



FUTURES TRADING CONTRACTS IN COMMODITY

MARKETS:

AN ISLAMIC LEGAL ANALYSIS

**A THESIS SUBMITTED IN THE FULFILMENT
OF THE REQUIREMENT FOR THE DEGREE OF
DOCTOR OF PHILISOPHY IN LAW**

BY

MUHAHAMMAD AL-BASHIR MUHAMMAD

AL-AMINE

**AHMAD IBRAHIM KULLIYYAH OF LAWS
INTERNATIONAL ISLAMIC UNIIVERSITY MALAYSIA**

NOVEMBER 2001

ABSTRACT

The importance of derivative instruments as tools of risk management is taken for granted in the modern financial system. Many Muslim scholars have stressed the need for a prudent utilisation of such instruments in Islamic equity markets, banking and finance. However, these instruments may not be totally in compliance with Islamic principles of *mu'āmalāt*. This study begins with a critical review of the previous works and proceeds to analyse the forward, futures and option contracts from an Islamic point of view. The present study also highlights their economic benefits, their reason d'être, the legal aspect of these contracts which may or may not be acceptable from *sharī'ah* perspective and then attempt is made to propose Islamic alternative whenever they are deemed necessary and appropriate. Derivatives are used in commodities, shares, currencies, interest bearing transactions and stock indices. The scope of the present analysis is, however, limited to derivative transactions based on commodities and shares. The use of these instruments in interest rate and currencies is out of the scope of the present study due to the involvement of *riba*. Stocks indices are also excluded due to their indulgence excessive risk or *gharar*.

The discussion on the forward contract includes the forward commodity market, the possibility of trading gold on a forward basis and the forward market for currencies. An analogy has been drawn between the conventional forward contract and similar contracts in Islamic law such as *bay al-salam*, *bay al-istiṣnā* and *bay al-ṣifah*. The present study rebuts the claim that there is no benefit in the conventional forward contract or that it contradicts the principle enshrined in the *hadīth* "do not sell what is not with you".

Several alternatives to the forward currencies are explored and debated. Among the proposals advanced here are the concept of mutual promise (*muwā'dah*) which is a mutual promise of currency exchange at the spot rate of exchange. These alternatives also include the concept of mutual loan where an equivalent amount of money in different currencies is exchanged between the two parties as benevolent loan (*qard hasan*) and the concept of a basket of currencies where the settlement of price between the importer and the exporter is made in several hard currencies. The final alternative is the idea of a cooperative fund whereby traders will participate by depositing a certain amount of money that will be managed by a third party in order to share the profit, if any, or face any risk associated with possible currency fluctuations.

My analysis of the futures contract addresses the main arguments against such a contract. I have elaborated on the concept of sale prior to taking possession, the sale of debt for debt, hedging and the relationship between speculation and margin trading and relevance, if any, of speculation to financial crisis. The present research has also examined the importance of the clearinghouse, the role of intermediaries in futures market and the regulation of the futures industry. Generally I have referred, in my discussion of these issues, to the Malaysian derivatives industry and its regulatory framework.

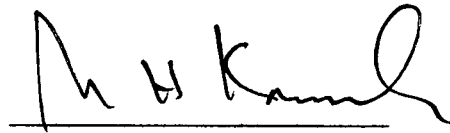
The efficacy of trading in options is accentuated by the need to avoid the problems associated with the forward and futures contracts. The present study proposes *khiyār al-shart* and *bay' al-'arbūn* as tools of risk management and as possible alternatives to

options. In this connection I have argued that option does not involve the combination of two contracts in one transaction. The present analysis also addresses the use of *'arbūn* in currency exchange, commodities, financial services, shares trading and *salam*.

The sale of pure rights, as it is in the case of options, is one of the hotly debated issues raised against the permissibility of options. The present study argues in favour of the sale of such rights relying on the general principles of Islamic commercial law and by referring to specific cases where a right is sold or exchanged for money. Included among the cases I have highlighted are the sale of the right of *shuf'ah* or preemption, the rights of easements or *huqūq al-irtifāq*, the right of reservation over barren land (*tahjīr*), intellectual property right and the right of option in *khiyār al-shart*. The present research also deals with the permissibility of exchanging one's right to bargain for something; a woman waiving her right of *hadānah* or custody in exchange for something, or waiving one's right to recover one's gift in exchange for something. Finally, the present study raises the issue of involvement or otherwise of gambling in options and provides suitable response.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality as a thesis for the degree of Doctor of Philosophy in Laws



Mohammad Hashim Kamali

Supervisor

Date 28/11/2001

DECLARATION

I hereby declare that this thesis is the result of my own investigation, except otherwise stated. Other sources are acknowledged by footnotes giving explicit references and bibliography is appended.

Name: Muhammad al-Bashir Muhammad al-Amine

Signature



Date

28/11/2004

ACKNOWLEDGMENTS

All praise to Allah (s w t) the most Gracious and most Merciful, by whose grace and blessing I have been able to complete this thesis for the requirement of Doctor of Philosophy in Laws.

I also take this opportunity, while relying on the instruction of the Prophet to the effect that: "whoever does not thank people does not thank Allah", to express my profound gratitude to my supervisor Prof. Dr Mohammad Hashim Kamali, for his invaluable assistance, guidance, tireless advice and encouragement throughout the writing of this dissertation. His advice and criticism have been of great value in sustaining this work. May Allah reward him and give him long life to serve the Muslim Ummah.

Moreover, I would to take this opportunity to thank the authorities of IIUM specially the Faculty of Laws for giving me the chance to study in this unique university. May Allah reward them for their contribution.

TABLE OF CONTENTS

INTRODUCTION	1
CHAPTER TWO:	19
LITERATURE REVIEW	19
THE FORWARD MARKET	60
CHAPTER THREE:	61
THE FORWARD COMMODITIES MARKET	61
ECONOMIC BENEFITS OF THE FORWARD CONTRACT	62
SALAM AND THE FORWARD CONTRACT.....	64
<i>ISTISNA'</i> AND THE FORWARD CONTRACT	74
<i>IBTIDA' AL-DAYN BI AL-DAYN</i> AND THE FORWARD CONTRACT	78
IS THERE NO BENEFIT IN THE FORWARD CONTRACT?.....	81
<i>BAY' AL-SIFAH</i> AND THE FORWARD CONTRACT	84
NON-EXISTENCE OF THE SUBJECT MATTER AND THE FORWARD CONTRACT	86
CHAPTER FOUR:	92
IS IT PERMISSIBLE TO EXCHANGE GOLD WITH PAPER MONEY ON FORWARD BASIS?	92
CHAPTER FIVE:	118
THE FORWARD MARKET FOR CURRENCIES	118
BASIC RULES OF CURRENCY EXCHANGE	118
MUTUAL PROMISE IN CURRENCY EXCHANGE	130
MUTUAL LOAN AND CURRENCY RISK MANAGEMENT	139
CURRENCY BASKET AND RISK MANAGEMENT.....	140
MANAGING PRICE FLUCTUATION THROUGH DEPOSIT	141
COOPERATIVE FUNDS AND CURRENCY RISK MANAGEMENT	141
THE FUTURES MARKET	152
CHAPTER SIX:	152
CONCEPT AND SCOPE OF FUTURES CONTRACTS	152
CHARACTERISTICS OF A SUCCESSFUL FUTURES MARKET.....	154
FUTURES CONTRACTS AND FORWARD CONTRACTS.....	155
A BRIEF HISTORY OF THE COMMODITY MARKET	163
SCOPE OF THE FUTURES MARKET.....	167
ECONOMIC BENEFITS OF FUTURES CONTRACTS.....	169
THE CLEARINGHOUSE AND THE FUTURES MARKET	176
CHAPTER SEVEN:	179
SALE PRIOR TO TAKING POSSESSION, SALE OF DEBT AND FUTURES CONTRACT	179
THE MEANING OF <i>TA'ĀM</i>	186
PARALLEL SALAM AND THE FUTURES MARKET	190
<i>BAY AL-DAYN BI AL-DAYN</i> AND THE FUTURES CONTRACT	195
CHAPTER EIGHT:	203
HEDGING, SPECULATION AND THE FUTURES MARKET	203
HEDGING AND THE FUTURES MARKET	203
SPECULATION AND THE FUTURES MARKET	205

SPECULATION AND FINANCIAL CRISES	214
ARBITRAGE AND SPECULATION.....	221
MARGIN TRADING AND SPECULATION	223
CHAPTER NINE:	226
FUTURES MARKET REGULATION AND ADMINISTRATION	226
INTERMEDIARIES IN THE FUTURES AND OPTIONS MARKET: AN ISLAMIC EVALUTION	226
THE FIDELIDY FUND	231
FUTURES MARKET REGULATION	232
TRADING OFFENCES UNDER THE FUTURES INDUSTRY ACT AND ISLAMIC LAW	234
THE OPTIONS MARKET	243
CHAPTER TEN:	243
CONCEPT AND SCOPE OF OPTIONS	243
CONCEPT OF OPTIONS	243
DEFINITION.....	244
ECONOMIC BENEFITS OF OPTIONS.....	247
AMERICAN AND EUROPEAN OPTIONS	253
TYPES OF OPTIONS	255
EXCHANGE TRADED AND OVER-THE-COUNTER ISLAMIC OPTIONS	257
A BRIEF HISTORY OF OPTIONS TRADING.....	259
SCOPE OF OPTIONS	260
CHAPTER ELEVEN:	266
KHIYAR AL-SHART RISK MANAGEMENT AND OPTIONS	266
CONCEPT OF KHIYĀR AL-SHART	267
THE TERMS OF KHIYĀR AL-SHART	269
THE OWNERSHIP OF THE COMMODITY DURING THE PERIOD OF KHIYĀR AND LIABILITY FOR DAMAGE	272
MANAGING PRICE RISK WITH KHIYAR AL-SHART	275
KHIYAR AL-NAQAD.....	283
CHAPTER TWELVE:	286
'ARBŪN RISK MANAGEMENT AND OPTIONS	286
THE LEGAL STATUS OF <i>BAY'AL-'ARBŪN</i>	292
<i>'ARBŪN</i> IN CURRENCY EXCHANGE OR <i>ṢARF</i>	293
<i>'ARBŪN</i> IN COMMODITIES AND SERVICES	293
<i>'ARBŪN</i> IN SHARES TRADING.....	296
<i>'ARBŪN</i> IN <i>MURĀBAHAH</i>	296
<i>ARBŪN</i> IN <i>SALAM</i>	303
<i>'ARBŪN</i> IN <i>'ISTISNĀ'</i>	305
<i>'ARBŪN</i> AS THE ISLAMIC ALTERNATIVE TO OPTIONS.....	307
<i>'ARBŪN</i> AS AN ALTERNATIVE TO CALL OPTION	307
<i>'ARBŪN</i> AS AN ALTERNATIVE TO PUT OPTION	309
DOES OPTIONS TRADING INVOLVE THE COMBINATION OF TWO CONTRACTS IN ONE TRANSACTION?	322
CHAPTER THIRTEEN:	325
THE SALE OF PURE RIGHTS AND THE LEGALITY OF OPTIONS	325
CONCEPT OF <i>MĀL</i> OR PROPERTY	335

HAQQ AL-NUZŪL ‘AN AL-WAZĀ‘IF AND THE SALE OF RIGHTS	339
HUQŪQ AL-IRTIFĀQ AND THE SALE OF RIGHTS.....	341
<i>BADAL AL-KHULU</i> AND THE SALE OF RIGHTS.....	344
SALE AND EXCHANGE OF THE RIGHT OF PRECEDENCE.....	347
INTELLECTUAL PROPERTY AND THE SALE OF RIGHT.....	350
RIGHT TO OPTION IN <i>KHIYĀR AL-SHART</i> AND RIGHT OF <i>SHUF‘AH</i> OR PRE-EMPTION AS PROPERTY RIGHTS	354
SALE AND EXCHANGE OF THE RIGHT TO OPTION IN <i>KHIYĀR AL-</i> <i>SHART</i> AND THE RIGHT TO PRE-EMPTION OR <i>SHUF‘AH</i>	359
EXCHANGE OF RIGHT TO BARGAIN FOR PURCHASE OF COMMODITY	364
SALE OF A RIGHT BY A WIFE TO HAVE HER HUSBAND WITH HER.	365
EARNING AN EXCHHNGE FOR DROPPING THE RIGHT TO <i>HADĀNAH</i>	366
EARNING AN EXCHANGE FOR WAIVING A RIGHT	366
CHAPTER FOURTEEN:	371
OPTIONS AND GAMBLING	371
CONCLUSION	382
BIBLIOGRAPY	398

INTRODUCTION

The economies of many Muslim countries are based on commodities or raw materials. It is also generally agreed that the production, investment and pricing of these commodities are largely affected by the use of derivatives in the international market for risk management and trading. The question normally arises as to what the Islamic position is regarding the use of these instruments.

Futures trading markets deal in almost all the basic commodities required by people around the globe such as corn, wheat, cotton, crude oil, heating oil, gasoline, cocoa, palm oil, timber, rubber, aluminum copper, zinc, nickel, tin, coffee, sugar, currencies, shares etc. and almost every person feels the impact of these markets.

If we take oil for instance, as one of the world's most important commodities and, it is impossible to conduct world commerce without it, the price of this commodity is generally determined by the use of oil derivatives transactions.

Derivatives instruments have largely emerged in a non-Islamic environment, thus they are loaded with values which may not be totally in compliance with Islamic principles. Therefore, there is need for a systematic analysis of these tools of risk management and hedging from an Islamic perspective.

More importantly, the availability excess of liquidity in many Islamic financial institutions which require viable and permissible channels for investment, makes the study of these new tools of financial engineering in the international commodities markets a timely undertaking. Many questions arise with regard to the idea of

evaluating their compliance with Islamic principles and suggesting new avenues of investment for the Islamic financial institutions.

Furthermore, the widely held opinion regarding the legality of derivatives instruments that they did not comply with *sharī'ah* regulations whether due to *riba*, gambling or other illegal activities, may not be totally true at least for certain forms of derivatives. Yet, this opinion has, so far, prevented the Islamic institutions from venturing into these areas of investment, open to conventional financial institutions. Therefore, it is pertinent to analyze the other available alternatives so that Islamic financial institutions do not find themselves in a disadvantaged position.

A series of studies have been conducted so far by certain Islamic institutions such as *Majma' al-Fiqh al-Islāmi* (Islamic Fiqh Academy based in Jeddah); *al-Majma' al-Fiqhi al-Islāmi* (Islamic Fiqh Academy based in Mecca) and by individual Muslim jurists. However, despite the welcome scholarly effort made so far, there are issues which still call for a systematic study and evaluation of the existing works and to address the shortcomings of some of these studies and the generalizations of others.

The present study will attempt to focus and elaborate specifically on those issues which have not been well elaborated by previous works or which have been left out despite their fundamental importance in the understanding of the issue of futures trading and derivatives.

The present analysis begins with a critical review of the major studies which have addressed the issue so far. The bulk of the present analysis is then divided into three

major parts: the forward market, the futures market and the options market in addition to the introduction and the conclusion.

The first part, which is subdivided into three chapters, addresses the forward market in commodities, the possibility of trading gold on a forward basis and the forward market in currencies. Considering the fact that a forward contract, as it is applied in the conventional system, is a contract where both countervalues are deferred to a future date, many contemporary Muslim jurists have argued against it relying on what is generally reported as the saying of the Prophet (PBUH) in which he prohibited the sale of *al-kāli' bi al-kāli'*. One of the different interpretations given to this “*hadīth*” by some classical as well as contemporary jurists is that it means a sale where both countervalues are deferred or what is known as *ibtidā' al-dayn bi al-dayn* and, the conclusion is therefore drawn that, the conventional forward contract is illegal.

However, some jurists have disputed this interpretation on the grounds that such a sale involves neither *riba* nor *gharar* and therefore, there is no reason for declaring it unlawful. Moreover, it is argued that from the outset the conventional forward contract is not a case of sale of debt for debt or *bay' al-kāli' bi al-kāli'* and therefore, it is not included in the above prohibition. Some commentators have upheld the view that even if the conventional forward contract partakes in *bay' al-kāli' bi al-kāli'* and therefore prohibited in principle, it can be accepted on grounds of necessity and pressing need.

The forward contract is one of the most commonly used contract in export-import trading especially in basic and essential commodities. It is also an important tool of risk management and business planning. However, bearing in mind the limitations of the existing nominated contracts in Islamic law to serve the functions of the conventional forward contract despite the close similarities of some of them with this contract, an alternative is needed. The present study attempts to investigate the possibility of admitting the forward contract in Islamic law.

This requires firstly, an investigation into the concept of *bay' al-kāli' bi al-kāli'* or, more precisely, the sale of debt where both countervalues are deferred to a future date after assessing the authenticity of the relevant “*hadīth*” and the alleged “*ijmā'*” about it. This will pave the way for the admissibility of this contract under the theory of freedom of contracts and conditions.

Secondly, the permissibility of the forward contract could be based on *salam*, the closest contract to the conventional forward contract. The major point of difference between the two contracts is that both countervalues could be deferred in the forward contract while in *salam*, in principle, the price must be paid in advance. Moreover, if we consider the Maliki opinion on *salam*, which is also endorsed by the Islamic Fiqh Academy in its resolution regarding *salam*, that the price in the *salam* contract could be deferred for three days or even more, it could be argued that this opinion represents a precedent for the postponement of both countervalues for any time agreed upon between the parties as it is in the conventional forward contract.

It should be noted however that the Maliki argument for the permissibility of deferring the price in *salam* contract for three days or more, does not include currency exchange due to the likelihood that it will lead to *riba*. Therefore, it is maintained that this is further evidence that the deferment of the price in *salam*, for three days, is allowed in commodity exchange because it is free from *riba* and excessive *gharar* and therefore, there is no reason not to extend the duration of the deferment for longer period than that.

In a similar approach, the present study argues that if it is admitted by the Hanafi school as well as by contemporary Muslim jurists that both countervalues could be deferred in *istisnā'* contract on the basis of *istihsān*, due to the people's need then, this need is much more obvious in the case of the forward contract than it is in *istisnā'*. Therefore, there is no reason to disallow it. Moreover, the study refutes the claim that there is no benefit in such a sale or that it contradicts the *hadīth* of the Prophet to the effect "do not sell what is not with you".

Furthermore, it is submitted that the forward contract is analogous to the contract by description (*al-bay' 'alā al-ṣifah*) or sale through sample (*al-bay' bi al-anmūzaj*) in Islamic law. This is because that both contracts are concluded based on a description of the subject matter of the contract which is generally not available at the time of the conclusion of the contract. More importantly, in both contracts both countervalues are deferred.

However, if the permissibility of the forward contract in commodity trading is obvious, this may not be the case with gold due to its special position. Trading gold

on spot basis is unanimously agreed as being lawful transaction. However, trading it on a forward basis is an issue of interest for Islamic financial institutions not only because it offers an additional area of investment but also because it is the source of legal debate and controversy among Muslim scholars.

Although it is agreed upon among Muslim jurists that the *sunnah* has clearly mentioned that the exchange of gold for gold, silver for silver and gold for silver must be hand to hand, there is a difference of opinion among classical Muslim jurists regarding the rationale behind this. Is it because gold and silver are weighted items or because they are used as money (*athmān*)?

The majority of contemporary Muslim jurists prefer the opinion that the cause or the *'illah* behind exchanging gold and silver on a hand to hand basis is that they are money. However, the question is whether gold and silver are still money or whether they have already lost this characteristic and become commodities after the adoption of paper money as legal tender and the end of the relation between the US dollar and gold in the 1970's. Are gold and silver money by creation and therefore, they can never lose this characteristic? Or were they chosen as currency during the time of the Prophet based on custom? More importantly, if they are no longer money and have become commodities, is it possible to trade them on a forward basis?

Numerous arguments have been advanced regarding the issue. The present study will critically analyze the divergence of opinions on the issue, although a final decision requires a collective *ijtihad* due to the complexity and sensitivity of the question.

On the other hand, the risk of currency fluctuation is an everyday business problem, especially after currency trading has become an area of investment or speculation by international fund managers. Although Islamic financial regulations oppose the idea of considering currencies as commodities and therefore, could not be traded in a speculative manner, however, it did not ignore the need for a mechanism that will provide Muslim investors with an acceptable method to manage their currency risk without contravening the rules of the *sharī'ah* in a world dominated by a system that does not give much consideration to business ethics.

Thus, given the fact that the forward currency market is the most widely used method to manage currency risk and bearing in mind that currency trading on a deferred basis will be a clear *riba* transaction, the conventional forward currency trading will definitely be illegal in Islamic law. However, Muslim scholars are looking for an Islamic alternative and in fact several alternative have been advanced.

The most frequently discussed proposal and one which is gradually being adopted by several Islamic financial institutions is the idea of mutual promise for currency exchange. It involves the promise to exchange different currencies according to the rate of exchange prevailing on the day of agreement. In other words, it is a mutual promise of currency exchange at the spot rate of exchange. It does not involve delivery on the part of either party: it is just a promise to purchase, on a future date at a rate fixed beforehand. This proposal raised the question about the differences between a contract and a promise, and whether or not a promise could be binding? What will happen, for example, if the party who makes the promise fails to fulfill his

obligation? Therefore, the present study will expound on the issue in order to ascertain the permissibility of such a transaction.

A second proposal advanced in this connection is the idea of a mutual loan or deposit where an equivalent amount of money in different currencies will be exchanged between the two parties for a specific period as a mutual loan or *qard hasan*. During this period each party has the right to use the amount of money he received in his respective investment and will refund his original amount of money at the agreed date.

Similarly, it is proposed that a Muslim importer may protect himself against currency fluctuation by buying the amount of currency needed for the settlement of his obligation and depositing it in an Islamic bank in order to withdraw it when the time to settle his obligation comes.

The final proposition is about the establishment of a co-operative fund whereby a number of Muslim traders will participate by depositing a certain amount. The amount would be managed by an Islamic bank for instance, and the parties would share the profit, if any, or face any risk associated with possible currency fluctuation. Although these proposals might solve some of the problems associated with currency fluctuation they are not immune from shortcomings. The present study will discuss the legal grounds for these different propositions and their compliance with Islamic principles.

However, despite the fact that the forward contract has been able to overcome some of the problems of risk management, it has its own shortcomings such as the problem of double coincidence, the problem of price determination which depends on the bargaining position of the parties and the problem of default or counterpart risk. Given these genuine problems, the futures contract was introduced in the conventional system of finance. Futures contract is basically a standardized forward contract with regard to the contract size, maturity, quality, place of delivery and the characteristic of being traded in an organized market. In other words, it is “a formal agreement between two parties to make and take delivery of a specified quantity and quality of a particular underlying item, at a specified location and time under the rules of a recognized exchange.”

The second part of the present study, divided into four chapters, will address the permissibility of the futures contract in Islamic law by expounding its different characteristics as distinct from the forward contract. This is followed by a brief history of the commodity market in general and the Malaysian commodity futures market in particular, being the first organized futures market in the Muslim world and serving as a case study in the present work. The study also addresses the scope of a futures market from an Islamic perspective focusing on the futures commodities market while currency futures and interest rate futures are out of consideration due to the clear involvement of *riba*.

The economic benefits of the futures market represent the main reason behind the search for an Islamic alternative. It serves different benefits such as risk shift, price discovery, liquidity enhancement, information flow and improvement of knowledge

and education related to the commodity traded in order to remain competitive. Moreover, establishing a futures commodity market in a country that is the largest producer of a specific commodity will not only provide local producers with facilities to hedge or to transfer their risks but also to retain a greater influence over the price paid for what they produce. Moreover, it helps in earning considerable sums of foreign currency exchange from foreign traders in the form of deposits, margins and brokerage commissions.

However, considering the fact that the conventional forward contract is the fundamental building block on which the futures markets are based, almost all the objections addressed against the forward contract are also raised against the futures contract. However, there are some other objections raised against the futures contract in particular such as, the assumption that it involves sale prior to taking possession, the sale of debt for debt and speculation which is considered as a kind of gambling. All of these objections are considered to be against *sharī'ah* principles and consequently affect the permissibility of the futures contract. Hence, a systematic study of these objections and other principles of the futures market need to be discussed.

However, the legality of selling prior to taking possession is largely debated. Some scholars have upheld that the prophetic injunctions regarding the issue are general and apply to all sales, which means that nothing could be sold prior to taking possession. Some others limit the prohibition to foodstuff only. However, the concept of foodstuff or *ta'ām* itself is a point of disagreement among Muslim scholars. Therefore, a thorough investigation is needed to ascertain the applicability of these rules to modern

transactions especially when the main reason for this prohibition according to the majority, is the uncertainty or *gharar* of not being able to deliver what is not in one's possession

The legality of selling *salam* prior to taking possession in particular and that of parallel *salam* deserve special attention. This is because *salam* is the closest contract among the nominated contracts in Islamic law upon which an Islamic futures market could be established. The study will therefore, discuss the possibility of futures contracts based on *salam*.

Closely related to the concept of sale prior to taking possession with regard to futures contracts is the issue of sale of debt for debt or *bay' al-dayn bi al-dayn*. It directly affects the legality of an Islamically viable futures market. However, the issue is surrounded by great controversy with regard to its legal basis, the different methodologies adopted by Muslim scholars with regard to its application and its relevance to the futures contract.

One of the important organizational features of futures exchange is the clearinghouse. It serves several crucial functions such as the registration of contracts, the substitution of counterparties, the management of physical delivery, the settlement of contracts, and the monitoring of members' positions. Therefore, an Islamic evaluation of the different functions performed by the clearinghouse is necessary for the legality of the futures contract in Islamic law

Hedging against business risk is the fundamental reason behind the formulation and existence of the futures market. It is generally accepted by contemporary Muslim jurists as a lawful and useful mechanism. However, there is no hedging without speculation. Similarly, it is commonly acknowledged that excessive speculation will harm much more than it helps. For this reason some have opposed all forms of speculation and as a result rejected any possibility of hedging.

The present study will elaborate on the issue of speculation by critically analyzing the different opinions on the issue and touching on the relation between speculation and financial crises. It refutes the claim of associating certain market crises with speculation given the fact that the clear causes of these crises lay in other factors such as weaknesses in the micro and macro-economic fundamentals of the economies concerned or poor management and lack of supervision in the affected market. At the same time, it is not possible to deny the fact that speculation may aggravate an unstable market situation. However, aggravating a situation is one thing but being the cause is quite another. Moreover, the study discusses the relation between arbitrage and speculation and margin trading and speculation.

The role of intermediaries is fundamental in the operation and existence of the exchange regulated futures or options market. The brokerage industry represents the most important part of intermediation in the derivatives industry. However, it also includes futures fund managers and futures advisers. It is not difficult to accommodate the rules governing these intermediaries and their legal status in Islamic law.

Concerning the basic concept of brokerage, it is maintained that it falls under the concept of *samsarah* or *wakalah bi al-'ajr* in Islamic law. Meanwhile, the other regulations governing the industry such as the financial capability of a broker, his duty not to trade against his client, to give priority to his customer's order or to segregate his customer's fund are administrative requirements for the smooth running of the market and the protection of investors and could be easily adopted in Islamic law on the basis of *maṣlahah*.

The present study also deals with futures market regulation. It takes the provisions of the Malaysian Futures Industry Act as an example. Thus, it discusses the role of the Securities Commission as the regulator of all matters related to the futures contracts and as a monitor of the activities of the exchange and clearinghouse. It can take all the necessary measures in order to protect investors and promote proper conduct amongst members. This supervisory role of the market by the Securities Commission is no more than the role of the *muhtasib* discussed in Islamic law. In addition, the study touches on the trading offences under the Futures Industry Act from the Islamic perspective

Although the forward and futures contracts have been able to overcome some of the problems associated with risk especially price risk and better planning of business, they are still inadequate to meet current business needs in some respects. In addition, the forward and futures contracts are associated with certain other problems such as the possibility of exposure to subsequent price movement or their unsuitability for the management of contingent liabilities and contingent claims. Thus, a new tool of risk

management is needed and the options contracts have been introduced due to their potential for managing such risks.

The third part of this study comprises five chapters, all of which address the legality of options as a tool of risk management. An options contract conveys the right to buy or to sell an underlying commodity at a specified price within a specified period of time. The economic benefits of options are not only recognized by Western scholars but also by many Muslim economists. Options bring about an increase of liquidity in the market, reduction in the effect of fluctuation of prices, and give an opportunity for investors to rearrange their portfolios. The study will also address the difference between American and European options, the major types of options: namely call and put options, the exchange traded and the over the counter options.

The scope of options trading in the present study will be limited to options in commodities in particular, although at times reference to options in shares trading will also be made. However, interest rate options, index options and currency options cannot be admitted in Islamic finance due their involvement in *riba* or *gharar* and therefore, they are beyond the scope of this study.

In the case of interest rate options the involvement of *riba* is clear while in the currency options the involvement of *riba* will be due to the deferment of one or both countervalues which is not permissible in currency exchange as a matter of principles. This is because currencies must be exchanged hand to hand and in spot.

The exclusion of options indices is due to the involvement of high risk of *gharar* given the fact that the subject matter of the contract in index options is not a commodity or even a right but the movement of price itself.

Khiyār al-shart and its variant *khiyār al-naqđ* seem to be the first alternative to conventional options from an Islamic point of view. The study will address the legal basis of these two contracts, the term of the *khiyār*, the ownership of the commodity during the period of *khiyār*, the liability for damage during this period and how *khiyār al-shart* and *khiyār al-naqđ* can be devised as tools to manage risk in *murābahah*, *ijārah* or stock trading.

Charging a fee for the option in *khiyār al-shart* is considered by some contemporary Muslim jurists to be lawful based on the general theory of freedom of contract while others maintain that *khiyār al-shart* is originally against the general principles and is allowed only by way of exception, therefore, it could not be the basis for an analogy with other things such as conventional options. Moreover, the critics argued that options trading will result in unfair transactions and work for the advantage of one party against the other.

Bay' al-'arbūn, on the other hand, could be a very effective tool of risk management and an Islamic alternative to options. It should be noted that although the legality of *'arbūn* was disputed among the classical Muslim jurists, there is almost a consensus among contemporary scholars that it is a valid contract. On the other hand, asserting the legal status of *'arbūn* is of great importance in the use of *'arbūn* as an alternative