ISLAMIC FINANCIAL SERVICES BOARD

GUIDANCE NOTE IN CONNECTION WITH THE RISK MANAGEMENT AND CAPITAL ADEQUACY STANDARDS: COMMODITY *MURĀBAHAH* TRANSACTIONS

December 2010

ISBN: 978-967-5687-05-1

ABOUT THE ISLAMIC FINANCIAL SERVICES BOARD (IFSB)

The IFSB is an international standard-setting organisation that promotes and enhances the soundness and stability of the Islamic financial services industry by issuing global prudential standards and guiding principles for the industry, broadly defined to include banking, capital markets and insurance sectors. The standards prepared by the IFSB follow a lengthy due process as outlined in its Guidelines and Procedures for the Preparation of Standards/Guidelines, which includes the issuance of exposure drafts and the holding of workshops and, where necessary, public hearings. The IFSB also conducts research and coordinates initiatives on industry-related issues, as well as organises roundtables, seminars and conferences for regulators and industry stakeholders. Towards this end, the IFSB works closely with relevant international, regional and national organisations, research/educational institutions and market players.

For more information about the IFSB, please visit **www.ifsb.org**.

COUNCIL MEMBERS

Chairman

H.E. Dr Sabir Mohamed Hassan – Central Bank of Sudan

Deputy Chairman

H.E. Faris Sharaf – Central Bank of Jordan

Members*

H.E. Rasheed Mohammed Al Maraj	Governor, Central Bank of Bahrain
H.E. Dr Atiur Rahman	Governor, Bangladesh Bank
H.E. YM Haji Mohd Roselan Haji Mohd Daud	Permanent Secretary, Ministry of Finance, Brunei Darussalam
H.E. Djama Mahamoud Haid	Governor, Banque Centrale De Djibouti
H.E. Dr Farouk Abd El Baky El Okdah	Governor, Central Bank of Egypt
H.E. Dr Ahmad Mohamed Ali Al Madani	President, Islamic Development Bank
H.E. Dr Darmin Nasution	Governor, Bank Indonesia
H.E. Dr Mahmoud Bahmani	Governor, Central Bank of the Islamic Republic of Iran
H.E. Sheikh Salem AbdulAziz Al-Sabah	Governor, Central Bank of Kuwait
H.E. Dr Zeti Akhtar Aziz	Governor, Bank Negara Malaysia
H.E. Fazeel Najeeb	Governor and Chairperson, Maldives Monetary Authority
H.E. Rundheersing Bheenick	Governor, Bank of Mauritius
H.E. Sanusi Lamido Aminu Sanusi	Governor, Central Bank of Nigeria
H.E. Shahid Hafiz Kardar	Governor, State Bank of Pakistan
H.E. Sheikh Abdullah Saoud Al-Thani	Governor, Qatar Central Bank
H.E. Dr Muhammad Al-Jasser	Governor, Saudi Arabian Monetary Agency
H.E. Heng Swee Keat	Managing Director, Monetary Authority of Singapore
H.E. Dr Adib Mayaleh	Governor, Central Bank of Syria
H.E. Sultan Bin Nasser Al Suwaidi	Governor, Central Bank of the United Arab Emirates

*** In alphabetical order of the country the member's organisation represents**

TECHNICAL COMMITTEE

Chairman

Dr Abdulrahman A. Al-Hamidy – Saudi Arabian Monetary Agency

Deputy Chairman

Mr Osman Hamad Mohamed Khair – Central Bank of Sudan *(until 15 August 2009)*
Dr Mohammad Yousef Al Hashel – Central Bank of Kuwait *(from 23 November 2009)*

Members*

Dr Sami Ibrahim Al-Suwailem *(until 13 December 2010)*	Islamic Development Bank
Dr Salman Syed Ali *(from 14 December 2010)*	Islamic Development Bank
Mr Khalid Hamad Abdulrahman Hamad	Central Bank of Bahrain
Mr Gamal Abdel Aziz Ezzat Negm *(until 13 December 2010)*	Central Bank of Egypt
Mr Farag Abdul Hameed Farag *(from 14 December 2010)*	Central Bank of Egypt
Mr Ramzi Ahmad Zuhdi *(until 5 April 2010)*	Bank Indonesia
Dr Mulya Effendi Siregar *(from 6 April 2010)*	Bank Indonesia
Mr Hamid Tehranfar *(until 31 March 2009)*	Central Bank of the Islamic Republic of Iran
Mr Abdolmahdi Arjmand Nehzad *(from 1 April 2009)*	Central Bank of the Islamic Republic of Iran
Mr Bakarudin Ishak *(until 31 March 2009)*	Bank Negara Malaysia
Mr Ahmad Hizzad Baharuddin *(from 1 April 2009)*	Bank Negara Malaysia
Dr Nik Ramlah Mahmood	Securities Commission of Malaysia
Dr Bashir Umar Aliyu *(from 6 April 2010)*	Central Bank of Nigeria
Mr Pervez Said *(until 31 March 2009)*	State Bank of Pakistan
Ms Lubna Farooq Malik *(until 5 April 2010)*	State Bank of Pakistan
Mr Saleemullah *(from 6 April 2010)*	State Bank of Pakistan
Mr Mu'jib Turki Al Turki	Qatar Central Bank
Professor Abdulaziz Abdullah Al Zoom	Capital Market Authority of Saudi Arabia
Mr Chia Der Jiun *(until 13 December 2010)*	Monetary Authority of Singapore
Mr Adrian Tsen Leong Chua *(from 14 December 2010)*	Monetary Authority of Singapore
Mr Mohammed Ali Elshiekh Terifi (from 1 April 2009)	Central Bank of Sudan
Mr Saeed Abdulla Al-Hamiz *(until 31 March 2009)*	Central Bank of the United Arab Emirates
Mr Khalid Omar Al-Kharji *(from 1 April 2009)*	Central Bank of the United Arab Emirates

*** In alphabetical order of the country the member's organisation represents**

ISLAMIC DEVELOPMENT BANK *SHARĪ`AH* COMMITTEE*

Chairman
Sheikh Mohamed Mokhtar Sellami

Deputy Chairman
Sheikh Saleh Bin Abdulrahman Bin Abdulaziz Al Husayn

Sheikh Dr Abdulsattar Abu Ghuddah	Member
Sheikh Dr Hussein Hamed Hassan	Member
Sheikh Mohammad Ali Taskhiri	Member
Sheikh Mohamed Hashim Bin Yahaya	Member

*** In alphabetical order**

SECRETARIAT, ISLAMIC FINANCIAL SERVICES BOARD

Professor Datuk Rifaat Ahmed Abdel Karim	Secretary-General
Professor Simon Archer	Consultant
Dr V. Sundararajan	Consultant
Mr Jamshaid Anwar Chattha	Member of the Secretariat

TABLE OF CONTENTS

ACRONYMS

BCBS	Basel Committee on Banking Supervision
CAR	Capital adequacy ratio
CCR	Counterparty credit risk
CMF	Commodity *Murābahah* Financing
CMLF	Commodity *Murābahah* for Liquid Funds
CMOF	Commodity *Murābahah* for Obtaining Funding
CMT	Commodity *Murābahah* Transactions
GN	Guidance Note
GN-3	IFSB Guidance Note on the Practice of Smoothing the Profits Payout to Investment Account Holders, December 2010
IAHs	Investment account holders
IFSB	Islamic Financial Services Board
IFSB-1	IFSB Guiding Principles of Risk Management, December 2005
IFSB-2	IFSB Capital Adequacy Standard, December 2005
IFSB-5	IFSB Guidance on Key Elements in the Supervisory Review Process, December 2007
IFSB-10	IFSB Guiding Principles on *Sharī`ah* Governance System, December 2009
IIFS	Institutions offering only Islamic financial services (which, for the purpose of this document only, shall also include Islamic windows operations) [excluding Islamic insurance (*Takāful*) institutions and Islamic mutual funds]
OTC	Over-the-counter
PSIA	Profit-sharing investment account
RW	Risk weight
RWA	Risk-weighted assets
SLOLR	*Sharī`ah*-compliant lender of last resort
SSB	*Sharī`ah* Supervisory Board
TN-1	IFSB Technical Note on Issues in Strengthening Liquidity Management of IIFS, March 2008

Bismillahirrahmanirrahim
Allahumma salli wasallim 'ala Sayyidina Muhammad wa'ala a*lihi wasahbihi*

OBJECTIVE

The objective of this Guidance Note (GN) is to highlight risks associated with Commodity *Murābahah* Transactions (CMT) and products of similar design and structure, and to assess their implications in relation to the regulatory capital requirements in institutions offering only Islamic financial services (IIFS).

SECTION 1: INTRODUCTION

1. The Islamic Financial Services Board (IFSB) Council approved in its 11th meeting held on 22 November 2007 the development of a GN in response to the increasing use of CMT by IIFS in different jurisdictions as a tool for liquidity management. The use of CMT has various possible implications in terms of risk assessment and regulatory capital requirements. In addressing these risk management and capital adequacy issues arising from the use of CMT, this GN will complement the existing IFSB Guiding Principles of Risk Management for IIFS, December 2005 (hereinafter "IFSB-1") and IFSB Capital Adequacy Standard, December 2005 (hereinafter "IFSB-2").

2. It is observed from industry practice that many IIFS employ CMT as part of their liquidity management strategy, despite there being differences of opinion among Islamic scholars as to its *Sharī`ah* permissibility, especially in recent times. As their business rapidly grows, there has been a significant emphasis by IIFS on the management of excess liquidity, and on the challenges of maintaining a sufficient liquidity cushion to meet any mismatches of the term structure (maturity dates) of assets and liabilities.[1] The use of CMT can be categorised into several main areas, including: (i) interbank market (more or less informal) and central bank involvement; (ii) extending financing based on *Murābahah* where the counterparty immediately sells the commodities; and (iii) receiving funding from a counterparty in the form of liabilities. However, while operating in the commodities segment, IIFS are exposed to the full spectrum of prudential risks arising from significant and concentrated exposures. This may, in turn, expose them to substantial counterparty credit risk and have a significant influence on liquidity and prices in the specific segments of the commodities market in which they are investing (see section 3).[2]

3. It is observed that, as a financial instrument, CMT was mainly developed for the purpose of *Sharī`ah*-compliant interbank transactions, whereby IIFS having an excess of liquid funds may invest such funds with other IIFS having a deficit of such funds (or vice versa). However, the expansion of its use into other areas, as noted in paragraphs 2 and 11, has raised a number of issues for IIFS and their supervisory authorities. The Islamic Financial Services Board (IFSB) notes that some central banks/supervisory authorities have served as facilitators of CMT for specific purposes, such as by providing a platform (i.e. liquidity management infrastructure) for effective management of liquidity position in the Islamic financial system, and by using CMT in central bank operations with IIFS, such as those undertaken as a *Sharī`ah*-compliant lender of last resort (SLOLR).

[1] Excess liquidity is currently the norm for most IIFS worldwide, for various reasons, and is an ongoing challenge for them in terms of business risk and competitiveness, as it earns them very low or no returns. IIFS, unlike their conventional counterparts, cannot simply borrow at interest to meet unexpected withdrawals from their depositors; hence, it could be difficult for them to manage the mismatch between their asset and liability portfolios unless efficient liquidity management arrangements, such as through CMT or sales of *Sukūk* in the secondary market, etc., are available.

[2] In the IFSB's Technical Note (TN-1) on Issues in Strengthening Liquidity Management of IIFS, published in 2008, it is recognised that efficient money and interbank markets for Islamic finance instruments have not yet been developed in most countries, in part due to those countries not implementing and developing *Sharī`ah*-compliant instruments and the relatively small number and size of the IIFS. According to the IFSB survey (2006) conducted for the purpose of the TN-1, CMT ranked highest (at 49%) among the instruments used for liquidity management.

1.1 Scope of Application

4. The IFSB notes that there are a number of instruments available to IIFS in the markets for managing liquidity, as mentioned in IFSB Technical Note on Issues in Strengthening Liquidity Management of IIFS, March 2008 (hereinafter "TN-1"), although this GN focuses only on CMT.[3] In general, the scope and application of this GN are subject to the adoption of the other applicable IFSB Standards.

5. IFSB-1 addresses, *inter alia*, 15 principles on risk management for six categories of risk arising from the various Islamic financial contracts used by the IIFS. IFSB-1 highlights the estimation of liquidity flows by types of funding, without giving specific consideration to the use of *Murābahah* as a type of funding. Hence, the specific prudential risk implications of CMT for the IIFS discussed in this GN would complement IFSB-1, since the CMT fall within the broad scope of those 15 principles.

6. IFSB-2 addresses, *inter alia*, the structure and content of *Sharī`ah*-compliant products and services that are not specifically addressed by the Basel Committee on Banking Supervision (BCBS) in the document "International Convergence of Capital Measurement and Capital Standards" (commonly referred to as "Basel II"), and seeks to standardise the approach to risk weighting such products and services. IFSB-2 deals mainly with funds mobilisation on a *Muḍārabah* – rather than *Murābahah* – basis (i.e. sale of an asset at cost plus profit). In principle, the recent emergence of this concept in IIFS and Islamic windows brings about a divergence from the traditional mode of mobilising funds in IIFS, which has mainly been through *Muḍārabah*. Using *Murābahah* as a source of funding introduces a new category of item to the balance sheet of an IIFS,[4] which is classified as a liability of the IIFS based on its contractual obligation as a creditor to the customer. This requires a clear distinction to be made as to whether *Murābahah* or *Muḍārabah* is used as a source of funding. The main concern, especially from the capital adequacy perspective, is to ensure proper consideration of the implications for capital adequacy of substituting *Murābahah*-based liabilities for *Muḍārabah*-based funds, with their profit-sharing and loss-bearing characteristics.

7. The IFSB recognises that some forms of framework for CMT already exist, provided by certain international bodies for Islamic finance, including in relation to certain *Sharī`ah* control features, legal format and standardisation of the CMT structures. Nevertheless, in view of the evidence of extensive use of CMT across several jurisdictions, the IFSB intends to highlight only the prudential concerns and implications that CMT raise and to consider how these concerns can be addressed.

[3] This GN does not address CMT as a hedging instrument (foreign exchange risk management tool) and Commodity *Murābahah Sukūk*, as issued by some IIFS, as these instruments are jurisdiction specific.

[4] Here CMT involves the customer/IIFS investing its funds with another IIFS/customer on a fixed profit rate basis, in a *Sharī`ah*-compliant way, through transactions in the commodities market. The asset/commodity is typically a freely tradable commodity such as platinum, crude palm oil, wheat, cotton, etc. See section 2 for a definition of CMT.

SECTION 2: DEFINITION AND EXPLANATION OF CMT

8. In this GN, "commodity" means *a physical product which is and can be traded on a secondary market – e.g. agricultural products, minerals (including oil) and precious metals*.[5] This includes different types of freely tradable *Sharī`ah*-compliant commodities (such as platinum, crude palm oil (CPO), wheat, cotton, etc. for CMT) as approved by the respective *Sharī`ah* Supervisory Board (SSB). The scope of the CMT may include those *Sharī`ah*-compliant commodities that the IIFS buys from the market on the specific request of a customer (which request could take the form of either a binding or a non-binding promise to purchase the subject-matter from the IIFS[6]). Alternatively, the IIFS might already have bought the *Sharī`ah*-compliant commodities for sale under the CMT arrangement.

9. In the context of this GN, the term "Commodity *Murābahah* Transactions as a tool for liquidity management (CMT)" means a *Murābahah-based* purchase and sale transaction of *Sharī`ah*-compliant commodities, whether on cash or deferred payment terms. Terms and conditions of the CMT will contain, *inter alia*: (a) the nature of the transaction (see paragraph 11 below for three categories of CMT); (b) the type and description of the commodities; (c) the quantity of goods, details of the time of payments and the unit price thereof; (d) the purchase price or cost, rate of profit and sale price; (e) the stipulation that delivery of the commodities is certain and unconditional;[7] and (f) the nature of the seller's ownership of the commodity in terms of period and type of currency before selling it to the counterparties under the CMT.

10. In CMT, a customer (counterparty) may be the recipient of funds, since the customer (counterparty) purchases the commodity from the IIFS on credit and sells it on spot to a third party to obtain funds. Alternatively, the IIFS may be the recipient of funds, since it buys the commodity from an individual or financial institution on credit and sells it on spot to a third party to obtain funds.[8] Since most IIFS provide financing through *Murābahah* contracts, which is often the dominant form of financing, the term "Commodity *Murābahah*" becomes distinct only because of the use of some standardised commodity that is traded with the intention to provide and/or obtain funds, and generally does not involve the physical delivery and use of the commodity for a specific purpose.[9] A common use of CMT is by IIFS as part of their liquidity management (see paragraph 11). In view of the huge amount of global CMT undertaken to channel funds from liquidity-surplus entities to liquidity-deficit entities within the economy, the effects on volumes and prices may be such as to distort the efficient allocation of resources for actual portfolio diversification and effective liquidity management for IIFS.

11. As highlighted earlier, CMT facilitate transactions for managing excess funds in some jurisdictions. At the same time, in some other jurisdictions, CMT are used for funding liquidity requirements of IIFS. Thus, an IIFS may utilise CMT on either side of its balance sheet, to place a short-term excess of liquidity funds with counterparties, or to fund its own short-term liquidity

---

[5] This definition of "commodity" is adopted from IFSB-2 (please refer to paragraph 55 of IFSB-2). Note that in Islamic finance, precious metals do not include gold and silver, and currency/money is not a commodity.

[6] It is likely that IIFS could buy and sell commodities to the counterparty based on: (a) a binding promise; or (b) a non-binding promise. In the case of (a), the counterparty approaches the IIFS and expresses the intention to enter into the CMT with specifications and a proper description, and the customer promises to buy the commodity. In the case of (b), the counterparty may approach the IIFS, but the IIFS may not have binding terms to enforce the contract if the counterparty does not agree to take delivery of the commodity.

[7] Delivery does not need to be, and generally is not, physical, but consists of the transfer of legal title.

[8] The GN recognises that the practice of buying and/or disposing of the CMT items among IIFS varies from one IIFS to another IIFS due to their respective SSBs' opinions on CMT. For instance, some IIFS buy and/or dispose of CMT items by themselves to third party (i.e. without involving the agents in transaction), while some act as an agent on behalf of the counterparty to buy and/or sell the CMT items to a third party. However, it should be noted that the GN deals with risks and capital adequacy issues arising therefrom, not with *Sharī`ah* issues.

[9] However, it is noted that some IIFS do not use standardised commodities (such as metal, CPO, etc.). Rather, they use a suitable local commodity. See paragraph 18 for details.

shortages.[10] In the interests of clarity, and in accordance with common practice, this GN uses "CMLF" and "CMF" on the asset side, and "CMLF" and "CMOF" on the liability side, of an IIFS's balance sheet. These key terminologies are defined below (see Appendix 1 for general structure with graphical illustration (i.e. the generic flow of funds and commodities) of the three CMT categories):

(i) CMT for interbank operations for managing short-term surpluses or deficits of liquidity (i.e. selling and buying of *Sharī`ah*-compliant commodities through *Murābahah* transactions, which is commonly termed as "placement" in conventional institutions) or where the counterparty is the central bank or monetary authority offering SLOLR and/or a standing facility for effective liquidity management, is referred to as "Commodity *Murābahah* for Liquid Funds (CMLF)".[11]

(ii) CMT for providing financing to a counterparty by a longer-term Commodity *Murābahah* where the counterparty immediately sells the commodities on the spot market is referred to as "Commodity *Murābahah* Financing (CMF)".

(iii) CMT in the case of an IIFS receiving funding from a counterparty in the form of liabilities for commodity purchases on credit (where the commodities are immediately sold on the spot market by the IIFS) is referred to as "Commodity *Murābahah* for Obtaining Funding (CMOF)".[12]

12. For an IIFS, CMLF is a tool for liquidity management, being a means of investing surplus liquid funds on a short-term basis (on the asset side) or obtaining short-term liquid funds (on the liability side). By contrast, CMOF is a means of obtaining funds (term deposits), when counterparties are looking for a stable, fixed return through *Sharī`ah*-compliant structures, while CMF is a means of extending financing to clients as a *Sharī`ah*-compliant term credit. In the case of CMT on the asset side, the nature of the counterparty who will be receiving funds and the duration of the funding will affect the risk weight (RW) on assets, and the type of counterparty who parks or invests funds with the IIFS through CMOF may have implications for rollover risk.[13] Hence, an IIFS using CMOF needs to consider very carefully the likelihood of the arrangements being rolled over by the counterparty. Some funds placed on this basis are more stable (i.e. very likely to be rolled over) than others. This also highlights the different risks from the perspective of an IIFS that is either undertaking CMLF by investing funds elsewhere, thereby incurring counterparty credit risk, or undertaking a CMOF by receiving funds and hence potentially facing rollover risk, depending upon the characteristics of the counterparty who provided the funds on a CMOF basis.

13. The GN recognises that IIFS may structure CMT very simply or in a highly complicated way, often resulting in complex structures that may pose additional prudential risks and raise capital requirements issues. It is outside the scope of this GN to elucidate all the possible structures of the CMT, because the practice and specific structure of CMT can vary among IIFS in different jurisdictions based on the different roles and responsibilities of the various parties involved in the CMT and the related opinions of the SSBs.

---

[10] In the case of an IIFS obtaining funding under CMOF, the counterparty could be any individual or corporate client, or a financial institution seeking a fixed return through transactions in *Sharī`ah*-compliant commodities. Similarly, in the case of an IIFS funding others under CMF, the counterparty could be any individual or corporate client, or an IIFS or other financial institution. By contrast, in the case of CMLF on either side of the balance sheet, the counterparty would normally be another IIFS or other financial institution, and in some jurisdictions, CMLF involves the supervisory authorities/central banks as a counterparty that is not in a liquidity-deficit position but rather is acting as a facilitator of the CMLF transaction.

[11] CMLF is also referred to as "Commodity *Murabahah* Investment" by some of the IIFS in the industry. This GN notes that *Murābahah* should not be recorded as an investment, since in fact it is a type of receivable. The term "investment" implies exposure to market risk, rather than to the credit risk which is applicable in the case of CMLF.

[12] It is worth mentioning that the term "*Murābahah* Deposit or Reverse *Murābahah*" is commonly used in various jurisdictions to refer to CMOF.

[13] Rollover occurs when parties to the CMT renew or roll over a CMT arrangement upon its maturity. Rollover risk is the risk of being short of liquidity if rollover does not occur, and can be a very serious factor in liquidity risk.

SECTION 3: PRUDENTIAL RISKS AND RISK MANAGEMENT IN CMT

14. This section highlights the different risk implications of CMT. Based on the risks indicated in paragraph 16 below, IIFS should develop and implement appropriate policies and procedures to manage these risks prudently. The risk management framework for CMT should be integrated within an IIFS's overall risk management system and governance framework. The policies and procedures designed by an IIFS for a comprehensive risk management for CMT should be consistent with Principle 1 of IFSB-1, and hence CMT risks should be dealt with on an ongoing basis, bearing in mind that a large volume of transactions in commodities may give rise to specific risk exposures for an IIFS. This GN notes that failures in risk management in CMT can cause problems for markets and are a matter of cross-border and cross-sectoral concern.[14] In line with paragraph 6 of IFSB-1, the GN recognises that the specific risk management practices of each IIFS for CMT will vary in scope and content, depending on its activities.

15. In addition to the various prudential considerations of risks described in the following sub-sections, an IIFS should be aware that any governance, operational or risk management failures in relation to its CMT that attract negative publicity may expose it to reputational risk, and that this may lead to an impact on its market position, profitability and liquidity.

3.1 Associated Risks in CMT

16. Based on the general CMT structures as identified in paragraph 11 (see also Appendix 1), the transactions in the CMT structure pass through several important phases, each of which has different risk implications (see Appendix 2). Thus, an IIFS is exposed to different risks in different phases of the CMT. The five main types of risk associated with CMT can be categorised as: (i) market risk, (ii) credit risk, (iii) liquidity risk, (iv) rate of return risk, and (v) operational risk. In CMT, these risks are all interrelated and may have the potential to disrupt the markets, which, in turn, may transmit systemic risk. (See Table 1 below, which summarises relevant paragraphs and sections of the relevant IFSB Standards for these categories of risk.) Consequently, it is crucial for IIFS to recognise and evaluate the overlapping nature and transformation of risks (see paragraphs 18 and 21) that exist between and among the categories of CMT and the types of risk. Since the dynamism of risk exposure through the phases of CMT is unique to IIFS, the GN recommends, *inter alia*, that an IIFS break down the CMT contractual timeline for managing the risks in each phase. Given the phases as indicated in Appendix 2, a number of steps will be required by an IIFS to address the risks.

3.2 Market Risk (Price Risk)

17. An IIFS may be exposed to market risk through any fluctuation in the price of the underlying commodity that comes into its possession for a longer duration than normal – for example, when a customer refuses to honour his commitment to buy or when the agreement is non-binding.[15] Price risk in commodities is often more complex and volatile, and commodity markets are also less liquid; as a result, changes in supply and demand can have more dramatic effects on price and volatility.[16] For instance, heavy use of CMT by a large number of IIFS could have an impact on commodity prices, particularly in times of stress when all IIFS are trying to get liquidity, and affect commodity price volatility, and hence may cause a systemic "market impact

[14] Due to the cross-border liquidity management practices of IIFS through CMT, and the interconnectedness of various counterparties (such as Islamic investment companies/banks, etc.) in IIFS, supervisors may have concerns relating to cross-border and cross-sectoral transactions.
[15] Normally the IIFS would resell the commodity to the broker immediately and would incur costs (i.e. the broker's commission) (see paragraph 18).
[16] See paragraph 718 (XLIV) of Basel II Pillar I (June 2006).

risk".[17] Given the complex nature of CMT transactions, it may be difficult for many counterparties to evaluate them, because the price fluctuations for some of these underlying assets are very difficult to predict.[18] Therefore, there appear to be significant concerns, as follows, which need to be considered by the IIFS: (a) Who bears the commodity price risk? (b) How does an IIFS pass on the price risk to counterparties when buying and selling arrangements are not made simultaneously?[19] (c) How may foreign exchange exposures be hedged using *Sharī`ah*-compliant methods involving CMT?

18. The extent of market risk will vary depending upon the type of CMT. With CMLF and CMF on the asset side, market risk transforms into credit risk. (That is, market risk is applicable before selling the commodities to the counterparty, while upon their being sold to the counterparty on deferred payment terms the market risk converts into credit risk.) With CMLF and CMOF on the liability side, however, an IIFS may be exposed to market risk if it holds title to the commodity for any length of time. Thus, the market risk management mechanism may be different from one IIFS to another, based on their positions in the CMT.[20] The GN notes that, given the rapid disposal[21] of commodities acquired to get liquidity, CMT may minimise market risk.[22] On the other hand, if an IIFS holds title to the commodities for any length of time in the CMT transaction, this will result in a market risk exposure.

19. The increasing trend to place great reliance on the use of assets and liabilities denominated in foreign currencies in CMT can lead to severe foreign exchange risk exposures for IIFS.[23] In this context, the IIFS may look into matching the currency of commodity transaction with the instruments used. However, such issues are outside the scope of this GN (see footnote 3).

20. While conducting CMT in different commodities and markets, an IIFS should highlight the specific market risk factors corresponding to each commodity and market, and specify how it manages those risks.[24] An IIFS should also underline its limits on exposures set by the management or supervisory authorities, if any, in those commodities and markets, and its systems should include regular independent reviews of risk management (especially to capture specific market risks) – for example, in its internal auditing process.

3.3 Counterparty Credit Risk

21. In CMT, IIFS are exposed to counterparty credit risk (CCR) – that is, the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash

[17] This GN notes that this can be handled through stress testing exercises for possible systemic impact. The stress testing on CMT should be comprehensive enough to consider all types of possible scenarios that may trigger the systemic "market impact risk". However, this GN does not specifically address the stress testing for CMT, as this issue is broadly being addressed in a separate IFSB standard on stress testing.

[18] Since the majority of commodity trades are done through over-the-counter (OTC) contracts traded through a network of brokers and dealers, commodity markets are particularly opaque. Consequently, since OTC data are not available through exchanges, it is difficult to know precisely what the market is trading at any given time. In addition, since IIFS are engaged in multiple trading relationships, IIFS may not have a full picture of the counterparty's leverage or its other risk exposures.

[19] IIFS may set a maximum holding period and stop loss limit as part of the exit strategy in cases where buying and selling arrangements are not made on the spot.

[20] One IIFS may take different positions and different exposures depending on the willingness of the counterparty and the risk appetite of the IIFS.

[21] However, IIFS should note that too rapid unwinding of large positions may fuel market illiquidity and volatility, and lead to a collapse of asset prices.

[22] For instance, some IIFS may not face market risk if the commodity prices are fixed daily and the CMT are conducted within the cycle of one business day, and if the purchase and selling price of the underlying commodity is identical. To manage the supply risk in some IIFS, one IIFS provides the supplier/broker of a commodity with adequate notice of future transactions to mitigate supply risk. Purchase and sale of the commodity is settled within a day, thereby mitigating the counterparty, operational and settlement risk.

[23] If the IIFS uses a local commodity and a locally denominated currency, then it may not attract foreign exchange risk.

[24] The IIFS may develop a reliable way to identify primary risk factors pertinent to market risk (e.g. price factors) and put in place structure analysis to identify the relationship between the different risk factors associated with different CMT contract terms.

flows.[25] In particular, the CCR will be applicable in CMLF and CMF on the asset side; however, for the CMLF and CMOF on the liability side, the CCR is applicable to the counterparty and not to the IIFS itself, regardless of its position taken, as described above. In the cases of both CMLF and CMF on the asset side, the significance of CCR will depend on the size of the position, the quality of the counterparty and the available risk mitigants. The difference between CMLF and CMF on the asset side in terms of the counterparty indicates the RW applicable.[26]

22. Both normal *Murābahah* transactions and the CMT are based on real assets, but in the CMT, IIFS may be exposed to the risks associated with the assets used in a subsequent (rolled-over) CMT contract. In this context, the CCR of a broker/supplier to the IIFS is also an important consideration, as nearly all CMT are executed through brokers/suppliers. Additionally, risks associated with CCR in the case of OTC transactions should be correctly evaluated and mitigated by the IIFS. IIFS may manage the CCR by putting in place appropriate credit policies, applying *Takāful* coverage, securing the necessary collaterals, and authorising the limits prior to entering into CMT. These policies and procedures set by the IIFS for the CMT should be consistent with IFSB-1 to manage CCR. (See Table 1 for credit risk principles.[27]) The supervisory authority should provide guidelines regarding the reporting of CMT.

3.4 Liquidity Risk

23. Another risk which should be given particular consideration by IIFS is liquidity risk. In this regard, IFSB-1 highlights, *inter alia*, the estimation of liquidity flows by types of funding, and the need to take into account ease of access to *Sharī`ah*-compliant funding sources in order to meet liquidity shortfalls. IFSB-1 does not give specific consideration to the use of *Murābahah* as a source of funding. Therefore, in relation to CMT, the liquidity risk management framework (including reporting) of an IIFS needs to consider separately and on an overall basis the liquidity positions of different types of accounts, including *Murābahah*, to ensure that adequate liquidity is maintained to meet the liquidity requirements resulting from the use of this source of funding.

24. In addition to possible liquidity (maturity) mismatches faced by an IIFS as a result of CMT, there is also a rollover risk resulting in IIFS facing a liquidity risk exposure (see paragraph 12). The lack of tradability of CMT is itself a source of liquidity risk for an IIFS.[28] This will require an IIFS to make a specific liquidity risk assessment. Given these considerations, the IIFS should be able to estimate the cash flows accurately, in order to manage and reduce the liquidity risk. However, it is noted that management of funding liquidity risks (including possible liquidity mismatches) may be difficult, especially in situations that combine increasing requests for withdrawals and illiquid asset markets. Regardless of the commodities and markets in which an IIFS conducts CMT, it should have appropriate processes in place to measure and manage this type of risk, whenever it deals with larger positions.

25. Though CMT's legitimacy under the *Sharī`ah* is validated by some SSBs, studies conducted by the IFSB on CMT have shown that its overwhelming use could lead to excessive leveraging that is inconsistent with *Sharī`ah* principles. This could be a source of serious concern,

---

[25] BCBS's Consultative Document (December 2009), "Strengthening the Resilience of the Banking Sector".

[26] For CMLF, an IIFS will more likely attract lower RW as the counterparty is normally another IIFS or central bank; however, for CMF, it is likely to attract a higher RW because of the nature of the counterparty (see footnote 10).

[27] That is, the need for a due diligence review in respect of counterparties, financial distress of a counterparty or, in particular, for managing problem credits, potential and defaulting counterparties, credit risk-mitigating techniques, and limits on the degree of and enforceability of collateral and guarantees.

[28] The nature of CMT involves buying and selling commodities from/to a counterparty on a cost-plus-profit basis to be paid for later, thus creating receivables (in CMLF and CMF on the asset side) and payables (in CMLF and CMOF on the liability side). In the case of CMLF and CMF, *Murābahah* receivables are debt (which a counterparty will have to pay on maturity) and in most jurisdictions such debts cannot be sold in a secondary market at a price different from the face value – thus creating a liquidity risk exposure for the IIFS. Hence, the use of CMT may not allow much flexibility to IIFS, as they would lock in their position once they enter into the transaction. Lack of tradability in CMT exists in spite of its widespread use; thus, once CMT is entered into, a non-tradable receivable is created (i.e. it is not *Sharī`ah*-compliant to trade in debt in most jurisdictions) and counterparties/IIFS have to wait until the maturity of the contract to recover their funds.

and may demand the supervisor's/regulator's intervention from a prudential perspective (especially when the use of CMT is not supported by proper risk management and corporate governance principles). The GN also notes that extensive use of CMT, and larger exposures in CMT using trades in commodities (e.g. metals, CPO, etc.) in some jurisdictions, induces greater volatility in the prices of these commodities, which eventually introduces greater market risk – that is, the volatility of prices at which these commodities can be bought and sold. To limit excessive leverage or over-concentration through CMT contributing to systemic risks, IIFS may establish, *inter alia, ex-ante* caps, in terms of intra-day gross turnover and/or cumulative net outstanding positions in CMT at any point in time. In regard to limits, the risk management function should closely monitor adherence. IIFS should also be cautious of entering into longer-maturity CMF agreements, which may in fact be required by counterparties for medium-term finance, rather than for funding liquidity. Rather than entering into such longer-maturity CMF arrangements, an IIFS may find it preferable to structure the arrangements as a series of shorter-maturity CMF contracts that can be rolled over.[29]

26. Heavy reliance on CMT for liquidity management raises serious concerns for the supervisory authorities that deserve closer monitoring, in line with IFSB Guidance on Key Elements in the Supervisory Review Process, December 2007 (hereinafter "IFSB-5"). IIFS should report those limits to the supervisory authority. Supervisory authorities should examine any increase in the degree of leverage using CMT to achieve growth, as it may bring about liquidity (maturity) mismatch between assets and liabilities of IIFS (i.e. when long-term financing/investment is funded through shorter-term liabilities (i.e. CMOF)). The GN recognises that comprehensive and effective liquidity management is a key component for a sound and stable IIFS. The supervisory incentives for liquidity management have been outlined in TN-1, which is relevant in the case of CMT. In order for supervisory authorities to gauge the short-term ability of IIFS to match the different maturities of their assets and liabilities in CMT, liquidity mismatch and liquidity management guidelines should be made available for IIFS in line with paragraph 7 of IFSB-5.[30]

3.5 Rate of Return Risk

27. Rate of return risk should be paid due attention by IIFS given the nature of CMT, particularly in the case of longer-maturity transactions (see paragraph 25). The rate of return risk with respect to CMT is different from rate of return risk in connection with a profit-sharing investment account (PSIA). The suppliers of funding through CMT have a contractually fixed return *ex-ante* in the form of the cost plus profit, whereas holders of PSIA have no such contractually fixed rate of return. Thus, to the extent that IIFS may lock in mismatches in the maturity time buckets, due to gearing up the balance sheet with shorter-term liabilities (i.e. CMOF) funding longer-maturity assets to take advantage of the upward slope of the yield curve, the exposure to rate of return risk will be more severe than when the funding is in the form of PSIA, the holders of which have no contractual right to a predetermined rate of return (although they may withdraw their funds if unsatisfied).

28. The estimation of cash flows is one of the key features of measuring rate of return risk; hence the IIFS should review regularly the behavioural maturity, underlying assumptions and parameters of the CMT contracts. If potential threats to future earnings are material and imminent, the IIFS should ensure that they have a good understanding of the different characteristics of their balance sheet positions in the different currencies and jurisdictions in which they operate. For instance, in cases where the CMT involves longer-maturity transaction with short-term funding, the IIFS needs to assess the fixed return accordingly. Therefore, the strategy is to match the sources of funds to the uses of funds. The IFSB Guidance Note on the

[29] Some IIFS hope that the increase in issuance of short-term and high-quality *Sukūk* or any other innovation may replace CMT to some extent in the near future.
[30] This GN does not specifically address the liquidity risk for CMT, as this issue is broadly being addressed in a separate IFSB standard on liquidity risk.

Practice of Smoothing the Profits Payout to Investment Account Holders (hereinafter "GN-3"), among other things, notes the existence of the practice of smoothing the profits payout to investment account holders (IAHs), in which some of the IIFS use their profit equalisation reserve to smoothen out the returns. Hence, the rate of return risk is also significant. The GN also notes that CMT (in the form of CMOF) where permitted by the SSB could also facilitate the solicitation of longer-term fixed rate funding to match the long-term fixed rate assets of IIFS and thus reduce the rate of return risk exposures of an IIFS.

3.6 Operational Risk

29. Broadly, the guidelines for operational risk are outlined in detail in IFSB-1. These guidelines are implemented through a regulation process that requires IIFS to have in place appropriate processes and procedures for identifying, measuring, monitoring and controlling operational risk. In this sub-section, without seeking to be exhaustive, the GN reviews some aspects of commodities' liquidity and delivery, settlement and exit strategies, legal risk, and *Sharī`ah* non-compliance risk that may give rise to the operational risks consequential to the CMT structure.

3.6.1 Commodities' Liquidity and Delivery

30. Maintaining and managing commodity inventories often in different markets (either liquid or illiquid markets) and different commodities (either local or foreign commodities) could raise operational risks. However, the main consideration in undertaking CMT should be finding a suitable local commodity for trading.[31] Among other things, an important question that should be addressed by IIFS concerns the receptiveness of the market to that particular commodity in the context of CMT. With respect to standardised transactions in CMT, IIFS should address the issue of multiple counterparties while observing applicable *Sharī`ah* requirements, when a particular transaction is too big in terms of volume and price.[32]

3.6.2 Settlement/Exit Strategies

31. An IIFS should ensure that it is not indirectly exposed to clearing and settlement system risks (settlement risk is actually a counterparty risk (see paragraph 21)) in the commodity market through its broker (i.e. when a broker is unable to deliver a commodity although he has received cash, and/or he purchases a commodity but does not deliver cash).[33] Hence, the commodities settlement period should be pre-planned and defined by the IIFS. In this regard, supervisory authorities may wish to provide the appropriate guidelines for the commodity settlement period. IIFS should also address the exit policies and early cancellation strategies in CMT, as the case may be, when maintaining and managing commodities in different markets (whether liquid or illiquid markets) and different commodities (either local or foreign commodities). This is to ensure that an IIFS can close its positions without exposing itself to liquidity mismatches and other liquidity risk exposures.

---

[31] The supervisory authorities with the assent of *Sharī`ah* scholars may look into a suitable local commodity that can be used for the exchange to meet the customers' needs. This will not only diminish transaction costs significantly, but will also encourage the participation of smaller IIFS and provide robust liquidity management alternatives.

[32] This could happen when there is a shortage of particular commodities, or a particular counterparty's placement is lower than the total transaction price (in the case of a standard transaction size). In the latter case, this may raise operational issues regarding joint ownership of the commodities with multiple counterparties for that particular transaction. An operational risk exposure would arise if the IIFS sold to a number of counterparties and failed to distinguish clearly the share of each counterparty in the transaction.

[33] Since the IIFS puts a high degree of reliance on the commodity supplier with regard to the delivery of the commodities, this may expose the IIFS to settlement risk (see paragraph 22). Nevertheless, there might be several events that could lead to the failure to deliver the commodities. As only certain events can be protected through obtaining *Takaful* coverage, adequate assessment of the supplier's ability to honour its obligation (i.e. track record) is crucial to avoid settlement and inventory risk. In view of this, adequate due process on the screening and selection of a commodity supplier/broker is highly recommended.

3.6.3 Legal Risk

32. Legal risk, which is an operational risk in CMT, is particularly important for OTC transactions with multiple contracts. This gives rise to the risk of enforceability, which can cause credit, liquidity or reputation risks at individual IIFS. Although some effort is made to mitigate this risk by the use of standardised master agreements, adaptation to local conditions (because of differences in the legal systems between jurisdictions) and to the particular needs and circumstances of counterparties would still be necessary. In this regard, the relevant department in the IIFS needs to review the terms of documents/contracts to ensure the IIFS's interest is protected.

3.6.4 Sharī`ah Non-Compliance Risk

33. *Sharī`ah* non-compliance risk is a type of operational risk facing IIFS which can lead to non-recognition of income and resultant losses. *Sharī`ah* non-compliance risk is the risk of a breach or violation of *Sharī`ah* rules and principles, due to the failure of an IIFS's internal *Sharī`ah* governance systems and/or *Sharī`ah* reviewers responsible for ensuring the IIFS's compliance with the *Shari`ah,* as determined by its *Sharī`ah* body or the relevant higher *Sharī`ah* body in the jurisdiction in which the IIFS operates. Hence, to avoid any potential risk arising from the transaction (i.e. non-compliance with *Sharī`ah* requirements), the GN notes that IIFS should have adequate controls to ensure validity of the contract in CMT, which may include, *inter alia*: (a) a proper process for screening commodity suppliers, and for admitting particular commodities under CMT (see paragraphs 8 and 9), and checking on transaction flows which are endorsed by the respective SSBs of the IIFS; and (b) an adequate *Sharī`ah* audit to ensure the validity of CMT. In this respect, for sound *Sharī`ah* governance practices, reference should be made to paragraph 7, Principle 7.1 of IFSB-1 and Principles 1.1 and 5.1 of IFSB Guiding Principles on *Sharī`ah* Governance System, December 2009 (hereinafter, "IFSB-10").

Table 1: Summary of References to CMT Risks from IFSB Relevant Standards

CMT Risks	Paragraphs and Sections of Relevant IFSB Standards
Market risk and foreign exchange risk	▪ Principle 4.1 and paragraph 144 of IFSB-1 ▪ Sections B.2(ii), B.2(iii) and C.1 of IFSB-2 ▪ Paragraph 33 of IFSB-5
Credit risk	▪ Principles 2.1 to 2.4 and paragraphs 139 to 142 of IFSB-1 ▪ Sections B.1 and C.1 of IFSB-2
Liquidity risk	▪ Principles 5.1 to 5.2 and paragraphs 145 to 146 of IFSB-1 ▪ Paragraph 7 of IFSB-5 ▪ Paragraphs 65 to 66 of TN-1
Rate of return risk	▪ Principles 6.1 to 6.2 and paragraphs 147 to 148 of IFSB-1
Operational risk (including *Sharī`ah* non-compliance risk)	▪ Principles 7.1 to 7.2 and paragraphs 149 to 152 of IFSB-1 ▪ Paragraph 29 of IFSB-5 ▪ Principles 1.1 and 5.1 of IFSB-10

SECTION 4: REGULATORY CAPITAL IMPLICATIONS OF CMT STRUCTURES

34. This section establishes and highlights the relevance of capital requirements to cover the risk of holding or taking positions in commodities, and the market, credit and operational risks arising from entering into CMT. IFSB-2 presents the minimum capital adequacy requirements in respect of market, credit and operational risk for different types of *Sharī`ah*-compliant financing and investment instruments.

35. The intervals at which capital calculations should be carried out[34] by an IIFS should be subject to the requirements provided by its supervisory authority. A supervisory authority should satisfy itself that the IIFS in its jurisdiction regularly report capital adequacy calculations on CMT.

4.1 Capital Requirements for CMLF and CMOF

36. At present, IFSB-2 deals with capital adequacy requirements for assets financed by IAHs, a pool of investment funds placed with an IIFS based on *Muḍārabah*.[35] The use of CMLF and CMOF on the liability side to finance assets[36] was not specifically envisaged. The same may be said of the other IFSB standards that have already been issued. Both CMLF and CMOF result in liabilities on an IIFS's balance sheet, and from a capital adequacy perspective, these are to be treated no differently than any other liabilities. Particular capital adequacy issues may arise only to the extent that CMLF and CMOF may lead to market risk exposures if an IIFS holds title to the commodity for any length of time.

37. In contrast, PSIA are not a liability and, in principle, are to be treated as at least partially risk absorbent. Assets funded by PSIA are either totally or partially excluded in computing the risk-weighted assets (RWA) in the denominator of the capital adequacy ratio (CAR), as required by IFSB-2, depending on whether the Standard Formula or the Supervisory Discretion Formula is applicable.[37] In regard to CMT, on the assets side, transactions are already covered by IFSB-2; while on the liabilities side, where CMLF and CMOF are used as a deposit-generating tool, the resultant liabilities need to be clearly distinguished from PSIA based on profit-sharing and loss-bearing *Muḍārabah* contracts. Hence, all the assets funded by CMLF and CMOF are automatically subject to capital requirements.

38. CMLF and CMOF on the liability side should thus be treated in much the same way as current accounts; the resultant funds finance an IIFS's general pool of assets. Thus, there are no particular assets associated with CMLF and CMOF that need to be specifically identified in deriving the denominator of the CAR.

4.2 Capital Requirements for Credit and Market Risk for CMLF and CMF

39. When IIFS use CMT to invest surplus funds under CMLF and extend financing under CMF, the RW of the counterparty shall be applied to the resultant receivables.[38] However, in the

[34] The maturity of CMT and the resultant implications for capital adequacy would vary. If commodities purchased by an IIFS are immediately sold, they would not appear on its balance sheet, and neither would CMT receivables or payables that had reached maturity and been repaid. However, there would likely be ongoing exposures that would need to be taken into account.

[35] For details, see section B.4(i), paragraph 74 of IFSB-2.

[36] Note that CMLF is used to meet a liquidity requirement, rather than to finance assets as such, although the result is that the funds are invested in assets (see paragraphs 12 and 38). By contrast, CMOF is used as an alternative to unrestricted PSIA as a means of financing assets.

[37] When the standard formula for calculating the CAR is applied, assets financed by IAH funds are not included in computing the RWA in the denominator of the CAR, so that the risk weights are irrelevant. When the supervisory discretion version of the CAR formula is applied, a proportion – "α (alpha)" – of the RWA financed by PSIA is included in the denominator of the CAR; thus the risk weights apply only to the proportion α of the assets financed by PSIA.

[38] In CMLF and CMF on the asset side, the IIFS will be exposed to market risk in the interval before it sells the commodities to the counterparty, and subsequently to credit risk (accounts receivable risk), which will be applicable after the IIFS sells those commodities to the counterparty (see paragraph 18).

case of CMLF and CMOF on the liability side, an IIFS will be exposed to price risk only (and then only if it holds title to the commodity for any length of time); the exposure to credit risk will be that of the IIFS's counterparty.[39] In the case of accounts receivable credit risk, applicable credit risk weights will depend on the counterparty, and are based on credit ratings issued by a recognised ECAI (external credit assessment institution, generally known as a rating agency), in the absence of which, under the Standardised Approach, the RW is 100%.[40] It is important to highlight that some IIFS may be taking positions simultaneously in CMLF on both sides of their balance sheet, hence having exposures both to credit risk and, potentially, to market risk.

40. The presence of market risk exposure from the CMT structures will depend on a number of aspects, as mentioned in sub-section 3.2. Credit risk exposures, the exposures that are subject to market risk capital requirements, and foreign exchange risk exposures that result from the practice of buying and selling commodities denominated in foreign currencies, are subject to the applicable capital charges which are clearly set out in IFSB-2 (as highlighted in Table 2 below).

4.3 Capital Requirements for Operational Risk

41. In addition to the considerations described in sub-section 3.6, it is recognised that an IIFS will be exposed to operational risks due to its dealings with various parties and their interconnectedness and high dependency on computer systems. This GN notes that the execution of several buy–sell transactions would add to transactions costs and possibly to operational risk; and the greater the complexity of the CMT structure, the greater would be the operational risk. Additionally, complexity of transactions, particularly if commodities are not traded on exchanges and involve many counterparties and brokers, could cause additional operational risk, and may call for specific operational risk capital charges for the aggregate of CMT transactions. In this regard, the supervisory authorities should determine appropriate capital charges for IIFS for any significant operational risks arising out of CMT consistent with IFSB-5. In any case, a supervisory authority has discretion to impose additional capital charges for operational risk as the authority deems fit, to cater for the *Sharī`ah* non-compliance risk of a particular IIFS. However, the GN also asserts that while an additional capital charge could be imposed based on the complexity of the transaction, consideration should also be given to the infrastructure, risk management and governance process in mitigating any possible operational risk which may nullify the need for such additional capital.

Table 2: Summary of References to Capital Requirements for CMT from IFSB Relevant Standards

Capital Requirements for CMT	**Paragraphs and Sections of Relevant IFSB Standards**
Market risk and foreign exchange risk	▪ Sections B.2(ii), B.2(iii) and C.1 of IFSB-2
Credit risk	▪ Sections B.1 and C.1 of IFSB-2
Operational risk	▪ Section B.3 of IFSB-2 ▪ Paragraph 29 of IFSB-5

[39] In CMLF and CMOF on the liability side, there would not be any accounts receivable risk applicable to an IIFS itself as purchaser of the commodity unless it sells the commodity on a deferred payment basis to a third party, in which case a credit risk exposure would result. However, this latter case seems rather unlikely.

[40] In IFSB-2, credit risk is measured according to the Standardised Approach of Basel II, and the assignment of RWs shall take into consideration the items mentioned in paragraph 20 of IFSB-2.

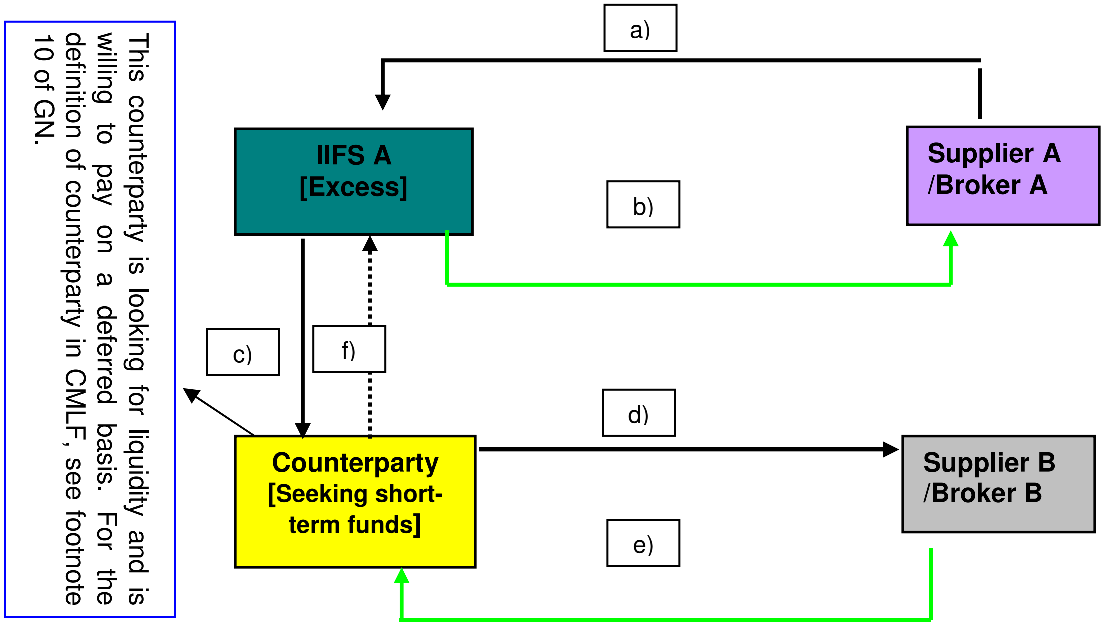
DEFINITIONS

The following definitions are intended to assist readers in their general understanding of the terms used in the Guidance Note. The list is by no means exhaustive.

Commodity	A physical product that is and can be traded on a secondary market – e.g. agricultural products, minerals (including oil) and precious metals. However, in Islamic finance, precious metals do not include gold and silver, and currency/money is not a commodity.
Corporate governance	A defined set of relationships between a company's management, board of directors, shareholders and other stakeholders that provides the structure through which: (i) the objectives of the company are set; and (ii) the means of attaining those objectives and monitoring performance are determined. In the context of IIFS, good corporate governance should encompass: (i) a set of organisational arrangements whereby the actions of the management of IIFS are aligned, as far as possible, with the interests of its stakeholders; (ii) provision of proper incentives for the organs of governance such as the board of directors, the *Sharī`ah* Supervisory Board (SSB) and management to pursue objectives that are in the interests of the stakeholders and facilitate effective monitoring, thereby encouraging IIFS to use resources more efficiently; and (iii) compliance with Islamic *Sharī`ah* rules and principles.
Islamic window	An Islamic window is part of a conventional financial institution (which may be a branch or dedicated unit of that institution) that provides both fund management (investment accounts) and financing and investment that are *Sharī`ah* compliant.
Muḍārabah	A partnership contract between the capital provider (*Rabb-ul-Māl*) and an entrepreneur (*Muḍārib*) whereby the capital provider would contribute capital to an enterprise or activity that is to be managed by the entrepreneur. Profits generated by that enterprise or activity are shared in accordance with the percentage specified in the contract, while losses are to be borne solely by the capital provider unless the losses are due to the entrepreneur's misconduct, negligence or breach of contracted terms.
Murābahah	A contract to sell a specified asset at an agreed profit margin plus cost (selling price), whereby the cost and profit margin shall be disclosed. The asset must be under complete ownership of the seller.
Sharī`ah Supervisory Board	Specific body set up or engaged by the institution offering Islamic financial services to carry out and implement its *Sharī`ah* governance system.
Sukūk (sing. *Sakk*)	Certificates that represent a proportional undivided ownership right in tangible assets, or a pool of assets that are *Sharī`ah*-compliant.
Takāful	*Takāful* is derived from an Arabic word which means solidarity, whereby a group of participants agree among themselves to support one another jointly against a defined loss. In a *Takāful* arrangement, the participants contribute a sum of money as wholly or partially *Tabarru'* (donation) into a common fund, which will be used for mutual assistance for the members against a defined loss or damage.

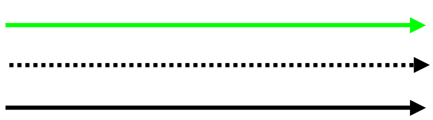
APPENDIX 1: THE GENERIC FLOW OF FUNDS AND COMMODITIES WITHIN CMT[41]

Diagram 1: Case of Commodity *Murābahah* for Liquid Funds (CMLF) when the IIFS has an Excess of Liquid Funds



(CMT structures of different IIFSs may vary in detail from that shown here.)

Note: The green box indicates the party that initiates the CMT (in this case, IIFS A), and the yellow box indicates the counterparty that receives funding (i.e. recipient of CMT).



This green line shows the cash flow.

This dotted line shows the periodic payments to the IIFS A.

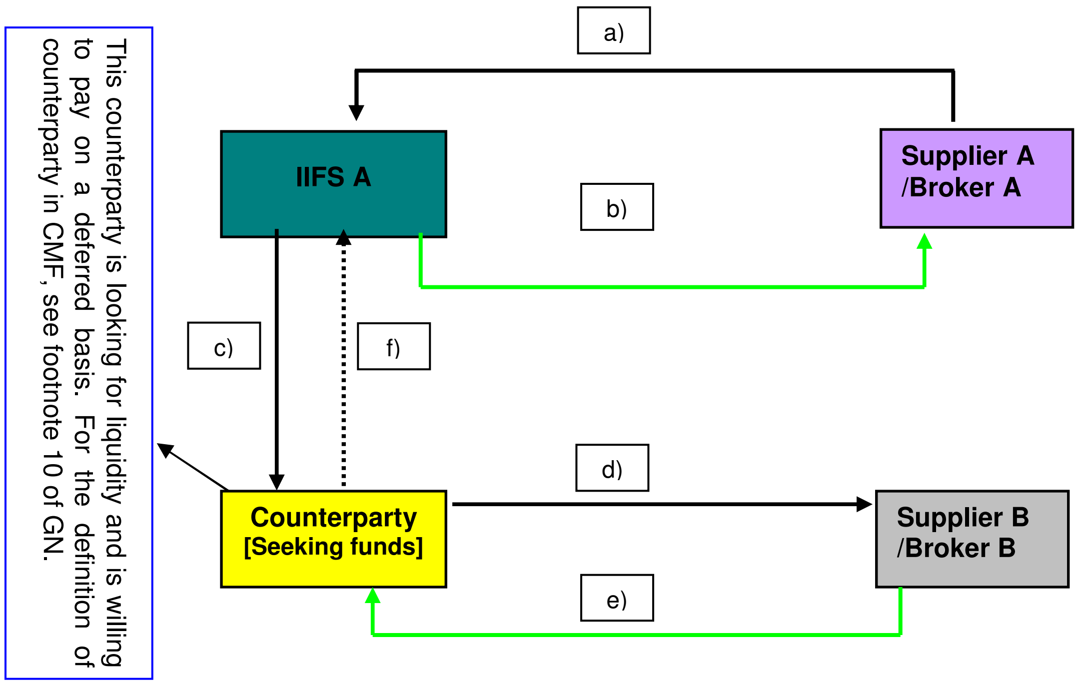
This black line shows the commodity flow.

Activity:

a. IIFS A buys *Sharī`ah*-compliant commodities on a spot basis from Supplier A/Broker A.
b. IIFS A pays cash on spot to Supplier A/Broker A against *Sharī`ah*-compliant commodities.
c. IIFS A sells *Sharī`ah*-compliant commodities to the Counterparty using a *Murābahah* contract (i.e. cost plus profit basis) on a deferred payment basis.
d. The Counterparty sells on spot *Sharī`ah*-compliant commodities to Supplier B/Broker B to obtain funds.
e. The Counterparty receives cash from Supplier B/Broker B against those *Sharī`ah*-compliant commodities.
f. The Counterparty pays the amount of the *Murābahah* profit plus the original investment through periodic payments to the IIFS A as agreed by both parties in the contract.

[41] As noted in paragraph 13, the IIFS may structure CMT very simply or in a complicated way, often resulting in complex structures (see paragraph 13). Nevertheless, in the interests of clarity, illustrations of the three categories (CMLF, CMF and CMOF) as defined in paragraph 11 have been included in Appendix 1 for the purpose of highlighting the generic flow of funds and commodities within CMT and to enhance readability. However, this GN does not attempt to recommend and/or standardise any particular CMT structures other than highlighting prudential issues (see paragraph 13 and footnote 8).

Diagram 2: Case of Commodity *Murābahah* Financing (CMF)



(CMT structures of different IIFSs may vary in detail from that shown here.)

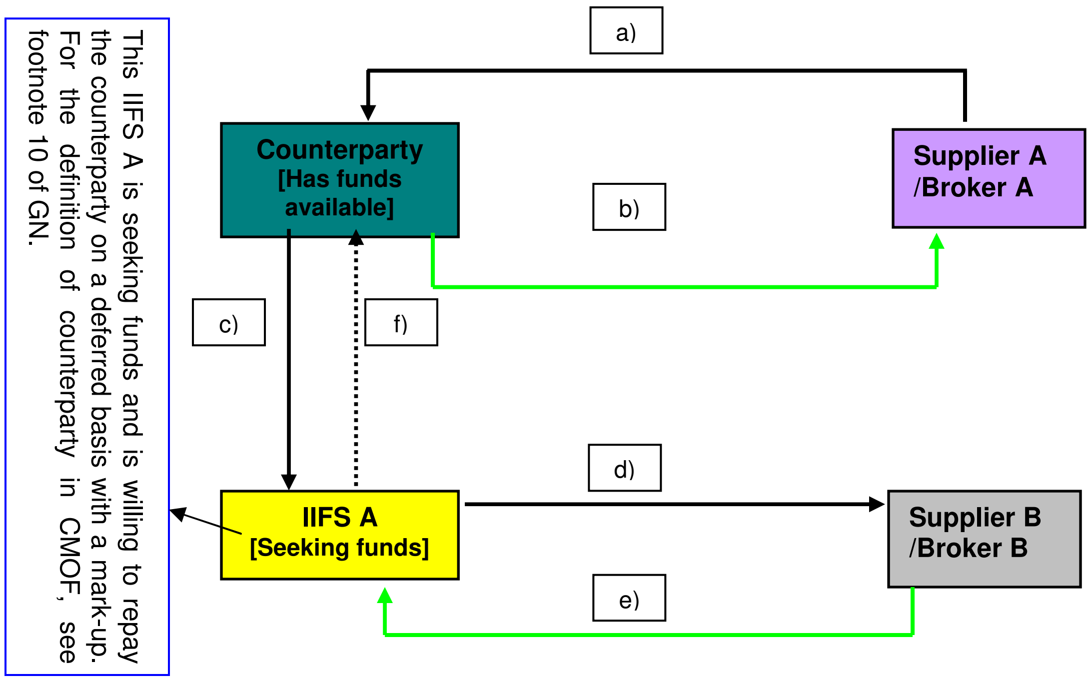
Note: The green box indicates the party that initiates the CMT, and the yellow box indicates the party that receives funding (i.e. recipient of CMT).

This green line shows the cash flow.
This dotted line shows the periodic payments to the IIFS A.
This black line shows the commodity flow.

Activity:

a. IIFS A buys (as customer requests, see footnote 6) *Sharī`ah*-compliant commodities on a spot basis from Supplier A/Broker A.
b. IIFS A pays cash on spot to Supplier A/Broker A against *Sharī`ah*-compliant commodities.
c. IIFS A sells *Sharī`ah*-compliant commodities to the Counterparty using a *Murābahah* contract (i.e. cost plus profit basis) on a deferred payment basis.
d. The Counterparty sells on spot *Sharī`ah*-compliant commodities to Supplier B/Broker B to obtain funds.
e. The Counterparty receives cash from Supplier B/Broker B against *Sharī`ah*-compliant commodities.
f. The Counterparty pays the amount of the *Murābahah* profit plus the original investment through periodic payments to the IIFS A as agreed by both parties in the contract.

Diagram 3: Case of Commodity *Murābahah* for Obtaining Funding (CMOF)



(CMT structures of different IIFSs may vary in detail from that shown here.)

Note: The green box indicates the party that initiates the CMT, and the yellow box indicates the party that receives funding (i.e. recipient of CMT).

This green line shows the cash flow.

This dotted line shows the periodic payments to the Counterparty.

This black line shows the commodity flow.

Activity:

a. The Counterparty buys *Sharī`ah*-compliant commodities on a spot basis from Supplier A/Broker A.
b. The Counterparty pays cash on spot to Supplier A/Broker A against those *Sharī`ah*-compliant commodities.
c. The Counterparty sells *Sharī`ah*-compliant commodities to IIFS A using a *Murābahah* contract (i.e. cost plus profit basis) on a deferred payment basis.
d. IIFS A sells on spot *Sharī`ah*-compliant commodities to Supplier B/Broker B to obtain funds.
e. The Counterparty receives cash from Supplier B/Broker B against *Sharī`ah*-compliant commodities.
f. IIFS A pays the amount of the *Murābahah* profit plus the original investment through periodic payments to the Counterparty as agreed by both parties in the contract.

APPENDIX 2: RISK IMPLICATIONS IN CMT IN DIFFERENT PHASES

Chart 1: Different Risk Implications for an IIFS in Different Phases of CMT[42]

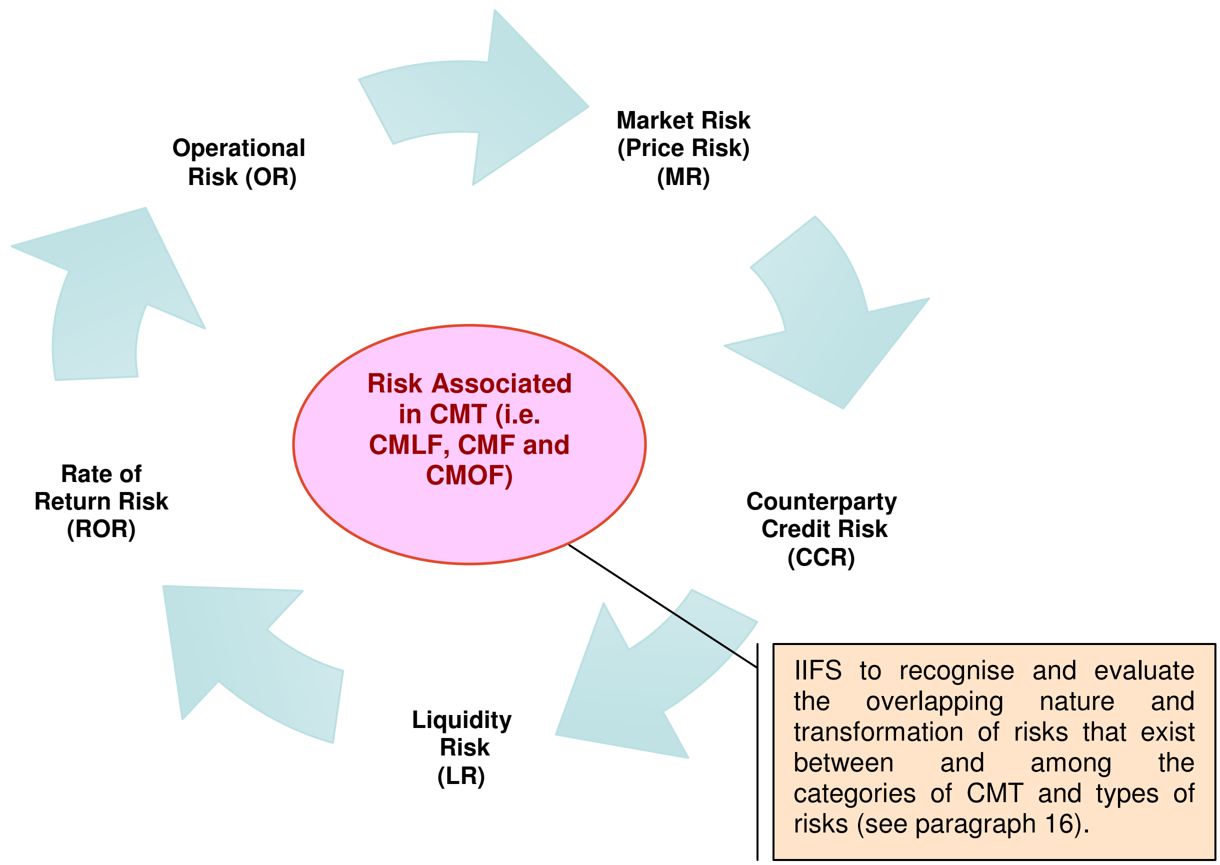


Table 1: Risk Implications for an IIFS in Three CMT Categories

CMT/RISKS	MR	CCR	LR	ROR	OR
CMLF	✓[ά]	✓	✓	✓	✓
CMF	✓[Ψ]	✓	✓	✓	✓
CMOF	✓[♣]	N/A[ϒ]	✓	✓	✓

[ά & Ψ] In CMLF and CMF on the asset side, market risk is applicable before selling the commodities to the counterparty, while upon their being sold to the counterparty on deferred payment terms the market risk converts into credit risk (see paragraph 18).

[♣] In CMLF and CMOF on the liability side, an IIFS will be exposed to market risk only if it holds title to the commodity for any length of time (see paragraphs 18 and 39).

[ϒ] In CMLF and CMOF on the liability side, CCR is applicable to the counterparty and not to the IIFS itself (see paragraph 21).

---

[42] For instance, initially, the IIFS faces the risk of the counterparty refusing to honour his commitment to buy *Sharī`ah*-compliant commodities, thus exposing the IIFS to market risk through any fluctuation in the price of the underlying commodity that remains in its possession (see sub-section 3.2 and footnote 6). At the later stage, the IIFS is exposed to credit risk (counterparty credit risk) linked to a potential default or delayed payments from the counterparty (see sub-section 3.3), as well as to liquidity risk resulting from changes in the anticipated cash flow (see sub-section 3.4). Further, an IIFS is exposed to rate of return risk, specifically when the CMT involves a longer-maturity transaction with short-term funding (see sub-section 3.5). The IIFS is also exposed to operational risk in holding possession of the commodity (as may result from damage, spoilage, *Sharī'ah* non-compliance, theft, etc.) during the period in which the commodity remains in its possession (see sub-section 3.6).