shares outstanding or issued by a company multiplied by the latest available transacted price of that company in the stock market. Since the transacted prices of shares can fluctuate greatly, market capitalisation of stocks will therefore fluctuate in tandem.

The three (3) main classifications of stocks using market capitalisation as a denominator are: large cap, medium cap, and small cap. In the Singapore context:

- **large-cap stocks** are those above SGD 10 billion in market capitalisation value
- **mid-cap stocks** are those whose market capitalisations fall between SGD 1 billion and SGD 10 billion
- **small-cap stocks** are all those stocks whose market capitalisations are below SGD 1 billion

The significance of market capitalisation can be summed up as follows:

- Market capitalisation provides a good indication of the size of the company. Generally, the larger the market cap, the more blue chips, and the greater would be investors' interests in such companies
- Similarly, the greater the market capitalisation, the more liquid the trading would be of such companies
- Certain investment funds and pension fund managers may have policies that do not allow them to invest in stocks with small market capitalisation, due to the risk profiles of such small cap stocks.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 1: The Investment Environment
Pages 32 – 37

Chapter 6: Common Stocks
Pages 246 – 254
Pages 256 – 262
Pages 264 – 275

Additional Practice:

1. MyFinanceLab Study Plan 6.1 on Appeal of Common Stocks
2. MyFinanceLab Study Lab 6.6 on Types of Common Stocks

Reflect

The size of the trading lot for shares traded on the Singapore Stock Exchange (SGX) used to be a minimum of 1,000 shares for each trade. But this has recently been reduced to just 100 shares. Yet after its implementation, stockbrokers still complain that retail investors have not really increased their transaction activities despite the fact that Singapore's blue chip and other stocks are now very much affordable even for the average investor.

What do you think might contribute to this? Based on your current situation as an investor, reflect on whether or not you would trade more frequently because the minimum lot size is reduced to 100 shares.

1.2 Fundamental Analysis in Equity Investments

1.2.1 Principles of Fundament Analysis

Fundamental analysis requires the gathering of information, organizing the data into a framework for analysis, and determining the intrinsic values of the equity investments.

Intrinsic value is the estimated measure of what a company is worth, comparing it to the prevailing market price, then deciding on its suitability for investment.

To arrive at a company's intrinsic value, take the following steps:

- Estimate future cash flows and amount of dividends over the holding period of the investment
- Use an appropriate interest rate (such as a suitable discount rate) to convert the future cash flows into present value
- Analyse the risks associated with future performance, as the analysis can help to determine the appropriate discount rate to be used

A traditional analysis that uses top-down approach in valuation will start with economic and industry analysis, and then the individual company analysis:

- With economic analysis as a starting point, use economic analysis to assess the state of the economy and its future prospects. In Singapore, key factors affecting economic performance are governmental policies and linkages with the state of the world economy
- Industry analysis is considered next, with factors like supply and demand, the degree of competition, and industry-wide profitability that affects the performance of the company being analysed
- The specific equity investment is then analysed using company analysis that identifies its strengths and the weaknesses, allowing investors to determine their expectations about the future performance of the equity

1.2.2 Fundamental Analysis Using Financial Statements

Before making investment decisions, use financial statements to analyse the company. A financial statement consists of:

- a balance sheet that shows the firm's assets, liabilities and shareholder's equity;
- an income statement which is a financial summary of the firm's operating results;
- a cash flow statement which indicates the firm's cash position and cash flows over a period of time;

A financial statement:

- is analysed comparing past performance data and projections for future prospects; and
- provides detailed information on the state of the company's current health and future prospects. With the data available over a period of time, any trend can be further analysed.

Financial ratio analysis studies the relationships between various financial data presented in financial statements, as well as between different financial statements over different periods.

- Financial ratios allow financial conditions and operating results of a firm to be analysed and compared to past performances and with different companies within the same industry and across industries

Important ratios for analysis are those that measure

- liquidity in terms of indebtedness, such as short-term versus long-term debt, net working capital, and long-term capital adequacy;
- inventory levels; and
- business activity in the form of sales, turnover and profitability. Profitability of the company is scrutinised using various ratios such as earnings per share (EPS), gross and net profit ratios.

In fundamental analysis, equity valuations of stocks are based on forecasts of book values, earnings and dividends with the following emphases:

- Book values, price earnings ratio (PER), and its related earnings per share (EPS) calculations, dividends per share (DPS) concepts are used as the basis for valuations of companies and their future prospects.
- Fundamental analysis relies on the accuracy and reliability of the data and information available to the analyst.
- Estimates and forecasts of future growth on earnings and dividend payouts are used to arrive at the intrinsic value of an equity investment. As these are estimates and forecasts, such conclusions can at times be subjective in nature.
- Comparisons can then be made among companies both within and across the industry to determine the suitability of such investments.

- Investors who use the fundamental approach to investing will invest in stocks whose current prices are below their intrinsic values, and sell them if their market prices rise above the intrinsic values over a period of time.

Read

You should now read: Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 7: Analysing Common Stocks
Pages 285 – 316

Additional Practice:

1. MyFinanceLab Study Plan 7.1 on Security Analysis
2. MyFinanceLab Study Plan 7.4 on Fundamental Analysis
3. MyFinanceLab Study Plan 7.5 on Financial Ratios

Reflect

From January to September 2016, a total of 25 companies were either already delisted or in the process of being delisted from the stock market in Singapore (SGX Ltd.). Some of these companies include well-known household names such as Tiger Airways Ltd, Neptune Orient Lines Ltd., SMRT Corpn. Ltd. and Eu Yan Sang International Ltd.

Reflect on what some of the reasons for 'going private' might be. As an investor would you be concerned? Or would you regard such privatisation deals as opportunities for profits?

Chapter 2: Fixed Income Instruments

In this chapter, we examine the basic characteristics of fixed income instruments together with the application of a simple valuation process. Different fixed income instruments are evaluated for their suitability in an investment portfolio.

2.1 Characteristics and Valuation

2.1.1 Characteristics of Fixed Income Instruments

Instead of borrowing from a bank or issuing shares to raise funds, a corporation, institution or government body can issue bonds which are long-term debt instruments that provide funding to the issuer.

Investors invest in bonds for:

- future streams of income, as bonds pay regular interest to bond holders;
- capital appreciation, as bond values go up when the general interest rates go down, making the bond investment much more attractive; and
- diversification purposes, from a concentrated portfolio of investments that consist of only equities to a portfolio that includes both equities and fixed income instruments.

Some features of bonds as an investment class are as follows:

- The issuer of the bond is the entity who needs the funds and is regarded as the borrower.
- The coupon is the stated rate of interest payable on the bond each year, either semi-annually or annually
- Tenure is the period of the bond's lifetime before the bond holders are paid back their principal investments by the issuer, upon maturity of the bond.

- Rating or grading of bond issue is done by an independent rating agency (such as Moody's, Standard and Poor, or Fitch Rating Agency) to indicate the level of credit risk associated with the issuer, and the likelihood of default or non-payment of the principals upon maturity

Comparisons of bonds with equity investment:

- Generally, fixed income investments as an investment class are less risky than equity investments, since bonds provide more certain income stream and possibly higher levels of income compared with the greater uncertainty of dividend payouts from equities.
- Inclusion of bonds will add stability and diversification to an investment portfolio that previously consisted of only equity investments.

Some of the risks associated with fixed income investments are as follows:

- Interest rate risk is an important risk consideration in owning fixed income instruments such as bonds. In an environment of rising interest rates, bond price volatility increases and becomes adversely affected as such securities become less attractive to investors since the coupon rates are fixed. The reverse is true in a period of decreasing interest rates, as bond investments become more attractive with bond prices tending to rise.
- Business and financial risk of the issuer is a major consideration, as the bond issuer may default not only on the regular interest payments, but also ultimately the repayment of the principals borrowed through the bond issued.
- Purchasing power risk associated with inflationary concerns is another consideration when investing in bonds and other fixed income instruments, the reason being that the income over the life-time of such instruments is fixed, while inflationary pressures can be increasing over the same period.
- Liquidity risk will arise when the market for the trading of the bond issued is very thin or inactive.

- Call risk can happen when the issuer of the fixed income instrument decides to call back the issue (i.e. prepay the principal amount of the bonds to holders) prior to the actual maturity date. Such situations are common in a period of declining interest rates as firms will find it cheaper to "retire" their previous debts which were issued at higher rates, and subsequently borrow again at much lower rates based on the prevailing conditions.

Convertible bonds, as an investment class, are actually a hybrid between fixed income instruments and equity investments, and have the following features:

- Convertibles are issued mainly by listed companies and have features common to both equity and fixed income investments.
- Convertibles have fixed income features such as coupon, tenure, rating etc., BUT they also allow holders of such securities to convert their holdings directly into equities of the issuer. This is based on prescribed terms and conditions such as the conversion price, formula for the exchange and the time frame in which the exchange is permitted.
- Convertibles are often seen as the sweetener in the issuing of bonds to encourage investors of fixed income instruments to buy such securities for investment.

2.1.2 Analysis of Factors Determining Bond Valuation

A primary reason for selecting fixed income investments is that their streams of income are generated over their tenure or lifetime. Any changes that affect this stream of income, such as the ability of the issuer to pay or the changes in the interest rate environment, will therefore impact on bond pricing and valuation.

The stability and movements of market interest rate are affected by

- changes due to money supply changes, level and amount of government spending, governmental budget considerations, and Central Bank policies and actions on interest rates; and

- the level of local and global economic activity, as their resulting impact on the demand for money will in turn affect interest rate movements directly.

The main considerations used in the pricing of bonds through basic bond valuation model, with income stream calculations, are as follows:

- Investors of bonds receive two (2) distinct cash flows which are the periodic stream of coupon income over the bond's remaining lifetime, and the eventual fulfilment of the promise of principal repayment at the end of the tenure of the bond's lifetime.
- By calculating the receipts of the income stream over the remaining lifetime and the final repayment as an annuity based on the concept of present value, the bond can then be valued.

Other factors affecting the valuation and pricing of bonds are:

- liquidity and depth of the market in which the bonds are traded
- ratings given by the rating agencies on the respective bond issue
- fundamentals of the issuers covering their ability to pay the stream of coupon interests, and the final repayment of the principal
- prevailing market conditions affecting the fixed income and other financial markets

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 10: Fixed Income Securities

Pages 409 – 415

Pages 416 – 423

Pages 436 – 437

Chapter 11: Bond Valuation

Pages 404 - 408

Additional Practice:

1. MyFinanceLab Study Plan 10.1 on Bonds – Attributes and Use as Investment Vehicles
2. MyFinanceLab Study Plan 10.2 on Essential Features of a Bond
3. MyFinanceLab Study Plan 10.4 on Different Types of Bonds
4. MyFinanceLab Study Plan 11.3 on How Bonds Are Valued

Reflect

Assuming you are a Singapore-based investor who has just bought an apartment under construction in the neighbouring Iskandar Malaysia with the equivalent value of SGD 1.5 million from a well-known, China-based developer of luxury properties. Just two days ago, you came across the news report of another China-based developer defaulting on the repayments of its bonds upon maturity in China. Should you be concerned that a default of a bond in China can have wider repercussions and affect your property investment in Malaysia?

Chapter 3: Mutual Funds and REITs

Mutual funds are also known as unit trusts. In the Singapore context, they represent professionally managed portfolios readily available for investors to invest. They are a pool of funds managed by a professional fund management company mainly for the purpose of investing in equities and other securities in order to gain capital appreciation and income over time for the investors.

The REITs (Real Estate Investment Trusts) are organized as investment funds that specialise in real estate investments. Its objectives include capital appreciation and generation of regular streams of income from the ownership and management of properties.

3.1 Investing In Mutual Funds

3.1.1 Understanding the Mutual Fund Concept, Its Merits and Demerits in an Investment Portfolio

Mutual funds are pools of funds obtained from investors that are managed by a professional fund management company. Mutual funds invest in a portfolio of equities, fixed income securities, and other investment products and instruments.

Mutual funds, as an investment class, have developed tremendously over the years because of the following appeals:

- By combining financial resources of investors, mutual funds are able to invest in a wide array of different products and instruments that include equities and fixed income securities. An individual investor investing alone may lack the resources and face difficulties in investing in the different instruments all by himself
- Diversification with a relatively large pool of funds available can be easily achieved by the fund manager

- Liquidity for individual investors in the mutual fund is enhanced when the fund manager provides redemption or fund buy-back facility for investors in the mutual fund
- Provision of additional services for mutual fund investors such as carrying out the administrative chores of handling rights issues, reinvestment of dividends and exercising voting rights at annual general meetings of companies. These are chores that an individual investor would gladly delegate rather than be involved in, if he were to directly invest in such equities

Characteristics of mutual funds:

- Mutual funds have been around for a long time, for over a hundred years. Their historical performance in terms of investment returns is comparable to that of equity investments over the same period
- Even though investors need to carefully analyse the past performance of the mutual funds that they are keen to invest in, past performance alone will not provide an assurance or indicate what their future performance will be
- Loading in mutual funds refers to the commissions charged by and paid to the fund distributors when they sell such funds to investors. Loading represents additional costs to the investors for the services rendered by the distributors
- Other fees charged to the funds include management fees paid to the professional managers for managing the fund, custodial fees for the safe keeping of the securities, and administrative fees for the running and upkeep of the funds
- Investors need to be aware of the fees and charges when investing in a mutual fund. These can make up substantial amounts that are deducted before the investors get rewarded for their investments in the particular fund
- A salient feature of mutual fund is the "open" fund concept whereby there are practically no limits as to the amounts investors can invest in the fund. Hence, the number of units that can be issued is unlimited, unlike the investment in an equity

where the number of shares available for investment is limited by the number of shares outstanding or issued by the company

From the huge number of mutual funds available in the market place, classifications of mutual funds can be made in accordance with their objectives and investment strategies:

- Growth – main focus is on capital appreciation of the underlying securities held by the mutual fund. Such funds invest mostly in "growth" stocks which can be defined as those whose market shares, revenues and, hence, profits are expected to outpace the rest of the market in a relatively short time period
- Income – as the name suggests, such funds select stocks and bonds that are based mainly on the income streams that are expected from the dividend payouts and interest payments of the securities that the fund has invested in
- Balanced – mutual funds whose asset compositions are "balanced" with the right mix of equity investments, which provide capital appreciation, and fixed income investments which provide streams of income
- Fixed income – the bulk of the investments in such mutual funds, as the name suggests, is in the fixed income instruments such as bonds and convertibles. A small portion is usually invested in a very short-term liquid instruments to provide funding needs should investors liquidate or redeem their holdings in the fund
- Value – mutual funds employing such a strategy invest in equities that are considered to be undervalued by the fund manager. Their strategy is to hold on to such stocks with potential for future appreciation, with the hope of profiting when the market as a whole realises sooner or later the full value of such stocks
- Sector – investments by sector mutual funds are based on specialised segments of the economy, such as technology companies, companies involved in infrastructural projects, or the bio-medical and pharmaceutical-based companies
- Geographical location or level of economic development – mutual funds concentrate investment portfolios to include only securities originating from certain geographical locations such as Latin America or emerging Asian countries. Other

funds which were popular at one time or another include grouping economies with similar stages of development such as the Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan) and BRIC (Brazil, Russia, India and China)

- Themed investments – these can be based on healthcare (popular due to increasingly ageing populations worldwide), entertainment, tourism or hospitality industries. Even environment-based "green" funds have been established to cater for investors who are interested in a greener global environment

3.1.2 Merits and Demerits of Investing In Mutual Funds

Some of the merits of mutual fund investments are as listed:

- Professional fund managers manage and monitor the entire portfolio of investments. Teams of analysts and researchers constantly evaluate the investment merits of the existing portfolio holdings and other potential securities
- With substantial resources at their disposal, mutual fund managers are able to diversify the investments in the mutual funds they manage, thereby reducing the risks and volatility of the portfolio
- Mutual funds provide liquidity for individual investors as there is an obligation to repay funds to investors upon redemption of their shares or units in the mutual funds

Some of the demerits to consider when investing in mutual funds are as listed:

- Costs in the form of loading charges and other fees can be high or excessive, resulting in such funds being unattractive for investment
- Individual investors in the mutual funds have no control or say in running and managing the funds. Information on issues such as excessive trading and high turnover of stocks in the portfolio may not be transparent or made known to the investors

- Management changes such as departures of key analysts and portfolio managers may affect the performances of the mutual funds in which individual investors have holdings
- The tendency for mutual funds to stay fully invested at all times according to their mandate or objectives without regard to market timing may result in the inflexibility of such funds to unwind their positions, thereby incurring losses during periods of continual market downturn

Compare and contrast mutual fund investments with direct equity investments by an individual investor:

- Unlike direct equity investments, investors of mutual funds have professional fund managers to carry out the necessary analysis, research and due diligence on all the investments. The tasks of monitoring, evaluating and responding to the market situations are constantly being carried out by mutual fund managers, whereas an individual investor may not have the time or resources to do so.
- Mutual funds provide ready-made diversified portfolios for investors to reduce their risk and volatility. Under direct equity investments, an investor has to build up and diversify his portfolio over time with whatever limited financial resources and time constraints that he may face.
- The relatively small size of mutual fund investment needed for each investor makes it an attractive option compared to direct equity investments
- As mentioned earlier, the individual investor has no direct say or control over the individual component of the holdings that make up the fund’s portfolio

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 12: Mutual Funds and Exchange-Traded Funds

Pages 499 – 506

Pages 509 – 511

Pages 514 – 522

Pages 522 – 532

Additional Practice:

1. MyFinanceLab Study Plan 12.1 on Features of Mutual Funds
2. MyFinanceLab Study Plan 12.2 on Funds – Open and Closed End, Loading, Fees and Charges
3. MyFinanceLab Study Plan 12.3 on Types of Funds and Objectives

3.2 Investing in REITs

3.2.1 Key Features of REITs (Real Estate Investment Trusts)

In a way, REITs can be considered as a sub-set of mutual fund investments that manage investors' pool of funds for investment entirely in the real estate sector. REITs are organised as close-ended funds that own and manage the various properties under their portfolios to generate income and capital gains for their stakeholders.

However, unlike mutual funds, the number of shares or units in each REIT available for investors to invest is limited by the number of outstanding units or shares issued.

Some key features of REITs are as follow:

- REITs provide diversification of real estate investments for individual investors by investing in an array of real properties in their portfolios.
- Similar to mutual funds, the investment amounts needed for investment in REITs are relatively small and affordable to most investors.
- The advantage of having professional managers in mutual funds is similarly applicable to REITs where professionals are employed to run and manage the portfolio of real properties owned by the REITs.

Proliferation of REITs in the Singapore context:

- Due to the government's encouragement of growing the REITs industry in Singapore, the local tax laws were changed over the years in favour of REITs. Earnings of REITs (at least 90%) which are distributed to unit holders are not taxed at the corporate level, thereby encouraging investors to invest in REITs vis-a-vis other equity investments.
- As most of the REITs' income is distributed to unitholders each year, they do not have much retained earnings to support future growth or expansion. REITs will almost inevitably ask for fresh funds from unitholders via rights issues on a regular basis.

3.2.2 Objectives of Investing in REITs

Investors include holdings of REITs in their portfolios with the objectives of:

- obtaining regular income streams through the regular declaration of distributions by the REITs
- achieving capital gains when the prices of REITs rise as the underlying values of the properties appreciates over time
- providing diversification in an investment portfolio to reduce risks and enhance returns

- providing an alternative means to direct investment in real properties without commensurate risk, property management involvement, and large capital outlay

3.2.3 Factors to Consider When Investing in REITs

- The income streams from REITs investments and the yields achieved
- The underlying book values of REITs and the potential for capital appreciation
- The constant need for further capital fund raising by REITs to expand their businesses simply means that existing investors who are not prepared to invest further by taking up the rights issues of the REITs will have their shareholding diluted over time
- The state of the economy, especially with regard to the real estate market and the particular sector that the REITs are involved in

3.2.4 Classification, Merits and Demerits of REITs Investments

REITs can be classified by the types of real property owned and managed:

- Commercial REITs are those that own office space and buildings in their real estate investment portfolios
- Retail REITs invest mostly in retail properties such as retail spaces and shopping malls as part of their portfolios
- Hospitality REITs are those that own hotels, serviced apartments and residences, and related properties that cater to the hospitality business
- REITs that are related to the logistics industry hold warehouses, distribution centres and other related properties, while those of the industrial sector own factories and industrial buildings in their portfolios

The advantages of having REITs in an investment portfolio are as follows:

- The main advantage of a REIT investment is the relatively small capital outlay required compared with direct investment in a real property in a similar category.

- Professional management of the real estate portfolio takes away the burden of individual investors as the properties are well taken care of in terms of management, maintenance, and enhancement.
- With regular payouts of the REITs' earnings in the form of distribution per unit (DPU) to unit holders, investors seeking income objectives will be attracted to REITs.
- Another main draw of REITs is their potential for capital appreciation over time, especially in a period of rising property prices.
- Compared with direct real estate investments that need to be invested or divested as whole properties and thus are "lumpy", REITs offer investors a wide range of choices as to the size of their investment commitments. The liquidity of REITs investments whereby investors can readily transact further adds to their attractiveness as an asset class in an investment portfolio.
- Investments in REITs enable investors to diversify their investment portfolios. By adding this class of assets, investors can reduce an existing portfolio's overall risks while maintaining or enhancing the overall returns.

Some of the demerits of investing in REITs are as follows:

- The lack of control over the investment properties by individual investors as all control is now at the hands of the REITs management.
- As the REIT needs to distribute the bulk of its yearly earnings, there is often insufficient retained earnings to grow their business. As a result, there will be constant calls for capital increases through rights issues whenever there is a plan to develop new businesses or acquire other properties. If investors are unable to take up the rights or invest further, there will be further dilution of ownership for the existing shareholders of the REITs.
- REITs investors have no control or influence over management decisions, such as the acquisitions of properties, the level of gearing or the day-to-day management of the properties.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 12: Mutual Funds and Exchange-Traded Funds
Pages 511 - 512

Web-based Chapter 18: Real Estate and Other Tangible Investments at
www.pearsonmylabandmastering.com/global/myfinancelab
Pages 18-8 to 18-25

Additional Practice:

1. MyFinanceLab Study Plan 18.6 on REITS

Reflect

As investors of REITs receive a regular income, how should they treat or use the income received over a period of time? Should the amounts be re-invested elsewhere or be put back into the same or different REITs, or set aside to take up the potential rights issues subsequently? Reflect on whether an investor would make the same decisions if he were at different stages of his life-cycle of investing.

Activity 1

A short extract of an analyst's report on an equity investment is available online for students to evaluate before attending the Face-To-Face Seminar on Study Unit 2. Students are required to actively take part in the class discussion on the analyst's report.

Activity 2

Tutor Marked Assignment (TMA01), based on a case study analysis, takes up 40% of the total grade to be awarded and must be submitted by the due date.

Formative Assessment

1. Investing in equities is attractive for Singapore based investors as they can achieve the following objectives EXCEPT :
   a. Generate capital appreciation
   b. Hedge against inflation
   c. Offset capital losses against income tax
   d. Obtain a stream of incomes

2. Traditional security analysis usually involves a " top-down " approach in evaluating investment decisions. Such an approach begins with :
   a. a specific company's fundamental analysis, followed by the industry analysis and then the broad economic analysis
   b. the economic analysis as starting point, followed by the industry analysis and then the fundamental analysis of the specific company.
   c. neither economic nor industry analysis but with analyzing price movements of the company through use of charts and graphs
   d. concentrating only on analyzing in greater details the specific company's fundamentals and ignoring economic and industry analyses.

3. Investors invest in fixed income instruments such as SGD or USD denominated corporate or government bonds for the following reasons EXCEPT :
   a. capital appreciation
   b. income stream over the remaining duration of the bond
   c. diversification of an existing portfolio
   d. ensure certainty of returns

4. When making a decision on whether to invest in a fixed income instrument, an investor should consider

a. the fundamentals of the issuer of the instrument
b. the liquidity and depth of trading in the instrument
c. market conditions particularly the outlook for the economy and interest rate.
d. all of the above.

5. Which one of the following is NOT true of mutual fund investments ?
   a. Investors can opt for growth by investing in mutual funds that focus on capital appreciation rather than income
   b. Mutual funds management companies will charge management , custodial and sales and distribution fees which will be borne by investors.
   c. Investors who are invested in a specific mutual fund will have the right to choose the fund's portfolio manager.
   d. Mutual funds have professional managers and analysts to monitor and manage the portfolios on behalf of investors

6. Real Estate investment Trusts (REITS) are organized as closed end funds listed on the stock exchange that :
   a. will not ask for more fresh funds from investors via rights issues from time to time
   b. enable REITS investors to enjoy either capital appreciation or regular income stream but not both.
   c. specialize in real estate management and investments in properties such as retail malls, office buildings, industrial and logistic facilities and properties related to the hospitality business.
   d. allow individual REITS investors to make decisions on the REITS' level of gearing and on which properties to be acquired.

Solutions or Suggested Answers

Formative Assessment

1. Investing in equities is attractive for Singapore based investors as they can achieve the following objectives EXCEPT :

    a. Generate capital appreciation
    Incorrect. Generating capital appreciation over time is one of the main appeals of equity investments. Review Study Notes on Chapter 1, Topic 1: Characteristics of Equity Investments

    b. Hedge against inflation
    Incorrect. Investing in equities enable investors to hedge against inflation and rising prices. Review Study Notes on Chapter 1, Topic 1: Characteristics of Equity Investments

    c. Offset capital losses against income tax
    Correct. Offsetting of equity investment losses against income tax is not allowed under current tax rules.Hence investors would NOT have this objective in mind. Review Study Notes on Chapter 1, Topic 1: Characteristics of Equity Investments

    d. Obtain a stream of incomes
    Incorrect. Many equity investments do provide income streams in the form of dividends that are paid regularly. Review Study Notes on Chapter 1, Topic 1: Characteristics of Equity Investments

2. Traditional security analysis usually involves a " top-down " approach in evaluating investment decisions. Such an approach begins with :

    a. a specific company's fundamental analysis, followed by the industry analysis and then the broad economic analysis

Incorrect. The " top-down " approach involves analyzing the broad economic fundamentals as starting point, followed by the industry analysis and then the specific company's fundamentals being analyzed. Review Study Notes on Chapter 1, Topic 2: Fundamental Analysis in Equity Investments

b. the economic analysis as starting point, followed by the industry analysis and then the fundamental analysis of the specific company.
Correct. This is the approach adopted by the traditional top-down analysis of equity investing. Review Study Notes on Chapter 1, Topic 2: Fundamental Analysis in Equity Investments

c. neither economic nor industry analysis but with analyzing price movements of the company through use of charts and graphs
Incorrect. Price movement charts and graphs fall under the purview of technical analysis and NOT the traditional " top-down approach of fundamental analysis. Review Study Notes on Chapter 1, Topic 2: Fundamental Analysis in Equity Investments

d. concentrating only on analyzing in greater details the specific company's fundamentals and ignoring economic and industry analyses.
Incorrect. Economic and industry analyses are equally important in "top-down" approach as in the specific company's fundamental analysis. Review Study Notes on Chapter 1, Topic 2: Fundamental Analysis in Equity Investments

3. Investors invest in fixed income instruments such as SGD or USD denominated corporate or government bonds for the following reasons EXCEPT :
   a. capital appreciation
   Incorrect. Capital appreciation in bonds is a valid reason and happen when bond values go up as the interest rates go down. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

b. income stream over the remaining duration of the bond
Incorrect. A steady stream of income is one of the main reasons for investing in fixed income instruments. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

c. diversification of an existing portfolio
Incorrect. Instead of fully concentrating on equity investments, investors can diversify their portfolios to reduce risk. Diversification by including fixed income investments such as bonds in their holdings is a valid reason. Review Study Notes on Chapter 2, Topic 1 : Characteristics and Valuation

d. ensure certainty of returns
Correct. The returns whether in the form of capital appreciation or coupon income from the interest payout can never be certain in fixed income investments due to the inherent risks. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

4. When making a decision on whether to invest in a fixed income instrument, an investor should consider

a. the fundamentals of the issuer of the instrument
Incorrect. While the fundamentals of the issuer such as its cash flow and profitability are important, these are not the only considerations. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

b. the liquidity and depth of trading in the instrument
Incorrect. While the liquidity and depth of trading for the instrument are important, these are not the only considerations. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

c. market conditions particularly the outlook for the economy and interest rate.

Incorrect. It is incorrect because economic and interest rate outlook are not the only factors affecting the fixed income investor's decisions. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

d. all of the above.

Correct. This is the best answer as it includes all the factors for consideration. The fundamentals of the issuer, the liquidity and depth of trading as well as the economic and interest rate outlook are all important factors. Review Study Notes on Chapter 2, Topic 1: Characteristics and Valuation

5. Which one of the following is NOT true of mutual fund investments ?

a. Investors can opt for growth by investing in mutual funds that focus on capital appreciation rather than income

Incorrect. A mutual funds that has growth as its objective will focus on stocks that provide capital appreciation and not rely on income streams. Hence this statement is true. Review Study Notes on Chapter 3, Topic 1: Investing in Mutual Funds

b. Mutual funds management companies will charge management , custodial and sales and distribution fees which will be borne by investors.

Incorrect. True statement. As mutual funds charge fees for its services, the management, custodial and sales fees will ultimately be borne by the investors. Review Study Notes on Chapter 3, Topic 1: Investing in Mutual Funds

c. Investors who are invested in a specific mutual fund will have the right to choose the fund's portfolio manager.

Correct. The statement is NOT true as investors have no say over who the fund's portfolio manager should be. Review Study Notes on Chapter 3, Topic 1: Investing in Mutual Funds

d. Mutual funds have professional managers and analysts to monitor and manage the portfolios on behalf of investors
Incorrect. The statement is true as mutual fund companies employ professional managers and analysts to manage the portfolios. Review Study Notes on Chapter 3, Topic 1: Investing in Mutual Funds

6. Real Estate investment Trusts (REITS) are organized as closed end funds listed on the stock exchange that :

a. will not ask for more fresh funds from investors via rights issues from time to time
Incorrect. As almost all income is distributed, most REITS will need more capital from investors via rights issues from time to time in order to expand their business. Review Study Notes on Chapter 3, Topic 2: Investing in REITS

b. enable REITS investors to enjoy either capital appreciation or regular income stream but not both.
Incorrect. Investors are interested in REITS precisely because there is potential for both capital appreciation and income distribution. Review Study Notes on Chapter 3, Topic 2: Investing in REITS

c. specialize in real estate management and investments in properties such as retail malls, office buildings, industrial and logistic facilities and properties related to the hospitality business.
Correct. The statement is an accurate definition of REITS. Review Study Notes on Chapter 3, Topic 2: Investing in REITS

d. allow individual REITS investors to make decisions on the REITS' level of gearing and on which properties to be acquired.
Incorrect. The individual investors in REITS have no say over management matters such as the level of gearing or borrowing and which properties are to be acquired. Review Study Notes on Chapter 3, Topic 2: Investing in REITS

Study Unit 3

Foreign Currency, Alternative And Real Estate Investments

Learning Outcomes

By the end of this Study unit, you should be able to:

1. recognise the role of foreign currency investment and evaluate its suitability as an asset class in an investment portfolio
2. evaluate the characteristics, merits and demerits of options, futures and commodities as alternative investments, and explain the role of hedge funds
3. evaluate the characteristics of direct real estate investments and indirect real estate investments that cover equities and REITS, and recognise their relative merits and demerits

Chapter / Topic	**Learning Outcomes**
Chapter 1, Topic1 Foreign Currency Investments	At the end of this study topic, students will be able to: 1. identify alternatives to investing in local currency terms through foreign currency investments 2. describe the risk and return factors of foreign currency investments, and evaluate their role in an investment portfolio
Chapter 1, Topic 2 Alternative Investments - Options, Futures, Commodities and Hedge Funds	At the end of this study topic, students will be able to: 1. describe the derivative instruments available for investments such as options, futures and commodities, and discuss their relative merits and demerits in investment portfolios 2. Discuss the role of hedge funds and alternative investments as complements or alternatives to publicly traded securities such as equities and fixed income instruments

Chapter 2, Topic 1 Investing in Real Estates	At the end of this study topic, students will be able to: 1. describe the key features and considerations involved in real estate valuation and investing 2. evaluate the relative merits and demerits of real property investments
Chapter 2, Topic 2 Indirect Real Estate Investments	At the end of this study topic, students will be able to: 1. discuss the alternatives to investing in real properties such as equity investments in real estate companies which are publicly listed, and in REITs

Overview

Chapter 1 gives students an overview of the role of foreign currency in the increasingly interconnected global investment environment.

Chapter 2 equips students with a basic understanding of real estate investing by analysing the characteristics and investment objectives in such undertakings. Both real property (direct) and alternative (indirect) investment strategies, such as equity holdings in publicly listed real estate companies and REITS, are evaluated based on their merits and demerits for inclusion in an investment portfolio.

Chapter 1: Foreign Currency and Alternative Investments

The characteristics of foreign currency investments, options, futures and commodities as alternative investment instruments are discussed in this chapter. Students are given a firm understanding of the role of hedge funds as alternative investments.

1.1 Foreign Currency Investments

Lesson Recording

Foreign Currency Investments

This video provides an overview of the foreign currency investments, their various forms, risks and returns, with illustrations to show their workings.

1.1.1 Investing in Foreign Currency Other than a Local or Base Currency

Objectives for foreign currency investments include:

- the need for returns in the form of interest income (due to the attractive yield of foreign currency), and potential for capital appreciation (as the foreign currency may rise in value against the local currency)
- diversification and asset allocation considerations that reduce risk, especially in periods of economic uncertainties and/or political turmoil that impact on different countries

When investing in a foreign currency denominated security, the forms of such investments can be:

- foreign currency deposits (such as USD, AUD and GBP)

- equities denominated and traded in a foreign currency (such as Apple and IBM stocks in the US trading in USD; BP and HSBC stocks in the UK trading in GBP)
- fixed income instruments such as bonds denominated, and issued in the respective foreign currencies by corporations, institutions, government related bodies and sovereigns
- other instruments/products, such as mutual funds, options, futures, commodities, hedge funds and real estate investments, etc., which are denominated in the foreign currencies

The risk factors to consider when investing in a foreign currency denominated investment are as listed:

- Volatility of the foreign currency exchange rate movements due to economic factors such as interest rates, levels of economic activities and unemployment, the prevailing debt levels, etc.
- Geo-political issues that impact on foreign exchange movements, including government policies on foreign exchange restrictions and control, central bank policies on interest rates, and availability of credit in the country

1.1.2 Simple Illustration of Foreign Currency Deposit

Below is an illustration of the expected returns on a foreign currency deposit as an investment choice.

- Assuming a Singapore-based investor has a principal sum of 130,000 Singapore Dollars (SGD 130,000) available for investing. He uses this amount of money to buy 100,000 Australian Dollars (AUD 100,000) at the prevailing exchange rate of AUD 1 = SGD 1.30.
- The amount of AUD 100,000 is then placed on fixed deposit for six (6) months at 5% p.a. with interest income of AUD 2,500 to be received upon maturity. At the end of the six-month period, he will receive AUD 102,500 that constitutes the principal

amount of AUD 100,000; and the interest earned amounting to AUD 2,500 (5% X AUD 100,000 X 6/12).

- Compare this with the prevailing local interest rate of say, 1 % p.a. for SGD deposits. If he were to make the same placement of a six-month deposit with a local bank using the principal sum of SGD 130,000, he will only get SGD 650 (1.0% X SGD 130,000 X 6/12) in interest or a total of SGD 130,650 at the end of the placeme

Consider the following factors when analysing risk factors of foreign currency investments:

- Assuming six (6) months later, the Australian economy improved tremendously due to the boom in the export of commodities, of which Australia is a major producer. The AUD has now appreciated to AUD 1 = SGD 1.40 and the foreign currency deposit of AUD 102,500 will now be worth SGD 143,500 (AUD 102,500 X 1.40). Compared with our investor's principal amount of SGD 130,000, this will result in total gains of SGD 13,500 from interest income and capital appreciation. This gain compares very favourably with the SGD 650 in interest he would have received had he placed his principal sum in a local bank.
- If, on the other hand, there was a cut in the Australian interest rate due to an imminent recession, resulting from a slump in Australian exports, the exchange rate of the Australian currency could decline to AUD 1 = SGD 1.20 six (6) months later. In such a situation, the deposit of AUD 102,500 upon conversion back to SGD will now become SGD 123,000 (AUD 102,500 X 1.20). Comparing this with his original principal of SGD 130,000, the investor suffers an imminent foreign exchange loss of SGD 7,000 (capital loss) and income foregone of SGD 650 (income loss) because of his foray into foreign currency investment.
- Investing in foreign currency can result in either exchange gains or losses depending on the degree of volatility and the direction of the exchange rate movements between currencies.

1.1.3 Role of Foreign Currencies in an Investment Portfolio

Foreign currency considerations will always play a role even if an investor chooses not to invest outside of his home based currency.

Take for instance local-based companies such as Singapore Telecommunications Ltd. (SingTel) and Singapore Airlines Ltd. (SIA). The profitability of SingTel and hence its share price is affected by the profitability of its major subsidiary SingTel Optus Pty. Ltd. which operates in Australia. Investors should take into account the effects of the Australian currency exchange rate and movements when investing in SingTel shares. Similarly, SIA receives its revenues worldwide in different currencies (such as SGD, USD, AUD, EUR and GBP) while paying the bulk of its fuel in USD and administrative expenses in SGD. Currency exchange movements definitely have a major impact on its profitability.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 2: Securities Markets and Transactions
Pages 79 – 83

Chapter 6: Common Stocks
Pages 268 – 272

Other online materials from:
www.wikipedia.org
www.investopedia.com
internationalinvest.about.com

Additional Practice:

1. MyFinanceLab Study Plan 2.4 on Globalisation of Securities Markets

Reflect

Launched in 2009 and headquartered in Natal, Brazil, a company that claims to be a specialist in the construction of investor-funded social housing for Brazilian families has been soliciting funds from investors around the world. In Singapore, investors are enticed to invest in the company's real estate projects, investing millions of SGD with the promise of yearly returns of 15 – 20% p.a. and the paying back of principals upon the projects' completion over a short time span of 2-3 years.

Presumably, the funds, once invested by local investors, would be repatriated to Brazil for investment in the projects. The funds would subsequently be paid back to investors together with the returns months later upon the projects' completion and being sold to Brazilians. For added publicity and authenticity, selected investors have been flown to the projects' construction sites in Brazil.

Given that you have available surplus funds currently placed with banks which are getting very low interest rates (0.25 % p.a.), reflect on whether you would "invest" in such a scheme with the written "guarantee" of principal and returns by the firm.

As local investors place SGD with the firm and expect to get the returns and principals back in SGD, are they aware of the high risk associated with such foreign currency exposure given the past volatility of the Brazilian currency?

1.2 Alternative Investments – Options, Futures, Commodities and Hedge Funds

Lesson Recording

Alternative Investments -- Options, Futures, Commodities and Hedge Funds

This video provides an overview of alternative investments covering options, futures, commodities (with gold as illustration), the role of hedge funds, and evaluates their salient features.

1.2.1 Role of Options as Derivative Instruments

Options as a derivative instrument have the following features:

- Options are contractual instruments in which a buyer has the right to exercise his purchase or sale of an underlying asset at a predetermined price called the "strike price" by paying an option premium to the counter party.
- Similarly, a seller of an option is obligated to buy or sell the underlying financial asset, depending on the particular type of contract being entered into.
- To understand its workings, an illustration of an option (financial derivative instrument) to buy a piece of land (underlying asset) is used. Assume that a seller of the land grants an option valid for three (3) months to an interested buyer at the agreed price of SGD 1 million (strike price). In granting the option to the buyer, the seller will collect an option fee (option premium) which amounts to SGD 50,000 from the buyer.
- Due to government's announcement that a new MRT station will be built near the piece of land, the market price of that land immediately increases to SGD 2 million. The holder of the option would have made a paper gain of SGD 1 million since he

could now exercise the option, pay for the land at SGD 1 million, and then resell it for SGD 2 million for a profit of SGD 1 million all within the three (3) months period.

- Note that the option becomes very valuable within a very short time span. Instead of exercising the right to buy the land from the seller, the original buyer could sell the option in the market to another buyer for say, SGD 900,000 since anyone who owns the option can now acquire the land at SGD 1 million, sell it for SGD 2 million and still make SGD 100,000 after paying SGD 900,000 for the option.
- Even though the value of the land (underlying asset) has doubled (2x) in value, for a relatively small outlay, the option investor actually made more than 18 folds (18x) (based on SGD 50,000 investment giving rise to SGD 900,000 in profits).
- If, on the other hand, the land is now being compulsorily acquired by the government for road widening, its price will drop drastically to SGD 400,000 from SGD 1 million. In this situation, the option is now worthless as no rational investor would want to buy it at whatever amount and still pay SGD 1 million to the seller of the land. The original investor who obtained the option for SGD 50,000 would have lost the entire investment as he will no longer exercise it and pay SGD 1 million to the seller when he could buy it for SGD 400,000 at current market value.
- The important features that option investors need to consider are:
    - the expiry period (the longer the expiry period, the more the investor has to pay in terms of premium),
    - the implied leveraging factor (a smaller outlay used for investing in an underlying asset that is much higher in value), and
    - the potential of full losses (high risk level) if the option is not exercised before its expiry date.
- Options trading is considered to be a form of trading in derivative instruments, as it indirectly involves the underlying asset of the option contract.
- In the equity market, rights and warrants are considered as forms of option trading.

1.2.2 Role of Futures as Derivative Instruments

To understand the workings of the futures market, investors need to consider the following:

- Futures are contractual commitments to deliver a specified amount of an item (usually a financial asset, instrument or commodity) at a predetermined price at a specified time in the future. Sellers of futures commit to deliver while buyers of futures commit to take the delivery.
- However, compared with cash or physical markets, futures trading usually involves no physical delivery of the underlying asset, instrument or commodity but requires full settlement through offsetting in the form of cash payment at the expiration of the contract.
- As an illustration of the workings of the futures market, assume that a farmer has planted wheat that can be harvested in three (3) months' time. Based on the current price of wheat at USD 50 per bushel in the futures market for delivery in three (3) months' time, he is prepared to enter into a futures contract to sell the wheat at that price after taking into account his cost of production.
- Assume also that by the time the wheat is ready for harvesting, the price dropped drastically to USD 30 per bushel due to oversupply conditions prevailing in the global market. As he had sold off the wheat at USD 50 he would now need to buy back at USD 30, to settle the contract upon its maturity, thereby profiting USD 20 per bushel.
- With the profit of USD 20 from the futures contract, and since he is able to sell his harvested stock of wheat in the physical market at USD 30, the net income to the farmer is exactly USD 50 which is the amount that he was willing to sell at in the beginning of the wheat growing season.
- If, on the other hand, the price of wheat went up to USD 80 per bushel in three (3) months' time due to severe shortage from weather disruption elsewhere, the farmer would have lost USD 30 in the futures contract, due to the difference of USD 50 in price he had sold three (3) months back against the current price of USD 80 that he had to buy back at in order to settle the outstanding contract.

- However, in the physical market, the farmer would still be able to sell the wheat at USD 80. Coupled with the USD 30 loss from his futures contract, his net income is still USD 50 which is exactly the amount that he had wanted to obtain three (3) months ago.
- The above example shows an example of a perfect hedge – the farmer has actual physical stocks of a commodity that he wants to sell and delivers at a price that can be pre-determined. By using the futures market, the farmer can reduce the uncertainties in the price he will get for his produce by "locking in" the price at the beginning.
- Besides the producers of the commodity, futures markets need other market participants such as traders, producers and manufacturers to source for their supplies and speculators to provide liquidity to the markets.
- Futures trading can be risky for those players whose objectives are not hedging as theoretically there is no limit to the losses that can occur.
- The types of futures traded include grains, livestock and meat, food, fibres, and other commodities such as metals and petroleum products. Increasingly, futures markets are trading financial products with underlying assets consisting of interest rates, foreign currencies and stock indices

The major difference between options and futures is summarised as follows:

Options are obligatory instruments (need not be exercised by buyers) whereas futures contracts require performance (fulfilling of the contractual requirements) through cash settlement.

1.2.3 Merits and Demerits of Options and Futures as Investment Alternatives:

- The use of leveraging factors in such investment alternatives (since the amount of investment is relatively small) can result in disproportionately large amounts of underlying assets being invested. Inevitably increasing the use of leverage will increase the risks associated with such investments.

- These instruments are often used for diversification or hedging purposes by investors, as the returns of such instruments have relatively low correlation with the returns for traditional asset classes, such as equities and fixed income instruments.
- The limited time or life span of these instruments adds to their price volatility and thus increases the risk level.
- Investments in options and futures require greater understanding of the technical complexities of the strategies being deployed.

1.2.4 Role of Commodities such as Gold as an Investment Class

The main characteristics of physical commodities (such as gold and silver) as an alternative investment class are as follows:

- Used as storage of value in investments
- Used as hedge against inflation, since prices of commodities can rise faster than inflation rates during times of uncertainties
- Used as an alternative asset class that has low correlation with the other asset classes such as equities, fixed income and other investment instruments; investments in commodities for diversification purposes and to enhance returns in periods of low returns for equities and fixed income instruments
- Investments in commodities have potential for capital appreciation (subject to the risks involved) even though there is usually little or no income being generated from such investments.

Factors affecting commodities as an investment class in a portfolio are:

- High degree of volatility and risk as their prices can fluctuate widely due to the vagaries of nature that affect supply as well as geo-political risks associated with the mining of commodities

- There is no income being generated from such investments
- There is greater reliance on capital appreciation for achieving investment returns
- There is a wide array of commodities and markets to invest in. Examples of commodities being traded include farming produce such as cotton, wheat, corn, palm oil; and metals such as gold, silver, platinum, copper, tin, etc.

Merits and demerits of investing in gold as a commodity:

- Greater transparency in gold market trading
- No interest income is generated when investing in physical gold
- Often used as hedge against inflation or against political and economic uncertainties and disruptions
- Various forms of gold investment alternatives available in the market, such as gold certificates, coins and bullion, gold futures and gold mining stocks (equities)
- Potential for capital appreciation commensurate with the accompanying risk factors

1.2.5 Hedge Funds as an Alternative Investment Class

Hedge funds pool together the financial resources of individual, corporate and institutional investors to trade mainly in derivative securities with the objective of generating desired returns.

The main features of hedge funds are as follows:

- Hedge funds operate as pooled investment vehicles managed by professional hedge fund managers and traders
- Since hedge funds can be both long and/or short on the financial instruments they are invested in, there is often little correlation with the performance of traditional investment classes, such as equity and fixed income instruments; i.e. the performance of hedge funds can be independent of the performance of the

stock and bond markets. Hedge fund investments thus become attractive due to the returns they can generate when traditional asset classes underperform in periods of economic downturn and uncertainty

- There is a greater tendency for speculation when hedge fund managers frequently trade derivative instruments
- There is also greater use of leveraging in the execution of strategies when deciding to invest in hedge funds
- Certain hedge fund managers may use mathematical models in their investment and trading strategies. Others manage their hedge funds based on trading macro-economic factors, merger and acquisition situations, and trends in the prices of the underlying assets

When considering the merits and demerits of hedge funds as an alternative investment class, evaluate the following aspects:

- Lack of transparency in some of the hedge fund managers' operations and trading strategies
- Minimum size of funds required for participation in the hedge funds by investors may be substantial and beyond the individual investors
- Returns can be volatile in hedge funds; hence the need to carefully evaluate the risk reward factors in such investments
- Liquidity in hedge fund investments can be considered a major hurdle, as hedge fund managers usually impose minimum lock-in periods or set limits on redemption to limit disruptions to the trading strategies as part of the conditions of such investments

In conclusion, as an alternative investment to the traditional asset classes of equity and fixed income, hedge funds can provide a hassle-free strategy for individual investors to diversify their investment portfolios.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Chapter 14: Options: Puts and Calls

Pages 580 – 587

Pages 609 – 612

Chapter 15: Futures Markets and Securities

Pages 622 – 625

Pages 628 – 634

WEB Chapter 18: Real Estate and Other Tangible Investments

Pages 18-26 to 18-31

Chapter 12: Mutual Funds and Exchange-traded Funds

Pages 512 – 513

Other online materials from:

www.wikipedia.org

www.investopedia.com

www.beginnersinvest.about.com

internationalinvest.about.com/

www.hedgeweek.com

Additional Practice:

1. MyFinanceLab Study Plan 14.1 on Options
2. MyFinanceLab Study Plan 15.1 on Futures
3. MyFinanceLab Study Plan 15.3 on Commodities
4. MyFinanceLab Study Plan 18.6 on Precious Metals

Chapter 2: Real Estate Investments

Students are given a firm understanding of the basic characteristics and considerations of real estate investments which involve real properties, alternatives such as equity investments in real estate companies, and REITs. The relative merits and demerits of such investments in an investment portfolio are discussed.

2.1 Investing in Real Estates

2.1.1 Basic Features of Real Estate Investments

What is real estate investment? It refers to investments in real property such as land, buildings, and related financial claims and rights resulting from such ownership.

The main characteristics of real estate investments are as follows:

- Real properties are immobile; the important points of consideration are location, type of property, income being generated, tenure of the ownership, improvements and conditions of each real estate investment proposal.
- Gearing or leveraging is often used in most property investments as investors need loans or mortgages to fund the purchases since down payments or capital outlays form only a small portion of the total acquisition costs. Interest rate assumptions and the level of gearing are therefore critical to determine the suitability of such investments, as very often investors use cash flow from income streams (rentals) to pay off bank mortgages (principal and interest servicing) over the lifetime of the investments.
- The real property available for investment consists of many different types such as residential premises, retail spaces, commercial offices, warehouses, factory spaces, hotels, serviced apartments, etc. Each type of real property has its own peculiar characteristics that investors need to carefully evaluate.
- The objectives of investing in real estate include capital appreciation as well as income generation over a given time frame.

- One major constraint in real property investment is the lack of liquidity – the difficulty in finding a buyer willing to pay the price asked.
- Time constraint is another factor due to the drawn-out nature of such transactions – legal documentation and the process for completing a successful transaction that involves a property usually takes time.
- Investments in real estate tend to be "lumpy" as they cannot be broken down into smaller parts or pieces either for investment or divestment purposes; i.e., the property needs to be invested in total, very much unlike equity or fixed income investments.

In the framework for real estate investment analysis (see Figure 18.1, web-based Chapter 18: Real Estate and Other Tangible Investments, in Fundamentals of Investing by Smart, Gitman and Joehnk, 2017 edition), the following steps are taken when considering real estate proposals:

- Set investor objectives in terms of investment characteristics, constraints, goals and purposes.
- Analyse the features of the property such as its physical nature, property rights, time horizon, geographical area and location.
- Collect data on the determinants of value, such as demand and supply factors, cash flow projections and tax considerations.
- Perform valuation and investment analysis.
- Synthesise and interpret the results of your analysis before making a decision on the proposal.

2.1.2 Determinants of Valuation in Real Estate Investments

A valuation process is needed to help investors make informed decisions in real estate investments.

There are three approaches to the valuation process:

a. Cost approach to property valuation
   - This valuation approach is used for newer properties, as prices for land and buildings can be calculated, assessed or obtained.
   - For older properties, one needs to know the replacement costs as well as the estimation of the physical and functional depreciation or deterioration in value before arriving at the value of the property
   - Cost approach can be suitable for checking against a price estimate of a property

b. Comparative sales approach
   - This valuation approach is based on the sales prices and other relevant data of similar properties that were sold at about the same time as the subject property
   - The drawback of such an approach is that no two properties are similar. Each property is unique and needs to be valued differently

c. Income approach to valuation
   - With this approach, the property is valued based on the present value of all the future income streams that the property can generate. The income used in such calculation is based on the net operating income after subtracting all foreseeable expenses
   - The current value of the future income stream is then divided by the market capitalisation rate to determine the value of the property
   - Market capitalisation rate is simply the rate currently required by investors using recent market sales figures of similar properties

Valuation by experts as an alternative approach:

- As property valuation is complex and involves many technical details, valuation experts are engaged for valuation advice
- More than one (1) professional appraiser can be engaged to determine the valuation of the investment property, to arrive at a range of values.

Successful investment in real estate very much involve determining what the future prospects of ownership will bring, given the current situation. Investing in real estate for capital appreciation and for generating recurrent income are affected by a myriad of factors such as underlying economic performance, government policies, taxation and laws that affect ownership and the role of foreign investors.

2.1.3 Cross Border Real Estate Investments and Foreign Currency Considerations

Cross border real estate investments are becoming increasingly common, both by institutional and individual investors, as they seek to achieve higher returns than what they could achieve locally for their investment funds. Investors will need to carefully evaluate the role of foreign currencies in order to determine the potential risks and returns of such forays into real estate investments across borders, because foreign exchange rate movements can be volatile during times of uncertain governmental policies and economic vagaries.

Besides foreign currency considerations, investing in foreign real estate will involve a lot more risk considerations due to the myriad of regulations, rules and tax regimes that can govern ownership in an unfamiliar territory.

2.2 Indirect Real Estate Investments

2.2.1 Alternatives to Real Property Investments

Instead of gaining direct ownership of a real property, investors can consider alternatives such as equity investments in publicly-listed real estate developers and companies that own and manage real estate as well as in REITs.

Note the following when undertaking equity investments in real estate companies:

- Analysing an equity investment in a real estate company is the same as analysing an equity investment in any other business or industry (Please refer to Study Unit 2, Chapter 1 Topic 1 and Topic 2 on Equity Investments)
- Factors to consider when investing in real estate companies are: their cash flow analysis of income and expenses, profitability, price earnings ratios, book values, types and quality of the assets owned, level of gearing and indebtedness
- Different types of real estate companies include those that specialise in residential, commercial office, retail, industrial, hotel and hospitality properties
- Diversification concept applies when investing in equities of real estate companies

REITs as an investment product was discussed in detail in Study Unit 2, Chapter 3 Topic 2 – Investing in REITs.

To recap, the main features of investing in REITs are as follows:

- REITs are closed-end funds managed by professionals who specialise in real estate and related property investments
- Almost all income (at least 90%) attributable to a REIT has to be distributed to investors, therefore less earnings are retained to fund future business expansion or acquisition of properties. Calls for additional capital by the REIT through rights issues can be regular and common
- Advantages of investing through REITs include professional management, steady income stream through regular income distributions, potential for capital appreciation through growth in value of the REITs' underlying properties

2.2.2 Compare and Contrast the Three Forms of Real Estate Investments

Use liquidity, leveraging, risk and return analysis when comparing the forms of real estate investments:

- In terms of liquidity, investment in a real property is considered the most illiquid. Real property investment is considered to be lumpy, unlike direct investments in equities and REITs where the investment or divestment can easily be broken down into smaller units as the investor sees fit in a ready marketplace through the stock exchange.

- Leveraging real property investment is usually done through gearing or borrowing to finance the acquisition of the asset due to the relatively larger size of such direct real estate investments. In contrast, REITs and equity investments of real estate companies require investment outlays which are much smaller and do not need leveraging or borrowing unless one chooses to.
- Under risk and return analysis, direct real property investments have the potential for greater risk return characteristics compared to equity investment in real estate companies or REITs. This is due to the relatively larger size and lumpiness of such investments, as well as the use of the leverage factor when investing.
- In terms of diversification, a single investment in a real property can hardly be considered as being diversified whereas REITs and investments in different equities of listed real estate companies offer better diversification opportunities.
- With direct ownership, an investor has control over the real property whereas under equity or REITs investment, the control is handed over to the respective management.

Read

You should now read:

Smart, Gitman and Joehnk, *Fundamentals of Investing*, 2017

Web-based Chapter 18: Real Estate and Other Tangible Investments found at www.pearsonmylabandmastering.com/global/myfinancelab

Pages 18-1 to 18-10
Pages 18-15 to 18-23
(See Figure 18.1 on Framework for Real Estate Investment Analysis)
Pages 18-23 to 18-25

Chapter 12 Mutual Funds and Exchange-Traded Funds
Page 512

Other online materials from:
internationalinvest.about.com
www.realestate.about.com
www.propertyguru.com.sg

Additional Practice:

1. MyFinanceLab Study Plan 18.1 on Real Estate Investments
2. MyFinanceLab Study Plan 18.2 on Approaches to Appraising Real Estate
3. MyFinanceLab Study Plan 18.5 on REITs

Reflect

During the property boom in the early 2010s, developers in Singapore were building tens of thousands of so called shoe-box units – single bedroom apartments of less than 500 square feet in size – to meet investors' pent up demand. Various reasons were given by real estate experts for the surge in demand and that included their affordability (since most units cost below SGD 1 million), the ease of getting loans, the subsequent prevailing high rental demand, ownership pride, and bank deposits that yielded very low rates of returns, etc.

As an investor, would you or would you not be interested in such a property investment? What would be your reasons?

Activity 1

Tutor Marked Assignment (TMA02), comprising a case study with 40% weighting of the total grade, must be completed by all students.

Formative Assessment

1. Which of the following is NOT an approach used by expert valuers in their valuations of properties for real estate investors ?
   a. Comparative sales approach to valuation
   b. Historical cost approach to valuation
   c. Income approach to valuation
   d. Availability of funding approach

2. The following factors are often cited as disadvantages of investing in real properties when compared with alternative forms of real estate investments such as REITS and equity investments in real estate companies EXCEPT :
   a. Real property investment is lumpy unlike equity or REITS investment where investors can choose to sell only part of their equity or REITS holdings.
   b. With direct ownership of the real property, an investor will have control whereas in REITS or equity investments such control have been relegated by the investor
   c. Gearing is almost always needed when investing in real property compared with REITS or equity investments where the outlay can be lesser.
   d. long settlement period is an issue as the transaction cycle is much longer when compared with exchange traded REITS or equity investments.

3. An investor whose base currency is SGD decides to make an investment. Which of the following instrument or product should he choose to avoid the vagaries and uncertainties associated with foreign currency investments ?
   a. A corporate bond denominated in SGD paying 5 % coupon issued by a foreign entity such as ABN-AMRO Bank.
   b. Placement of AUD 100,000 on a 1 week fixed deposit a branch of OCBC Bank in Singapore

c. A USD 300 million bond issued by Keppel Corporation Ltd., a Singapore based company that pays 4.5 % coupon

d. Purchase of 5,000 MAYBANK shares currently traded on the Kuala Lumpur Stock Exchange

4. Which one of the following statements is FALSE ?

a. A futures contract is a contractual commitment to deliver a specified quantity of an item which is usually a commodity or financial asset at a pre-determined price at a specific time in the future.

b. Hedge funds as an alternative investment class pool together the financial resources of many investors to invest and trade mainly in derivatives securities to generate the desired investment returns.

c. The disadvantages of hedge investments include the lack of transparency in their operations and large fund sizes being accepted for investment.

d. Gold as a commodity investment cannot be considered as a hedge against inflation but has its appeal in its ability to generate income

Solutions or Suggested Answers

Formative Assessment

1. Which of the following is NOT an approach used by expert valuers in their valuations of properties for real estate investors ?

   a. Comparative sales approach to valuation
      Incorrect. Comparative sales approach which looks at transacted prices of similar properties is one way of arriving at valuation for real properties. Review Study Notes on Chapter 1, Topic 1: Investing in Real Estates

   b. Historical cost approach to valuation
      Incorrect. Analyzing the historical cost of the land and building is another way of arriving at valuation if such information is available. Review Study Notes on Chapter 1, Topic 1: Investing in Real Estates

   c. Income approach to valuation
      Incorrect. Such valuation is based on calculating the present value of future streams of income to be generated from the ownership of the property. Used together with an appropriate market capitalization rate, the property can then be valued. Review Study Notes on Chapter 1, Topic 1: Investing in Real Estates

   d. Availability of funding approach
      Correct. Professional valuers do not use the availability of funding or cost of funding as the main considerations in their valuation process. Review Study Notes on Chapter 1, Topic 1: Investing in Real Estates

2. The following factors are often cited as disadvantages of investing in real properties when compared with alternative forms of real estate investments such as REITS and equity investments in real estate companies EXCEPT :

a. Real property investment is lumpy unlike equity or REITS investment where investors can choose to sell only part of their equity or REITS holdings.
Incorrect. Real estate investment is often lumpy and cannot be easily broken up into smaller pieces or parts for divestment. Hence this is an often cited disadvantage. Review Study Notes on Chapter 1, Topic 2: Indirect Real Estate Investments

b. With direct ownership of the real property, an investor will have control whereas in REITS or equity investments such control have been relegated by the investor
Correct. In fact this is one of the advantage of direct ownership in a real property – direct control over the property. Review Study Notes on Chapter 1, Topic 2: Indirect Real Estate Investments

c. Gearing is almost always needed when investing in real property compared with REITS or equity investments where the outlay can be lesser.
Incorrect. Gearing or borrowing to fund real property investments is often needed as the total outlay can be substantial. Hence the disadvantage of such investments when compared with REITS or equity investments where the outlay can be much smaller. Review Study Notes on Chapter 1, Topic 2: Indirect Real Estate Investments

d. long settlement period is an issue as the transaction cycle is much longer when compared with exchange traded REITS or equity investments.
Incorrect. The long settlement cycle for real estate deals is a disadvantage as completion can take months whereas transactions over the stock exchange takes only a couple of days for settlement. Review Study Notes on Chapter 1, Topic 2: Indirect Real Estate Investments

3. An investor whose base currency is SGD decides to make an investment. Which of the following instrument or product should he choose to avoid the vagaries and uncertainties associated with foreign currency investments ?

a. A corporate bond denominated in SGD paying 5 % coupon issued by a foreign entity such as ABN-AMRO Bank.
Correct. The issuer is a foreign entity but the fixed income instrument is denominated and payable in SGD which is the investor's base currency. Hence there is no direct foreign currency exposure for the investor. Review Study Notes on Chapter 2, Topic 1: Foreign Currency Investments

b. Placement of AUD 100,000 on a 1 week fixed deposit a branch of OCBC Bank in Singapore
Incorrect. Placing foreign currency deposit certainly involves risk as the investor is exposed to the vagaries of the AUD's fluctuations even for a relatively short period of 1 week. Where the deposit is held is also irrelevant. Review Study Notes on Chapter 2, Topic 1: Foreign Currency Investments

c. A USD 300 million bond issued by Keppel Corporation Ltd., a Singapore based company that pays 4.5 % coupon
Incorrect. This product definitely involves foreign currency investment as the outlay is in USD and the investor will probably have to convert his existing SGD into USD should he decide to invest. Review Study Notes on Chapter 2, Topic 1: Foreign Currency Investments

d. Purchase of 5,000 MAYBANK shares currently traded on the Kuala Lumpur Stock Exchange
Incorrect. Buying foreign shares denominated in MYR certainly involves foreign currency exposure and risks. Review Study Notes on Chapter 2, Topic 1: Foreign Currency Investments

4. Which one of the following statements is FALSE ?

a. A futures contract is a contractual commitment to deliver a specified quantity of an item which is usually a commodity or financial asset at a pre-determined price at a specific time in the future.

Incorrect. This is the correct definition of a futures contract. Review Study Notes on Chapter 2, Topic 2: Alternative Investments – Options, Futures Commodities and Hedge Funds

b. Hedge funds as an alternative investment class pool together the financial resources of many investors to invest and trade mainly in derivatives securities to generate the desired investment returns.
Incorrect. This is the correct role of the hedge fund managers as mentioned in the statement. Review Study Notes on Chapter 2, Topic 2: Alternative Investments – Options, Futures, Commodities and Hedge Funds

c. The disadvantages of hedge investments include the lack of transparency in their operations and large fund sizes being accepted for investment.
Incorrect. These are 2 of the disadvantages of hedge fund investments. Other disadvantages include the lack of liquidity and long gestation period required by the hedge fund manager. Review Study Notes on Chapter 2, Topic 2: Alternative Investments – Options, Futures, Commodities and hedge Funds

d. Gold as a commodity investment cannot be considered as a hedge against inflation but has its appeal in its ability to generate income
Correct. Part of the statement is FALSE as Gold is a hedge against inflation while there is no income generated from gold ownership or investment. Review Study Notes on Chapter 2, Topic 2: Alternative Investments – Options, Futures, Commodities and Hedge Funds