EXAMINATION STUDY GUIDE:
REGULATIONS (MALAYSIAN FUTURES AND OPTIONS)
(MODULE 1)

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UPDATES FOR TOPIC 1
IN RELATION TO CONTRACTS FOR DIFFERENCE (CFD)
(As at May 2018)

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(This document consist of 43 pages including the cover page)

Topic 1: Overview of Derivatives Markets

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Overview

Introduction

This topic gives you an overview of derivatives and looks specifically at the Malaysian derivatives market. As you will learn, the development of the Malaysian derivatives industry is part of a global trend of emerging derivatives markets. In Malaysia, the introduction of derivatives is even more significant as it is closely linked to the process of industrial development. Malaysia's strong economic growth and developing capital markets has spurred the need for risk management facilities that derivatives provide.

In this topic, we examine the types of derivatives available and the methods in which they are traded. We look at the structure of the Malaysian markets and consider the importance of derivatives to Malaysia's capital market development, as well as the various participants in the industry.

Topic objectives

At the end of this topic, you should be able to:

- give reasons for the evolution and existence of derivatives markets
- distinguish between futures, options and contract for difference
- explain the significance of the derivatives market to the development of the Malaysian capital market
- explain on exchange-traded derivatives versus over-the-counter derivatives
- describe the role and functions of the Bursa Malaysia Derivatives Berhad
- describe the role and functions of the clearing house
- describe the different types of market intermediaries
- distinguish between the various users of the derivatives market — hedgers, speculators and arbitrageurs
- outline the regulatory structure of the derivatives market

1 What are Derivatives?

The word *derivatives* conjures up many different images for people who are not involved in the finance industry. Perhaps the most common view is that derivatives, such as futures and options, are new products and that investing in them primarily involves speculation. However, as this first section will show, derivatives are not new, nor is speculation for profit their primary purpose.

1.1 Definition

Derivatives are financial instruments whose value is *derived* from an underlying physical commodity or financial instrument. As such, their price is derived from the price of the instrument on which they are based — crude palm oil futures are based on the price of palm oil traded in the commodities market, while stock index options are based on the Kuala Lumpur Composite Index.

Derivative products have a very long history. The earliest derivatives were based on commodities — there are records of forward contracts on olive presses in Greece in the sixth century BC, and of forward contracts on rice crops in 18th century Japan. Options on equity stocks were available on the London Stock Exchange more than a century ago.

However, the most exciting growth period for derivatives has been the last 30 years. The use of derivatives to control financial risk exploded in the early 1970s in response to the increased risk in financial markets resulting from rising inflation, increased interest rate volatility, the floating of exchange rates, and the oil price shocks. The first financial derivatives contract offered by an exchange was a currency futures contract, offered on the Chicago Mercantile Exchange in 1972. The first interest rate futures contract was offered on the Chicago Board of Trade in 1975. The world's first formalised options exchange, the Chicago Board Options Exchange, was opened in 1973.

Financial derivatives based on the prices of securities, currency values and interest rates are now widely available in many countries, including Malaysia where stock index futures and interest rate futures are now well established.

Contracts for Difference (CFD) is a leveraged derivatives product that tracks the price movement of an underlying instrument and CFDs can be exchange traded or traded over-the-counter. CFDs emerged in the 1970s, and were developed for institutions to cost-effectively attain equity exposure. They were first offered to private clients in the United Kingdom in the late 1990s and have since rapidly grown as a trading and hedging tool in Australia, parts of Europe and Asia, as well as in Canada..

The world's three largest CFD trading hubs are currently London, Australia, and Europe. Some CFD providers, depending on the jurisdiction, also offer futures, OTC spot FX options, as well as, other products deemed more speculative and less regulated, such as spread-betting and binary options.

1.2 Purpose of Derivatives

Derivatives provide an avenue for market players such as producers of commodity products, traders of financial products, who wish to avoid uncertainties or adverse price fluctuations of the underlying market. The derivatives market brings buyers and sellers together in one place, where, through their brokers, they agree on a price at which those commodities and financial instruments will change hands at given future dates, thereby limiting their exposure to price change. Thus, the primary purpose of derivatives is to *manage price risk*.

Derivatives provide a useful risk management tool for those who wish to minimise their exposure to fluctuations in the price of physical commodities or financial instruments. Corporations, government entities, financial institutions and investors, are all concerned about managing price risk. Futures, options, and other derivatives, provide these financial market participants with a tool to manage (i.e. hedge) this risk.

In addition, derivatives are used by professional traders, known as speculators, who endeavour to make profits by correctly anticipating price changes. Though often maligned and misunderstood, the involvement of speculators is crucial to the operation of the market as they allow risk to be transferred from those seeking to avoid it, to those willing to accept it in the hope of making a profit.

1.3 Types of Derivatives

Derivatives are artificially constructed from existing debt and equity instruments, commodities and even foreign currencies. The range of derivatives that can be constructed is very wide, but essentially they fall into just a few categories — futures, forwards, swaps, options and CFD. In the following modules, however, we confine ourselves to futures, options and CFD and we do not cover other types of derivative products.

Futures

Futures are contracts, legally binding agreements, made on the trading floor of a derivatives exchange or via an electronic screen dealing system, to buy or sell something in the future. That 'something' could be gold or tin, cocoa or palm oil, a foreign currency, shares or interest rates. Each contract specifies the commodity, the quantity, quality and time of delivery or cash settlement. The buyer and seller of a futures contract agree on a price today for a product to be delivered and paid for in the future. That is why it is called a *futures contract*.

In most cases, actual delivery of the underlying security does not take place. Instead, the contracts are *closed out* by opposite deals before the delivery date is reached. A trader who has bought a futures contract will close out by selling the same number and type of contract he originally bought. In some cases, delivery is not even possible, with the contracts written in terms of a notional (i.e. hypothetical) rather than an actual security. For these contracts, the profit or loss on the contract is calculated when the contract matures, as the difference between the price of the underlying instrument agreed in the contract and the price on the delivery date. This difference is then settled in cash between the parties.

Options

An option is a contract between two parties in which one party (the buyer) has the *right but not the obligation* to buy or sell a specified asset at a specified price, at or before a specified date, from the other party (the seller). The seller of the option therefore has a contingent liability, or an obligation, which is activated if the buyer exercises that right.

Options provide a means of obtaining insurance against risk in the underlying markets, while still allowing the option buyer to take advantage of favourable price changes. They are quite different from futures contracts, which can be thought of as a price-setting mechanism, as opposed to options, which are a facility for price insurance that can be abandoned at a comparatively low cost if they are not needed.

Contracts For Difference

The pricing of a CFD mirrors that of its underlying asset. Generally, CFDs can be settled physically or by cash but a CFD that is offered in Malaysia must be cash settled. Margin requirements on trading CFDs are generally significantly lower than for equities, and similar to that of traditional futures trading (but with lower minimum contract sizes), thus making CFDs an ideal trading and hedging product.

CFDs provide traders or investors a means to hedge or invest into the price movements of various asset classes such as equities, indices, currencies, commodities and interest rate. CFD positions can be initiated on either the long or short side. Going long refers to initiating a new market position by buying, and shorting describes entering a new market position by selling.

1.4 Exchange-Traded vs Over-the-Counter Derivatives

Derivatives can be classified according to the type of market in which they are traded. There are two types of markets:

- Exchange-traded markets — which are based on a formalised exchange
- Over-the-counter markets — which are outside a formalised exchange

Exchange-Traded Derivatives

An exchange is a specific market place where derivatives are originated and traded. The exchange provides the trading environment. They serve as communication centres, centralising orders from various buyers and sellers and disseminating relevant information on price. The types of derivatives most commonly traded on an exchange are futures and options. The features of exchange-traded derivatives are detailed below.

- **Trading Method:** The trading of derivatives on certain exchanges is based on the system of *open outcry* on a physical trading floor, where traders transact deals through a combination of hand signals and speech. However, with the advent of computerised trading, most exchanges no longer have open outcry trading and all transactions are performed electronically, using the computer. Bursa Malaysia Derivatives Berhad uses a screen-based dealing system for all of its products, namely the FTSE Bursa Malaysia KLCI Futures, Option on FTSE Bursa Malaysia KLCI Futures, Crude Palm Oil Futures Contract, Crude Palm Kernel Oil Futures Contract, USD Denominated RBD Palm Olein Futures, USD Denominated Crude Palm Oil Futures Contract, Option on Ringgit Malaysia Denominated Crude Palm Oil Futures, Tin Futures Contract, Gold Futures Contract, 3 month KLIBOR Futures Contract, 3-Year MGS Futures Contract, 5-Year MGS Futures Contract, 10-Year MGS Futures and Single Stock Futures.

- **Contracts Have Standard Features:** Contracts listed on exchanges are highly *standardised* as to the type and maturity of the 'underlying' instrument, i.e. the commodity or security on which the contract is based. This standardisation makes it easy for market participants to deal in these instruments because there is no need for discussions or negotiations to determine the contract specifications — the only thing left to negotiate is the price. This in turn promotes greater *liquidity* because there is a large number of only a limited range of contracts being traded at any one time. Liquidity in the derivatives market refers to the capacity of a contract to be bought or sold quickly and easily with little or no impact on price.

- **Secondary Trading:** Standardisation also means that deals can be readily unwound prior to the maturity date — participants simply do a reverse transaction. For example, if a trader has sold a number of crude palm oil futures contracts, this position can be closed out by buying the equivalent number of the same contracts. This ease of entering and exiting positions further promotes liquidity.

- **Clearing House:** Transactions are settled through a dedicated *clearing house* associated with (although not necessarily owned by) the exchange. The clearing house tracks the positions outstanding and registers contracts. It centralises and nets out the collection and disbursement of margins and variation gains/losses. It also supervises the close out of contracts, either through physical delivery or payment of settlement amounts.

Over-the-Counter Derivatives

The instruments most commonly traded over-the-counter (OTC) are swaps, forward rate agreements, options on physical instruments and CFDs. Compare the features of exchange-traded derivatives described above with those of the OTC markets below.

- **Trading Method:** Generally, OTC derivatives are traded on a bilateral basis between both counterparties, unlike exchange traded derivatives that are traded on a centralised market place. However, it should be noted that as part of the G20 OTC derivatives reform, there is a recommendation to move the trading of the OTC derivatives to an organised trading platform.

- **Tailor-Made Contracts:** Contracts are not standardised in terms of quantity, delivery date or term to maturity for most OTC instruments. The details of each transaction are negotiated by the counterparties. This lack of standardisation has benefits in that the specifications can more exactly meet the needs of the parties.

- **Little Secondary Trading:** For most OTC instruments, the lack of standardisation means there is much less secondary trading of contracts, and much lower liquidity, because each contract tends to be unique. It is also more difficult to manage positions, since contracts usually cannot be onsold to third parties. Contracts can be unwound prior to maturity, only if the original counterparty agrees to a reverse transaction — in this case, the two offsetting gross contracts may be netted out. Failing this, an offsetting transaction can be done with another counterparty, but in most cases, these two offsetting transactions will not be able to be netted.

- **No Clearing House:** There is no centralised clearing house for OTC derivatives. As a consequence, OTC transactions involve higher credit risk because exposure is directly to the counterparty and there is no system of deposits or margins, and no guarantee fund. Traders control this risk through credit assessments of counterparties and the setting of exposure limits.

  Typically in an OTC derivatives transaction, a broker may be involved. If a broker is present in that transaction, the broker would act as an intermediary matching the needs of the buyer with the seller, at a price agreeable to both parties. Once agreed, the buyer and seller would be settling the trade directly with each other, and the broker would typically just charge a commission during trade settlement. If a broker is not involved, the buyer would look for its own seller, share its needs, negotiate and agree a price and settle the trade directly with the seller.

  It shall be noted however, there is a gradual move to require OTC derivatives to be cleared by a clearing house following the G20 OTC derivatives reform.

As for CFDs, although they are typically traded over-the-counter, they do have some features of exchange traded derivatives. A CFD that has an exchange traded security as its underlying would likely have similar, standardised features and be actively traded.

1.5 Derivatives Markets in Malaysia

The derivatives market in Malaysia commenced with the establishment of the Kuala Lumpur Commodity Exchange (KLCE) in July 1980. The initial futures contract traded on KLCE was Crude Palm Oil Futures. This contract is still traded until today. The KLCE had the infrastructures and capacity to allow for the trading of financial futures, however, setting up a subsidiary was necessary because trading in the financial futures fell under different jurisdictions.

Therefore on 19 August 1992, the KLCE, with the support of the government authorities, incorporated a wholly owned subsidiary called the Kuala Lumpur Futures Market Sdn Bhd (KLFM) which was later renamed Malaysia Monetary Exchange Bhd (MME) in mid-1995. On 7 May 1996, the Minister of Finance approved the establishment and operation of MME as a futures and options exchange company and the three-month KLIBOR futures contract was launched on 28 May 1996.

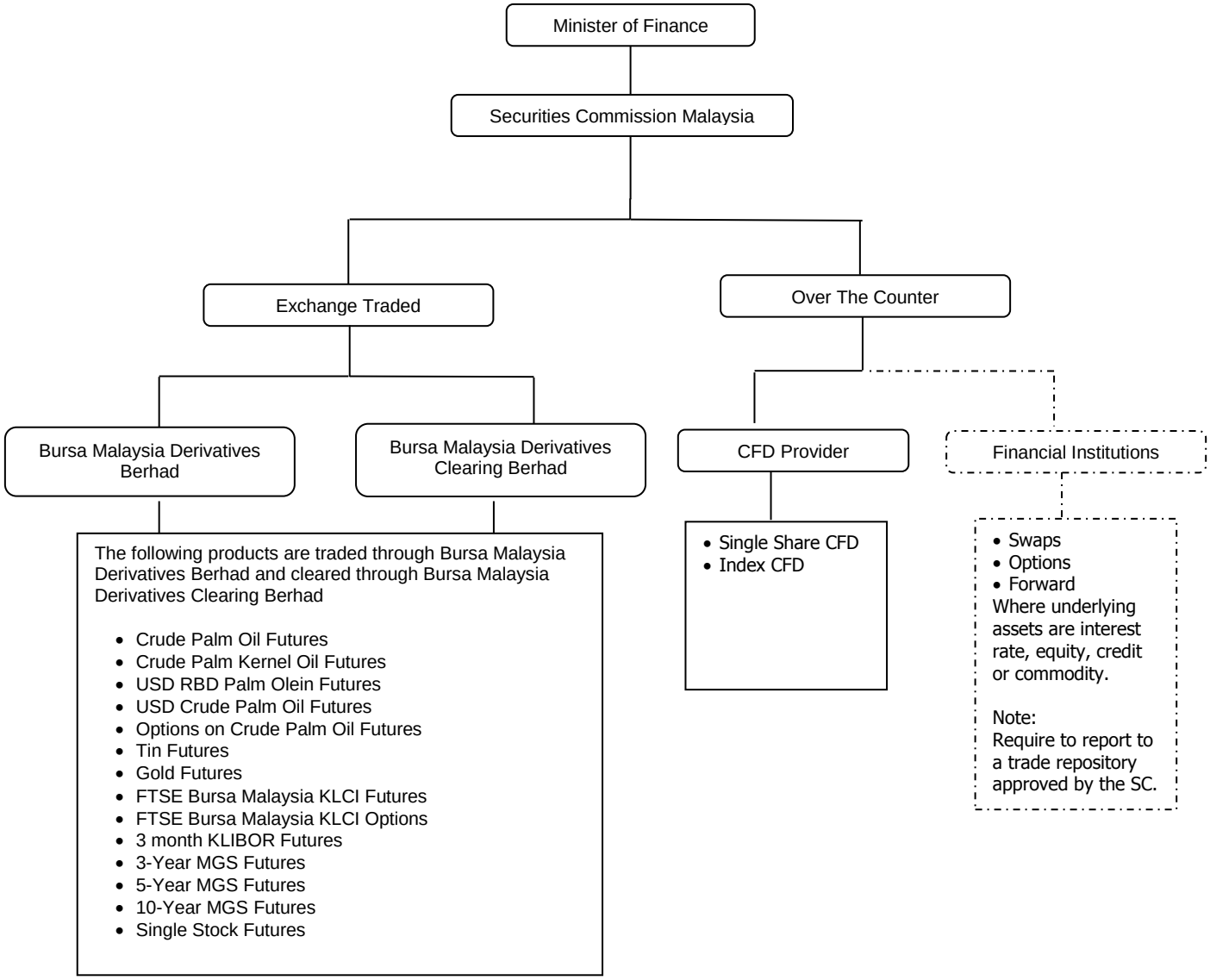
On 9 November 1998, the KLCE was renamed the Commodity and Monetary Exchange of Malaysia (COMMEX) in preparation for the merger with the Malaysian Monetary Exchange. The merger took place on 7 December 1998.

A visibility study by the International Monetary Fund for Bank Negara Malaysia in 1990 identified the need for some form of financial risk management tool in the face of increasing volatility in the financial markets. This study led to a series of regulatory infrastructure reforms to introduce financial derivatives. As a result of these reforms, Malaysia's first financial derivatives exchange was established – The Kuala Lumpur Options and Financial Futures Exchange (KLOFFE). KLOFFE was licensed as a futures and options exchange on 11 December 1995 and the stock index futures and stock index options were first traded on 15 December 1995 and 1 December 2000 respectively.

In line with the Capital Market Masterplan of the Securities Commission Malaysia, KLOFFE and COMMEX merged on 11 June 2001 and formed a new derivatives exchange called the Malaysia Derivatives Exchange Berhad (MDEX). On 20 April 2004, MDEX was renamed Bursa Malaysia Derivatives Berhad.

Figure 1 below illustrates the structure of the Malaysian derivatives market with the inclusion of the OTC CFD framework.

Figure 1: Structure of the Malaysian Derivatives Market (including OTC CFD)



Relevance of Derivatives to the Capital Market

The Malaysian Government is committed to fostering the growth of an effective capital market to support the financial system required for the country's economic development. Indeed, the government's goal of achieving the status of a developed country by the year 2020, means that a rapidly expanding capital market is essential.

The capital market assists the process of economic development by mobilising long-term funds from the investing public to finance public development programs and private investments. It also promotes private enterprise by providing a convenient means of raising capital for corporate investment and expansion.

Integral to the growth of Malaysia's capital market is the development of the derivatives market. Derivatives provide hedging and asset allocation facilities which allow investors to hold larger debt and equity positions and, as a result, enhance the liquidity of these underlying markets. Liquidity in the capital markets is essential, given the government's privatisation plans which will necessitate a large scale mobilisation of funds.

An active derivatives market that complements the capital market will enable investors to hedge or adjust their positions and thus make them more willing to take larger holdings, thereby fuelling Malaysia's economic development.

Participants in the Malaysian Derivatives Market

The Malaysian derivatives market is made up of a diverse range of participants. They include:

- the regulator — which authorises the existence of the market
- the derivatives exchange* — which provides the trading facilities
- the clearing house* — which clears and processes trades and assumes counterparty risk
- intermediaries such as holders of a Capital Markets Services Licence (CMSL) who carry on the business of dealing in derivatives , holders of a CMSL who carry on the business of fund management, and holders of a CMSL who carry on the regulated activity of investment advice — who advise and/or trade in the market
- the users, or clients of the intermediaries — who may be hedgers, speculators or arbitrageurs.

* *applicable to exchange traded derivatives*

These are illustrated in Figure 2.

Figure 2: Participants in the Malaysian Derivatives Market

The remainder of this topic examines each of these participants with a view to illustrating their role in the Malaysian derivatives market.

Activity 1

(a) Complete the following table (by circling the correct response) to illustrate the differences between exchange-traded and over-the-counter derivatives:

Features	Exchange-Traded	Over-the-Counter
Active and liquid secondary market?	Yes/No	Yes/No
Traded at a centralised market place?	Yes/No	Yes/No
Payment of margins required?	Yes/No	Yes/No
Contract specifications can be tailored to the needs of the user?	Yes/No	Yes/No
Used as a hedging instrument?	Yes/No	Yes/No

(b) Name the exchange responsible for derivatives market in Malaysia.

_____

_____

_____

(c) Explain the fundamental difference between futures and options.

_____

_____

_____

_____

_____

(d) CFDs offered in Malaysia can be settled _____.

(i) only physically

(ii) only by cash

(iii) physically or by cash

2 The Derivatives Exchange

We begin our examination of the Malaysian derivatives market with a close look at the exchange, Bursa Malaysia Derivatives Berhad.

2.1 Bursa Malaysia Derivatives Berhad

The first futures exchange in Malaysia, the Kuala Lumpur Commodity Exchange (KLCE) was established in July 1980 with just one contract, crude palm oil futures. Futures contracts on other commodities soon followed with a rubber futures contract in 1983 (known as "RSS 1 Rubber futures") and a second rubber futures contract in 1986 (known as "SMR 20 Rubber futures"). Tin futures were launched in 1987, cocoa futures in 1988, palm olein futures in 1990 and crude palm kernel futures in 1992. Currently the active contract is the crude palm oil futures.

The KLCE had the infrastructure and capacity to allow for the trading of financial futures, however, setting up a subsidiary was necessary because trading in the financial futures fell under different jurisdictions. Therefore on 19 August 1992, the KLCE with the support of the government authorities, incorporated a wholly owned subsidiary called the Kuala Lumpur Futures Market Sdn Bhd (KLFM) which was later renamed Malaysia Monetary Exchange (MME) in mid-1995. On 7 May 1996, the Minister of Finance approved the establishment and operation of MME as a futures and options exchange company and the three-month KLIBOR Futures was launched on 28 May 1996.

On 9 November, the KLCE was renamed as the Commodity and Monetary Exchange (COMMEX) of Malaysia in preparation for the merger with the Malaysian Monetary Exchange (MME). The merger took place on 7 December 1998.

The Kuala Lumpur Options and Financial Futures Exchange (KLOFFE), Malaysia's first financial derivatives exchange was established in December 1995. Stock index futures and stock index options were first traded on KLOFFE on 15 December 1995 and 1 December 2000 respectively.

In line with the Capital Market Masterplan of the Securities Commission Malaysia, KLOFFE and COMMEX merged on 11 June 2001 and formed a new derivatives exchange called the Malaysia Derivatives Exchange Berhad (MDEX).

On 5 January 2004, Kuala Lumpur Stock Exchange Berhad (KLSE Berhad) became the holding company of MDEX. This was one of the effects of the demutualisation exercise, which also resulted in the Kuala Lumpur Stock Exchange (KLSE) being converted from a company limited by guarantee to a public company limited by shares.

Subsequently, on 20 April 2004, KLSE Berhad and MDEX had their names changed to Bursa Malaysia Berhad and Bursa Malaysia Derivatives Berhad respectively.

Participantship of the Derivatives Exchange

Bursa Malaysia Derivatives Exchange Berhad participantship is made up of the following classes:

(a) Trading Participants

(b) Local Participants

(c) Associate Participants

(d) Such other class of participantship as may from time to time be created by the derivatives exchange

(a) Trading Participants

Trading Participantship shall be companies incorporated under the Companies Act 2016 and are set specifically to carry out the regulated activity of dealing in derivatives and must be licensed under the Capital Markets and Services Act 2007 (CMSA). The minimum issued and paid-up capital of a Trading Participant is currently RM5 million and this amount is determined by Bursa Malaysia Derivatives Berhad in consultation with the Securities Commission Malaysia. The minimum financial requirements may change from time to time. Trading Participants may be Clearing Participants or Non-Clearing Participants.

(b) Local Participants

Local Participant is offered to individuals who wish to trade on their own behalf. These individuals are not permitted to trade on behalf of clients. Local Participants are not required to be licensed under the CMSA as they are not considered to be intermediaries in the industry. They are however required to be registered with the derivatives exchange.

Local Participants have access to the trading facility of Bursa Malaysia Derivatives Berhad for the purpose of executing their own trades of which matched trades will then be cleared through any of the Clearing Participants.

(c) Associate Participants

Associate Participants must be corporations that do not carry the regulated activity of dealing in derivatives within Malaysia. However, Associate Participants must be a Clearing Participant or be nominated by a Nominating Participant for the clearing of its contracts.

Activity 2

Read through the following statements and state whether they are true or false:

(a) Local Participants are not participants of Bursa Malaysia Derivatives Berhad.

True or False? _____

(b) Options contracts are available for all futures contracts traded on Bursa Malaysia Derivatives Berhad.

True or False? _____

(c) The underlying instrument of crude palm oil futures is palm olein.

True or False? _____

(d) Trading Participant of Bursa Malaysia Derivatives Berhad can be Clearing Participants or have an arrangement with a Clearing Participant to clear its trades.

True or False? _____

(e) Associate Participants are individuals who execute trades on their own behalf.

True or False? _____

3 The Clearing House

A prerequisite for the successful operation of any derivatives market, is the existence of an efficient and financially sound, clearing house. Clearing houses provide the fundamental financial integrity to derivatives market by allowing participants to deal freely with each other without credit risk constraints. How they do this is explained in this section.

3.1 Functions of the Clearing House

The basic functions of the clearing house can be summarised as follows:

Register all Trades

Whenever a trade is concluded, a record is passed to the clearing house. The trade is processed by the clearing house and later that same day, a statement is issued to the clearing participant describing the trades registered in its name.

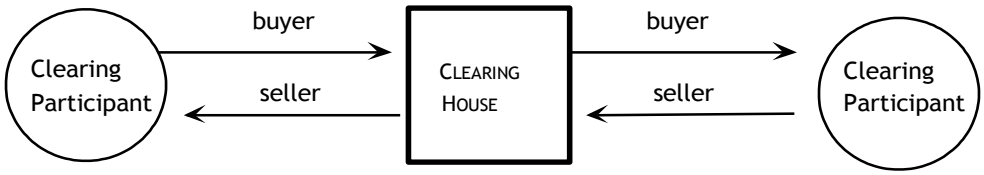
Novation

After the futures contract/option is registered by the clearing house (in the names of the two clearing participants), the nexus between the two original contracting parties is broken. The clearing house then becomes the buyer to the clearing participant acting as seller, and the seller to the clearing participant acting as buyer. Thus, the identity of the other party to a futures contract is no longer of importance, nor in fact, are parties to an original contract obliged to return to each other to complete or unwind the contract.

This function, termed *novation*, is one of the distinguishing features of exchange-traded derivatives market. Through novation, the clearing house becomes the seller to every buyer and the buyer to every seller. The clearing house eliminates credit risk between clearing participants since it is able to guarantee the performance of all contracts. The process of novation is demonstrated by the following diagrams:

Figure 3: Transacting a Trade on the Derivatives Exchange

Figure 4: Novation — The Clearing House is interposed between Buyer and Seller



A point of note here is that the clearing house does not guarantee the clients of the clearing participants. As mentioned earlier, contracts that are traded by a participant on behalf of a client are registered by the clearing house in the participant's name and not in the client's name.

3.2 Risk Management

The role of the clearing house is to provide efficient settlement and risk management facilities which protect the interest of clearing participants and their clients. To ensure that the clearing house can assume the risk of its participants if they default, the clearing house must effectively measure, monitor and manage risk so that it can protect its participants in the event of uncertain market conditions.

The clearing house protects financial integrity through its risk management policies and procedures. These include:

- ensuring that the clearing participant has the capability and meets the minimum standard of participantship
- daily margining requirements and settlement systems
- financial monitoring
- security deposit and clearing fund.

Participantship Standards

The initial step in the process of safeguarding financial integrity is to assess the creditworthiness and competence of each potential clearing participant.

The clearing house imposes stringent financial and operational requirements on its clearing participants. Each prospective clearing participant is subject to an assessment of its operational efficiency, in particular, the accurate and prompt accounting of its transactions. It must have within its organisation experienced management and adequate and qualified staff to perform its functions. Clearing participants must also comply with the minimum financial requirements relating to their assets, capital and participantship payments.

Margining and Settlement

For every futures or options trade in the market, a *margin*, or *deposit*, is required to be paid to the clearing house. The collection of margins on all positions held by clearing participants is fundamental to the operation of the clearing house in protecting itself against losses arising from a clearing participant's default. The margin level is monitored daily and may be adjusted to reflect changes in price volatility, movements in prices of underlying assets and other factors. The margin is returned at the time the contract is settled, whether by delivery, or by an opposite transaction on the derivatives market. The margin is more of a performance bond than a down payment on the contract being traded.

In addition to the initial margins required to open contracts, any price movements in the market must be covered daily by further margins called *variation gains/losses* or *daily settlement*. If a trader has bought a contract and the price subsequently falls, the trader will be required to pay additional funds to cover the current unrealised loss. The trader will be in a similar position if a contract has been sold on the derivatives market and the price rises.

The clearing house's exposure to risk is theoretically limited to a maximum one day's price movement. The system of variation margins, where the seller or buyer progressively pays this debit amount, effectively maintains the participants at current market values. This ensures that the buyer or seller is fully paid up or settled-to-market.

Financial Monitoring Programme

As part of its risk management procedures, the clearing house operates a programme of financial monitoring. The programme includes:

- monthly financial reporting by clearing participants
- audits and examinations by the clearing house
- information sharing between the clearing house and the derivatives exchange
- monitoring of the positions of clearing participants against intra-day price movements and economic events.

Security Deposit and Clearing Fund

The clearing house has recourse to contingency funds maintained by it in the form of security deposits and contributions made to the clearing fund. Security deposits and clearing fund contributions may be used in the event of margins being insufficient to the clearing house against losses sustained by its participants.

Activity 3

Provide a short answer to the following questions:

(a) Describe the difference between initial margin and variation payment.

_____
_____
_____
_____

(b) What is the purpose of margin payments?

_____
_____
_____
_____

(c) List the risk management policies and procedures that are adopted by the clearing house in upholding the financial integrity of its clearing system.

_____
_____
_____

(d) How is the clearing house able to guarantee performance in the derivatives market? Explain your answer.

_____
_____
_____
_____
_____
_____

4 Intermediaries in the Derivatives Market

Intermediaries in the derivatives market are the people who trade or provide advice on trading to the investing public. They are the 'middlemen' between the derivatives exchange and the users of the derivatives exchange's products.

Under the CMSA, intermediaries primarily involved in the derivatives market fall under the following categories of licences:

- Holders of a Capital Markets Services Licence (CMSL) who carry on the business of dealing in derivatives
- Holders of a CMSL who carry on the business of fund management
- Holders of a CMSL who carry on the regulated activity of investment advice
- Holders of a Capital Markets Services Representative's Licence (CMSRL) who carry on the regulated activity of dealing in derivatives
- Holders of a CMSRL who carry on the regulated activity of fund management
- Holders of a CMSRL who carry on the regulated activity of investment advice

In this section, we give a brief overview of all six.

4.1 Holders of a CMSL who Carry on the Business of Dealing in Derivatives

Holders of a CMSL who carry on the regulated activity of dealing in derivatives refer to companies that are participants of a derivatives exchange in that they trade in the derivatives exchange and agree to be bound by its rules. These CMSL holders can trade on behalf of other persons. Their basic functions are:

- representing their clients in placing orders in the market
- collecting margins from the clients
- provide basic accounting records and transaction documents to their clients
- advising and making recommendations to clients for their trading programs

By nature of the development of the derivatives market, these CMSL holders must execute all orders for dealing in futures and options contracts on the derivatives exchange. This means that, in addition to being licensed under CMSA, they must be participants of a derivatives exchange and accordingly, its business and activities are also regulated by the rules of the derivatives exchange.

4.2 Holders of a CMSL who Carry on the Business of Fund Management

Holders of a CMSL who carry on the business of fund management are companies that manage a portfolio of securities and/or derivatives. The funds operate very much like unit trusts and enable small investors to pool their resources for management by these CMSL holders. Holders of a CMSL who carry on the business of fund management must be companies, and their employees or agents who deal directly with their clients are known as holders of a CMSRL who carry on the business of fund management.

4.3 Holders of a CMSL who Carry on the Regulated Activity of Investment Advice

Holders of a CMSL who carry on the regulated activity of investment advice provide advice and analysis to clients who are interested in participating in the securities and derivatives market.

Holders of a CMSL who carry on the regulated activity of investment advice who do not engage in the business of derivatives dealing are subject to less strict obligations than holders of a CMSL who carry on the business of dealing in derivatives. The main reason for this is that they do not deal with clients' money and property in connection with dealing in derivatives. Accordingly, they do not have to maintain segregated clients' accounts and, unless the Securities Commission Malaysia otherwise prescribes, they do not have to keep statutory accounting records under the CMSA (except that they have to adhere to the provision of s.92). They do, however, have the statutory obligation under the Companies Act 2016 to maintain accounting records.

4.4 Representatives

The person who deals directly with the client of a holder of a CMSL who carries on the business of dealing in derivatives, a holder of a CMSL who carries on the business of fund management or a holder of a CMSL who carries on the regulated activity of investment advice are known as representatives. A representative essentially acts on behalf of his or her principal in connection with the principal's business.

As representatives or holders of a CMSRL, they are required to know their clients well. They need to be aware of the clients':

- reputation for integrity
- financial capacity
- trading objectives

In particular, the holders of a CMSRL who carry on the business of dealing in derivatives will often have to:

- supply the proper documents for new accounts
- explain trading rules and procedures to clients
- keep clients informed of prices and market conditions
- enter orders received from clients
- report executions
- explain the risks involved when dealing in futures and options

As the work of representatives involves personal skills, the most important criterion for licensing individuals as representatives is the possession of the appropriate knowledge and personal qualifications. As they represent their respective holders of a CMSL, they are also subject to the obligations relating to the conduct of the business of dealing in derivatives, fund management and an adviser as outlined in the CMSA.

As representatives, they are primarily responsible for the professional image and reputation of the entity whom they represent.

Activity 4

For each of the following questions, select the best response by circling the appropriate letter.

(a) A holder of a CMSL who carries on the business of fund management is:

A a person who deals directly with a client wishing to invest in futures
B a person who deals directly with a client wishing to invest in options
C a company that manages a portfolio of securities and/or derivatives
D a company that promotes unit trust investments to the derivatives exchange

(b) Under the CMSA, holders of a CMSL who carry on the business of dealing in derivatives are required to:

A represent their clients in placing orders in the market
B collect margins from clients
C provide basic accounting records and transaction documents to their clients
D all of the above

(c) Which of the following is NOT a requirement of holder of a CMSL who carries on the regulated activity of investment advice?

A maintain segregated clients' accounts
B provide advice to persons interested in participating in the derivatives market
C maintain accounting records
D provide market analysis of futures and options to clients

(d) A person who deals directly with the client of a holder of a CMSL is known as a:

A floor trader
B client adviser
C broker
D representative

5 Users of Derivatives — the Clients

Participants in the derivatives markets can be generally categorised as either hedgers, speculators or arbitrageurs. They are the users of futures and/or options contracts and the clients of the intermediaries discussed in the previous section. However, as this next section will show, these three categories of users have very different reasons for entering the derivatives market.

5.1 Hedgers

Hedgers deal in the underlying instrument and use futures and/or options to manage price risk. The derivatives market performs a price-setting function, permitting hedgers to know in advance the price at which they will buy or sell (or the interest rate at which they will borrow or lend). This allows hedgers to plan for known costs and returns and to put their financial budgeting on a sound footing.

The derivatives market achieves its purpose of setting a price in advance by providing profits or losses that balance losses and gains in the underlying market. Thus, a more favourable price in the actual market than that agreed on under the futures contract is balanced by futures losses, while an unfavourable price movement in the underlying market is offset by futures profits.

5.2 Speculators

Speculators deal with changes in the expected price levels over time, and they do not usually own or use the underlying instrument. They are motivated by the wish to profit on the transaction and assume the price risk of hedgers. Put simply, speculators profit from derivatives trading by buying contracts at a low price and selling them at a high price. Speculators are important participants, giving liquidity to the market and opportunities for continuous trading. Trading houses and professional market participants often operate in derivatives markets to benefit from anticipated changes in the prices of the commodities.

5.3 Arbitrageurs

Arbitrage is the simultaneous purchase and sale of the same instrument in different markets to profit from price discrepancies. It is the ability to take advantage of different rates, prices and/or conditions between different markets. Arbitrageurs (people who arbitrage) are able to profit from temporary distortions or inconsistencies in price. Like speculators, arbitrageurs play an important role in derivatives markets by providing liquidity and by ensuring the convergence of cash and derivatives prices towards the expiry date of the contract.

Activity 5

Provide a short answer to the following questions.

(a) In your own words, briefly describe the purpose of hedging and how you would hedge using futures or options.

_____
_____
_____
_____
_____

(b) List three reasons why speculators are attracted to the derivatives market.

(i) _____
_____

(ii) _____
_____

(iii) _____
_____

(c) Under what circumstances do arbitrageurs enter the derivatives markets?

_____
_____
_____
_____
_____
_____

6 Regulation of the Derivatives Market

Previously, the regulatory framework for the Malaysian derivatives markets was divided into two segments — one dealing with commodity futures and the other dealing with financial futures and options. An amendment to the Futures Industry Act in April 1997 saw the Securities Commission Malaysia take over the role and function of the Commodity Trading Commission as regulator of commodity futures.

As a result, both financial and commodity futures and options are now regulated by the Securities Commission Malaysia pursuant to the Futures Industry (Amendment and Consolidation) Act 1997.

In September 2007, the Futures Industry Act 1993 and Securities Industry Act 1983 were consolidated into a single act, the CMSA.

We will now look briefly at the role of the Securities Commission Malaysia and the impact it has on the operation of the market. As we shall see, regulation is aimed at promoting professional conduct among market participants, ensuring fair and transparent trading, and minimising systemic risk (systemic risk is the risk of default by one institution leading to default in the entire market and/or other markets.)

6.1 Securities Commission Malaysia

The Securities Commission Malaysia established on 1 March 1993 under the Securities Commission Malaysia Act 1993 (SCA) is a statutory body whose primary responsibility is the regulation of the Malaysian securities and derivatives markets.

There are nine Commissioners, all of whom are appointed by the Minister of Finance under the SCA. They comprise: the Chairman; the Deputy Chief Executive; four members representing the government (which have traditionally included representatives from the Ministry of Finance, Ministry of Primary Industries and Bank Negara); and three others traditionally representing various professions in the private sector. The management of the Securities Commission Malaysia, on the other hand, comprises full-time employees.

The Securities Commission Malaysia's functions which are relevant to the derivatives industry include to:

- advise the Minister on all matters relating to the derivatives industry
- regulate all matters relating to derivatives

- responsible for supervising and monitoring the activities of any exchange holding company, derivatives clearing house and central depository
- take all reasonable measures to maintain the confidence of investors in the derivatives market by ensuring adequate protection for such investors
- promote and encourage proper conduct amongst participants, depository participants and all licensed or registered persons of an exchange and clearing house
- suppress illegal, dishonourable and improper practices in dealing in derivatives
- encourage and promote self-regulation by professional associations or market institutions in the derivatives industry
- license, register, authorize, approve and supervise all persons engaging in regulated activities or providing capital market services as may be provided for under any securities law;
- promote and maintain the integrity of all licensed persons in the derivatives industry.

Co-Regulation

The scheme of regulation in the Malaysian derivatives industry is one of *co-regulation* between the:

- Securities Commission Malaysia, which administers the CMSA
- derivatives exchange, which establishes and administers a set of rules relating to the trading of products offered on its markets
- clearing house, which establishes and administers its own rules.

Because derivatives industry is an area that is at the forefront of financial innovation, the regulatory framework has to be flexible enough to accommodate rapid changes to business practices and economic utility of participants, and yet still be able to address regulatory concerns. For this reason, the primary emphasis of the CMSA is on matters concerning investor protection and systemic stability.

In contrast, the rules of the derivatives exchange and clearing house (though still regulatory in nature) have a more commercial emphasis. The rules are more flexible in that they can be amended with the approval of the Securities Commission Malaysia.

In principle, it may be said that the Securities Commission Malaysia concerns itself with general policy formulation, licensing, product and market approval, and prosecution, while leaving day-to-day supervision of markets, approval of entry into the industry, prudential controls and participantship regulatory responsibility to the derivatives exchange and the clearing house. Placing the primary responsibilities for the proper regulation of derivatives activities on derivatives exchange and the clearing house (commonly known as *frontline regulatory organisations*) ensures that derivatives markets are free to operate with only as

much regulation as is necessary to allow them to function in an efficient, competitive and orderly manner.

Activity 6

Provide a short answer to the following questions.

(a) What are the three broad aims of regulation of the derivatives industry?

(i) _____

_____

(ii) _____

_____

(iii) _____

_____

(b) Which intermediaries are bound by a derivatives exchange's rules?

_____

(c) Which regulatory body is responsible for licensing participants in the derivatives industry?

_____

7 In Summary

This topic provided a general introduction to derivatives market in Malaysia.

We examined the various types of derivatives which includes CFD which is typically traded over-the-counter, their main purpose and the structure of the Malaysian market. We then looked at the major participants in the Malaysian derivatives industry, beginning with the Bursa Malaysia Derivatives Berhad. We then examined the role of the clearing house in the derivatives market. In particular, we saw how the system of margins and variation payments which the clearing house uses, protects brokers from the risk of other traders defaulting.

Next, we examined the various market intermediaries. The users of the derivatives market, that are the clients of the intermediaries, were then outlined. They include hedgers, speculators and arbitrageurs. Finally, we examined the regulatory structure of the Malaysian derivatives market.

This topic has been deliberately broad in its coverage. Subsequent topics will elaborate on each of the sections we have covered here, giving specific details and examples relating to the operation and uses of the derivatives market. At this point, you should have an understanding of the 'big picture' of derivatives so that the specifics you learn next can be placed within a wider context.

7.1 Key Terms

Now that you have completed this topic, review each of the following terms and make sure you understand their meaning. Definitions of all these terms appear in the Glossary.

futures	holder of a CMSRL
options	holder of a CMSL
forwards	margins
derivatives	variation gains/losses
over-the-counter (OTC)	clearing house
Contracts for Difference (CFD)	novation
hedging	speculation
arbitrage	liquidity
systemic risk	delivery

7.2 Review Questions

Question 1

Why would someone wish to buy a futures contract?

Question 2

The client of a holder of a CMSL who carries on the business of dealing in derivatives sold 30 December Three-Month KLIBOR futures at 93.20. He then instructs the holder of the CMSL to 'Buy 30 December Three-Month KLIBOR futures on stop 93.30'. The market price is 93.10. What should the holder of the CMSL do?

Question 3

Outline the key aspects of the clearing house's financial monitoring program.

Question 4

Assume you purchase one December FBM Kuala Lumpur Composite Index futures contract at 1250 and hold the position for five days. The margin for FBM KLCI futures is RM8,000. Each index point is valued at RM50.

(a) Complete the table below to show the margin payments for your position on a settled-to-market basis.

Date	Trade	Settlement Price	Settlement Variation Gain/Loss
3 Oct	**Buy 1 Dec FBM KLCI at 1250**	**1250**	
4 Oct		**1230**	
5 Oct		**1215**	
6 Oct		**1255**	
7 Oct	**Sell 1 Dec FBM KLCI at 1275**	**1275**	

(b) Is the sum of the variation payments positive or negative? How much is it?

(c) What does this amount represent?

Question 5

Outline the advantages of an automated trading system.

Suggested Answers to Activities

Activity 1

(a) Complete the following table (by circling the correct response) to illustrate the differences between exchange-traded and over-the-counter derivatives:

Features	Exchange-Traded	Over-the-Counter
Active and liquid secondary market?	Yes/No	Yes/No
Traded at a centralised market place?	Yes/No	Yes/No
Payment of margins required?	Yes/No	Yes/No
Contract specifications can be tailored to the needs of the user?	Yes/No	Yes/No
Used as a hedging instrument?	Yes/No	Yes/No

(b) Name the exchange responsible for the derivatives market in Malaysia.

(c) Explain the fundamental difference between futures and options.

Answer: **(a)**

Features	Exchange-Traded	Over-the-Counter
Active and liquid secondary market?	Yes	No
Traded at a centralised market place?	Yes	No
Payment of margins required?	Yes	Yes
Contract specifications can be tailored to the needs of the user?	No	Yes
Used as a hedging instrument?	Yes	Yes

(b) Bursa Malaysia Derivatives Berhad

(c) Futures are legal agreements to buy or sell a specific underlying instrument or commodity, for a specific price, at a specific time in the future.

Options are legal agreements which give the buyer the right but not the obligation to buy or sell the underlying instrument or commodity.

(d) (ii) only by cash

Activity 2

Read through the following statements and state whether they are true or false:

(a) Local Participants are not participants of Bursa Malaysia Derivatives Berhad.
True or False? _____

(b) Options contracts are available for all futures contracts traded on Bursa Malaysia Derivatives Berhad.
True or False? _____

(c) The underlying instrument of crude palm oil futures is palm olein.
True or False? _____

(d) Trading Participants of Bursa Malaysia Derivatives Berhad must be Clearing Participants or have an arrangement with a Clearing Participant to clear its trades.
True or False? _____

(e) Associate Participants are individuals who execute trades on their own behalf.
True or False? _____

Answer:

(a) False
(b) False
(c) False
(d) True
(e) False

Activity 3

Provide a short answer to the following questions:

(a) Describe the difference between a margin and a variation payment.

(b) What is the purpose of margin payments?

(c) List the risk management policies and procedures that are adopted by the clearing house in upholding the financial integrity of its clearing system.

(d) How is the clearing house able to guarantee performance in the futures and options market? Explain your answer.

Answer:

(a) An initial margin is an up-front deposit paid upon execution of a contract. A variation margin is an on-going realisation of daily profits and losses on open contracts.

(b) To minimise the clearing house's or a holder of a CMSL who carries on the business of dealing in derivatives' counterparty credit exposure.

(c) The risk management policies and procedures

- **Ensure that the clearing participant has the capability and meets the minimum standard of participantship**
- **Daily margining requirements and settlement system**
- **Financial monitoring**
- **Security deposit and clearing fund.**

(d) The clearing house is able to guarantee the performance of futures and options contracts by the process of *novation*. This means that once the clearing house has accepted the contract for registration, it *substitutes* itself as the counterparty to the contract by becoming the buyer to the seller and the seller to the buyer. Thus, the clearing house is then responsible for the performance of the contract. By collecting initial and variation margins, the clearing house protects itself from any clearing participant defaulting. This system of having all open positions marked-to-market significantly

reduces the risk of financial loss since all losses are paid up daily. As a result, the maximum risk to the clearing house is the loss caused by a single day's change in prices.

Activity 4

For each of the following questions, select the best response by circling the appropriate letter.

(a) A holder of a CMSL who carries on the business of fund management is –

A a person who deals directly with a client wishing to invest in futures
B a person who deals directly with a client wishing to invest in options
C a company that manages a portfolio of securities and/or futures contracts
D a company that promotes unit trust investments to the derivatives exchange

(b) Under the CMSA, holders of a CMSL who carry on the business of dealing in derivatives are required to –

A represent their clients in placing orders in the market
B collect margins from clients
C provide basic accounting records and transaction documents to their clients
D all of the above

(c) Which of the following is NOT a requirement of holder of a CMSL who carries on the regulated activity of investment advice?

A maintain segregated clients' accounts
B provide advice to persons interested in participating in the derivatives market
C maintain accounting records
D provide market analysis of futures and options to clients

(d) A person who deals directly with the client of a holder of a CMSL is known as a –

A floor trader
B client adviser
C broker
D representative

Answer: **(a) C**
(b) D
(c) A
(d) D

Activity 5

Provide a short answer to the following questions.

(a) In your own words, briefly describe the purpose of hedging and how you would hedge using futures or options.

(b) List three reasons why speculators are attracted to the derivatives market.

(c) Under what circumstances do arbitrageurs enter the derivatives markets?

Answer: **(a) The purpose of hedging in the derivatives market is to limit the risks associated with major fluctuations in prices of the underlying assets or liabilities to which you have an exposure.**

If you own an asset and wish to hedge against a price fall, you would sell futures. If you have a liability and you believe its price is about to rise, you would buy futures.

(b) Reasons why speculators are attracted to the derivatives market:

(i) High leverage, i.e. small outlay relative to potentially large profits and losses

(ii) Low transaction costs

(iii) Easy access to derivatives markets for both big and small players

(iv) Minimal back-office administration

(v) High level of liquidity makes entry and exit easy

(c) Arbitrageurs enter the derivatives market when there are distortions or inconsistencies in price in different markets or instruments.

Activity 6

Provide a short answer to the following questions.

(a) What are the three broad aims of regulation of the derivatives industry?

(b) Which intermediaries are bound by a derivatives exchange's rules?

(c) Which regulatory body is responsible for licensing participants in the derivatives industry?

Answer: (a) The three broad aims of regulation are:

(i) to promote professional conduct among intermediaries
(ii) to ensure fair and transparent markets
(iii) to minimise systemic risk.

(b) Holders of a CMSL who carry on the business of dealing in derivatives who are participants of the derivatives exchange.

(c) Securities Commission Malaysia.

Suggested Answers to Review Questions

Question 1

Why would someone wish to buy a futures contract?

Answer: There are three possible reasons for buying or selling a futures contract:

(i) to increase profit through speculating

(ii) to limit risk by using futures as a hedge (e.g. a hedger could use a futures contract to protect against a price fall in some shares he owns)

(iii) to profit from pricing anomalies by arbitraging the market.

Question 2

The client of a holder of a CMSL who carries on the business of dealing in derivatives sold 30 December Three-Month KLIBOR futures at 93.20. He then instructs the holder of the CMSL to 'Buy 30 December Three-Month KLIBOR futures on stop 93.30'. The market price is 93.10. What should the holder of the CMSL do?

Answer: The order directed the holder of the CMSL to buy after the market traded at or above 93.30. As the market price is still below 93.30, the holder of the CMSL should not buy.

Question 3

Outline the key aspects of the clearing house's financial monitoring program.

Answer: Financial monitoring program:

- **monthly financial reporting by clearing participants**
- **audits and examinations by the clearing house**
- **information sharing between the clearing house and the derivatives exchange**
- **monitoring of the positions of clearing participants against intra-day price movements and economic events.**

Question 4

Assume you purchase one December FBM Kuala Lumpur Composite Index futures contract at 1250 and hold the position for five days. The margin for FBM KLCI futures is RM8,000. Each index point is valued at RM50.

(a) Complete the table below to show the margin payments for your position on a settled-to-market basis.

Date	Trade	Settlement Price	Settlement Variation Gain/Loss
3 Oct	Buy 1 Dec FBM KLCI at 1250	1250	
4 Oct		1230	
5 Oct		1215	
6 Oct		1255	
7 Oct	Sell 1 Dec FBM KLCI at 1275	1275	

(b) Is the sum of the variation payments positive or negative? How much is it?

(c) What does this amount represent?

Answer:

(a)

Date	Trade	Settlement Price	Settlement Variation Gain/Loss
3 Oct	Buy 1 Dec FBM KLCI at 1250	1250	
4 Oct		1230	-RM1,000
5 Oct		1215	-RM750
6 Oct		1255	+RM2,000
7 Oct	Sell 1 Dec FBM KLCI at 1275	1275	+RM1,000

(b) The sum of the variation margin = RM1,250

(c) This amount represents the profit on the FBM KLCI trade

Question 5

Outline the advantages of an automated trading system.

Answer: Advantages of automated trading:

- **fast and efficient execution of trades**
- **streamlining back-office administration.**