Managing Commodity Trading Risks in Islamic Financial Transactions

Introduction

A central tenet of Islamic finance is the direct link between financial transactions and the real economy. Shariah requires all financial transactions to be underpinned by an asset to justify profit generation. The asset must be specifically identified to avoid elements of uncertainty (gharar) in the transaction. In facilitating such transactions, a wide spectrum of underlying assets can be used by Islamic financial institutions (IFIs) (Diagram 1).

Diagram 1: Types of Shariah Contracts Used for Different Purposes and Their Underlying Assets

Source: Bank Negara Malaysia

In Malaysia, there has been an increasing use of commodities to facilitate Islamic financial transactions. Commodities alone account for more than half (2019: 56%) of the underlying assets in such transactions (Chart 1). This exposes IFIs to risks associated with commodities such as movements in crop yield or production and prices. This article explores the main risks arising in commodity trading underpinning Islamic financial transactions and the risk management practices adopted by IFIs in mitigating them.

Chart 1: Breakdown of Shariah Contracts Used as at End-2019

Tawarruq and murabahah account for almost two-thirds of the Shariah contracts applied

Source: Bank Negara Malaysia

1 Calculated as a percentage of total deposit and total financing of IFIs.

2 Other Shariah contracts such as rohn, sarf and mudarabah may also deal with commodities but due to the small exposure, these Shariah contracts are not included in this analysis.
Commodity Trading in Murabahah and Tawarruq Transactions

In an Islamic financial transaction, IFIs use the services of commodity brokers or commodity exchanges (CBEs) extensively when executing the trading of commodities for financing and deposit placements. For example, customers may use a murabahah contract to finance the purchase of commodities as raw materials for production (Diagram 2). In this financial transaction, an IFI purchases commodities from a commodity supplier and subsequently sells it to the customer on a deferred basis at a mark-up price.

Diagram 2: The Use of Murabahah in Financing Commodity Purchase

In another example, IFIs may use tawarruq to facilitate a fixed deposit placement (Diagram 3). This involves two separate and sequenced sale and purchase transactions conducted on behalf of the customer and IFI respectively. In practice, IFIs perform two distinct roles namely, as agent of customers to purchase commodities from a commodity supplier on spot basis and, as buyer of the commodities on a deferred basis. To obtain cash, IFIs will sell the commodities to a different commodity supplier on spot basis.

Diagram 3: The Use of Tawarruq in Facilitating Fixed Deposit Taking

1 Bursa Suq Al-Sila performed 65% of tawarruq transactions in Malaysia in 2019.
Understanding Risks in Commodity Trading

In Shariah, the validity of financial contracts hinges on the proper execution of sale and purchase transactions. This involves executing the offer and acceptance in proper sequence and verifying the type and quantity of the commodity and its price. As contracting parties, IFIs and customers are accorded specific roles and responsibilities under Shariah, and both parties bear risks (Diagram 4). Such risks arise from the specific characteristics of the market for the underlying assets, in this case the commodity market, and from the execution of transactions for the sale and purchase of commodities by IFIs.

**Diagram 4: Summary of Sources of Risk**

- **Operational risks**
  - Failure of CBE platforms
  - Incorrect automation
  - Non-compliance with Shariah requirements
- **Storage & delivery**
  - Damage/loss during storage and delivery
  - Additional storage and delivery costs
- **Supplier**
  - Commodity provided not according to specifications (invalid asset)
  - Failure to supply and/or deliver commodity as per contract
- **Yield**
  - Insufficient stock
  - Yield not of designated quality
- **Price**
  - Differences in price agreed with customer and supplier
  - Price volatility impacting quantity required
- **Sustainability**
  - Impact of climate change on commodity market
  - Transition towards more sustainable practices
- **Commodity market risks**
  - Price

Source: Bank Negara Malaysia

(i) **Commodity market risks**

In a transaction, the parties involved will agree on specific aspects of the commodity including its quality. Yield or production risk, namely the quantity and quality\(^6\) of crops/production, can affect the amount of commodity stock available to meet the demands of commodity trading (Chart 2). The availability of stock, in turn, has a direct influence on prices. Volatility in commodity prices exposes IFIs to market risk when prices agreed with the customer diverge from the prevailing price with the supplier due to the timing difference between the transaction conducted with the customer and the supplier. In the case of *tawarruq*, movements in the price of the underlying commodity will also have an effect on the quantity of commodity required and the management of the stock of commodities (Charts 3 and 4). For example, demand for crude palm oil (CPO) rose throughout 2018 following higher financing approvals and deposit placements. This necessitated CBEs\(^4\) to increase availability of CPO stock to meet the higher demand. The declining CPO prices particularly in the second half of 2018, resulted in the need to further increase the stock of CPO as the total value of the commodity would be lower than the amount of financing/deposit to be extended/accepted. Effective management of supplier risk is therefore critical as the supplier is entrusted to ensure that the commodity stock can be readily provided in sufficient quantity and meeting the necessary trading grade to complete the trade.

Climate change can also affect the supply of commodities. Physical risk arises from the impact of changing weather patterns such as frequency or severity of weather events on commodity yield. Transition risk on the other hand, could arise from changes in market demand due to the move towards more sustainable practices. In mitigating such exposures, CBEs typically maintain a diverse stock of alternative commodities\(^5\) and are engaging with commodity suppliers that are transitioning towards more sustainable practices.

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\(^4\) The commodity has to meet a certain level of trading grade to qualify as an eligible asset.

\(^5\) CBE conducts sale and purchase of CPO in batches when trading demand exceeds stock availability.

\(^6\) Certain CBEs also use non-commodities such as telecommunication airtime credits.
(ii) Operational risks

IFIs rely extensively on commodity trading systems provided by CBEs. Trading systems are programmed to automate critical Shariah requirements, especially the sequencing of activities such as offer and acceptance. IFIs have to ensure that system configurations fully comply with Shariah principles and are resilient against technology risk which could cause system disruptions. IFIs are also exposed to storage and delivery risks such as damage to commodities and additional costs in instances where customers require physical delivery of the commodity, although these risks are usually small relative to other risks.
Risk Management Practices

IFIs are required to have in place appropriate policies and procedures to manage exposures to commodity trading risks in line with the policy documents (PDs) issued by the Bank on Murabahah and Tawarruq. The risk management practices of IFIs for murabahah and tawarruq contracts are captured in Diagrams 5 and 6, respectively. The Bank, through its supervisory role, monitors and assesses the adequacy of IFIs’ risk management practices and takes actions where relevant to mitigate institutional and system-wide vulnerabilities. This includes IFIs’ management of risks in respect of financial transactions executed by CBEs.

Overall, commodity trading risks in Islamic financial transactions are assessed to be limited. IFIs generally observe robust risk management practices in managing their exposures to commodity trading risks. Both IFIs and CBEs have not experienced any major and prolonged system downtime that disrupted the execution of transactions. Neither has there been any major cyber incident that affected the integrity of the functioning of the CBEs and hence execution of the transactions. That said, there were a small number of non-compliances, triggered mainly by gaps in the overall operational risk management. Future commodity demands by customers are closely monitored by IFIs in coordination with CBEs in order to ensure availability of commodity stock, particularly for large transactions. IFIs also regularly engage the CBEs to manage the impact of regulatory changes on the execution of commodity trading. This includes understanding the impact of sustainability requirements on future demand and supply of commodity stock. To date, there has not been any incident where IFIs have had to incur storage and delivery costs on behalf of customers. Considering the risk controls in place, the residual risk stemming from the reliance on CBEs is not expected to significantly disrupt IFIs’ operations. If necessary, IFIs may perform commodity trading directly with the relevant counterparties.

Diagram 5: Risk Management Practices in Murabahah

<table>
<thead>
<tr>
<th>Sources of risk</th>
<th>Storage &amp; delivery</th>
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</thead>
<tbody>
<tr>
<td>Commodity procurement/sourcing</td>
<td></td>
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<tr>
<td>Yield</td>
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<tr>
<td>Price</td>
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<tr>
<td>Supplier</td>
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**IFI’s risk management**

Customer identifies commodity needed and agrees on price and quality with supplier.

IFI uses wakalah (agency) to appoint customer as agent to purchase from supplier.

Customer provides wa’d (promise) and if applicable, hamish jiddiyah (security deposit) to purchase commodity from IFI, subject to recourse from supplier for any quality defects.

Customer’s credit assessment includes validation of supplier.

Source: Bank Negara Malaysia

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7 For example, PD on Tawarruq only allows for commodities that are traded in the open market and meet recognised trading quality standards. The PD also stipulates commodity supplier selection criteria, systems requirements and expectations on the ongoing review of and engagements with CBEs.

<table>
<thead>
<tr>
<th>Sources of risk</th>
<th>IFI’s risk management</th>
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<th>CBE’s risk management</th>
<th>CBE’s risk management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commodity procurement/sourcing</strong></td>
<td>Wakalah used to appoint IFI as agent of customer to buy commodity.</td>
<td>Flexible for IFI to select commodity type according to internally approved policy.</td>
<td>Conducts audit of suppliers to ensure Shariah compliance.</td>
<td>Maintains strong buffer of commodity stock and alternative commodity types.</td>
<td>Monitors stock availability and failed trades.</td>
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<td><strong>Systems</strong></td>
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<td>Periodically conducts disaster recovery exercise with IFIs.</td>
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<tr>
<td><strong>Storage &amp; delivery</strong></td>
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<td>Conducts regular audit of commodity suppliers to ensure operational and Shariah compliance.</td>
</tr>
</tbody>
</table>

Note: The enterprise-wide risk management of the local exchange incorporates the risk management of the commodity exchange under its purview.

Source: Bank Negara Malaysia