

# RATING METHODOLOGY

The logo for MARC Ratings, featuring the word "MARC" in a bold, red, serif font, centered between two horizontal blue lines.

## RATING APPROACH TO SUKUK

### OVERVIEW

Sukuk represent certificates of equal value which evidence undivided ownership of underlying tangible assets, usufructs, rights to receivables or ventures. In Malaysia, ringgit-denominated sukuk, which are the focus of this methodology, are structured using shariah rulings, principles and concepts endorsed by a national-level Shariah Advisory Council. This ensures every sukuk issued is fully Shariah compliant and facilitates a relatively high level of standardization in sukuk structures.

Sukuk play an important role in corporate fund raising in Malaysia, accounting for 41% and 51% of total bonds and sukuk issued in 2015 and 2014 respectively. The Malaysian sukuk market is a well-established source of short as well as longer-term financing for corporates and banks. The total market size of the domestic corporate sukuk market was RM607.93 billion as at end 2015.

Much of present day domestic sukuk issuances are structured as fixed income corporate credit or project finance risk instruments. Asset-backed structures in which sukukholders have actual recourse to the assets in the event of a default make up a smaller proportion of sukuk issuances. The fixed income character of domestic sukuk issues continues to allow MARC Ratings to assign ratings using conventional corporate debt, project finance or structured rating methodologies. MARC Ratings' analytic treatment of sukuk reflects its economic substance and the credit risk drivers of the sukuk.

In general, MARC Ratings takes a case-by-case approach to analysis in rating sukuk. Each sukuk is assessed on its own characteristics.

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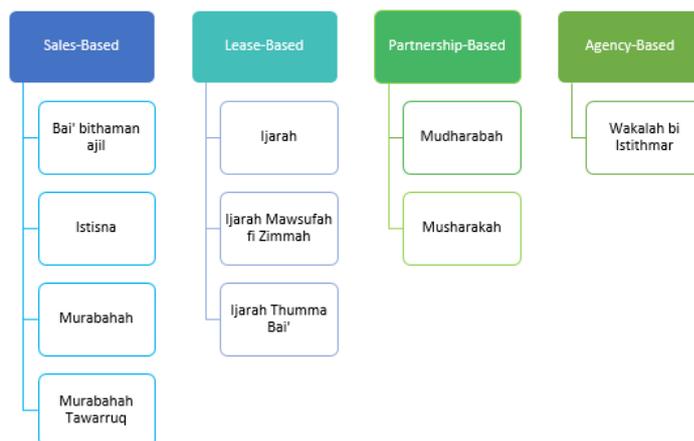
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## DOMESTIC SUKUK STRUCTURES

Sukuk can be classified based on underlying Shariah contracts. The Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) currently recognises 14 types of sukuk. The exhibit below depicts domestic sukuk structures in Malaysia based on underlying Shariah contracts or principles endorsed by the Securities Commission Malaysia's Shariah Advisory Council (SAC). These sukuk structures can be classified as sale-based, lease-based, partnership-based or agency-based.

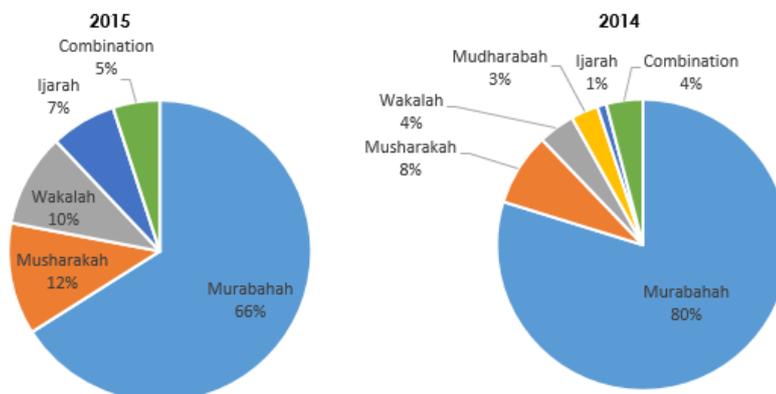
**Exhibit 1: Classification of Approved Domestic Sukuk Structures Based on Underlying Contract**



Source: Adapted from Dusuki, A.W. and Mokhtar, S. (2010), "Critical Appraisal of Shari'ah Issues on Ownership in Asset-based Sukuk as Implemented in The Islamic Debt Market" International Shari'ah Research Academy for Islamic Finance, Research Paper No: 8/2010

The structure of sukuk has evolved since ringgit-denominated corporate sukuk were first issued around 2001. Malaysia's sukuk universe has steadily expanded from mostly sale-based instruments (bai' bithaman ajil and murabahah) to include a variety of structures based on leases, investment, agency and combinations of Shariah contracts. Hybrid sukuk, which have some features of equity and are often designed to protect senior debtholders in the case of corporate issuances or to meet banks' regulatory capital requirements, have also become a notable feature of Malaysia's corporate sukuk issuance landscape.

**Exhibit 2: Size of domestic corporate sukuk approved based on various Shariah contracts in 2015 and 2014**



Source: Securities Commission Malaysia

Among the most commonly used sukuk structures in the domestic market currently are murabahah, musharakah and ijarah. The popularity of the murabahah sukuk structure (including sukuk commodity murabahah based on tawarruq) in the domestic market is underscored by its dominance of corporate sukuk approvals by the Securities Commission Malaysia (SC) both in 2015 and 2014. Of the partnership-based structures, musharakah is more popular than mudharabah. In 2010, sukuk based on musharakah contracts accounted for 42% of corporate sukuk approved by the SC, the single largest percentage for approved issuances in that year by type of Shariah contract.

The ijarah sukuk structure was employed in the first global corporate US dollar sukuk issued by a special purpose vehicle (SPV) owned by Kumpulan Guthrie Berhad in 2001 which was rated by MARC Ratings. Other lease-based contracts that have been approved by the SC for use in the structuring of ringgit-denominated sukuk include ijarah thumma bai' and ijarah mawsufah fi zimmah. Ijarah thumma bai' refers to a transfer of a right-to-use in return for ijarah payments that ends with the purchase of the leased asset by the lessee at the end of the lease period. Ijarah mawsufah fi zimmah (forward lease) can be applied where the ijarah assets will only be made available to the lessee at a future date as would be the case for an asset under construction. The ijarah structure has also been employed to structure asset-backed ijarah sukuk. However, the sukukholders of most ijarah sukuk in the domestic market only have beneficial ownership of the asset and are primarily dependent on the creditworthiness of the originator/lessee to meet the sukuk obligations.

Of late, sukuk wakalah have been gaining traction in the domestic market due to its advantage of not having to rely heavily on the existence of underlying physical assets.

## GENERAL RATING GUIDELINES FOR SUKUK

The analytical components in the rating of a sukuk transaction are:

- 1) Analysis of the basic structure of the sukuk – MARC Ratings considers whether the sukuk is structured as a corporate, financial institution, governmental, project finance or structured finance obligation. This determines the analytical framework(s) and rating methodology that will be used to rate the sukuk.

Where the sukuk is structured to achieve a flow-through of the rating of a certain sovereign, public or private entity that operates in the financial or non-financial sector, MARC Ratings will assign the ratings according to their respective credit profiles, using the relevant sector-specific methodology where specific criteria exists. Structured finance methodology will apply where the instrument is structured as an asset-backed transaction. The assigned rating will reflect the performance of the securitised assets, structural features of the transaction (including any subordination provided by more junior tranches to senior tranches) and credit enhancement, where applicable. If the sukuk is structured as a limited or no recourse project finance sukuk, the rating of the sukuk would be fundamentally driven by the quality of the project. In instances where assets are placed in the sukuk structure primarily to facilitate Shariah requirements, the quality of the underlying assets would not be a key consideration.

- 2) Assessment of key transaction parties - MARC Ratings considers the roles of key participants in the transaction: originator/borrower, lessee(s) or obligor(s), guarantor(s), contractor, servicer/back-up servicer as well as the credit quality of each participant and ability to perform their roles, and the corresponding implications of such for the risk profile of the sukuk. A shadow

rating may be performed on key participants where their credit quality is regarded to be an important driver of the rating of the sukuk issued.

- 3) Asset and cash flow analysis – This analysis is the most important driver of the ratings assigned to 'asset-backed' and non-recourse or limited recourse project finance sukuk. Certain sukuk are structured with external liquidity support and/or reserve accounts to mitigate interim deficiencies in returns from the assets. Alternatively, the originator may have a direct and irrevocable obligation as manager of the sukuk to make up any deficiency in project/asset cash flow, as in existing 'asset-based' sukuk transactions. The valuation of the asset(s) forms an important part of MARC Ratings' review where redemption of sukuk is to be partially or wholly derived from refinancing or disposal of the asset(s) to third parties. Where sukuk is structured to achieve a flow-through of the rating of a certain private entity that operates in the financial or non-financial sector, MARC Ratings' analysis will focus on that entity's business and financial risk profiles which are a function of its operating environment, industry trends, market position and size, credit metrics and financial policies, among other analytical factors.
- 4) Assessment of credit enhancement and structural protections – MARC Ratings assesses the internal credit enhancements such as reserve accounts, payment waterfalls and collateral value in addition to external credit support which may be provided by the originator/borrower or third party guarantor(s).
- 5) Legal analysis – The perfection of legal interest in the underlying assets and the insulation of the assets from insolvency or reorganisation of the originator/seller are important not only in the context of any securitisation but also from the perspective of any secured financing. The terms under which the sukuk are issued may specify certain 'trigger' events that, if they occur, would cause the transaction to be wound down. These could include failure of the lessee to make required lease payments under an ijarah structure, and certain events of insolvency and default connected with the lessee. In sukuk structures involving a SPV issuer, MARC Ratings will consider the bankruptcy remoteness of the SPV and the limitations on the business activities of the SPV.

The pre-determined periodic distribution and redemption amounts for present day fixed income sukuk allows MARC Ratings to use conventional corporate debt, project finance or structured rating methodology to rate these transactions. Given the above features and the rating focus on default risk, to date no fundamental differences in rating approach have been required for sukuk versus conventional bonds.

Our sukuk rating process for ringgit-denominated corporate sukuk does not entail an analysis of Shariah compliance risk and the appropriateness of the issue's underlying Shariah concept. The domestic regulatory framework for the issuance of Islamic securities requires the appointment of Shariah advisers to advise on all aspects of Islamic securities and to ensure compliance with applicable Shariah principles and relevant resolutions and rulings made by the Securities Commission's Shariah Advisory Council. Malaysia has in place a two-tier Shariah governance framework: the establishment of a Shariah Advisory Council at the national level and the appointment of registered Shariah advisers at the industry level. The aforementioned framework ensures the structure of sukuk approved for issuance will be in compliance with the Shariah, mitigating Shariah compliance risk.

## SUKUK STRUCTURES RATED BY MARC RATINGS

As at 31 December 2015, MARC Ratings has assigned a total of 672 issue ratings with a total rated value of RM483.0 billion, of which RM321.0 billion or 66% are rated Islamic debt instruments or sukuk.

In this update of the sukuk methodology, MARC Ratings has incorporated the wakalah, istisna' and mudharabah sukuk structures in addition to the ijarah, musharakah and murabahah structures covered in the rating agency's earlier versions of its sukuk methodology. Standard illustrations of the six most common sukuk structures employed in domestic corporate, structured and project finance transactions with the respective summary explanations of the steps to be followed for a typical sukuk issuance have been incorporated to facilitate better understanding of these structures among users of this methodology.

### Ijarah Sukuk Structure

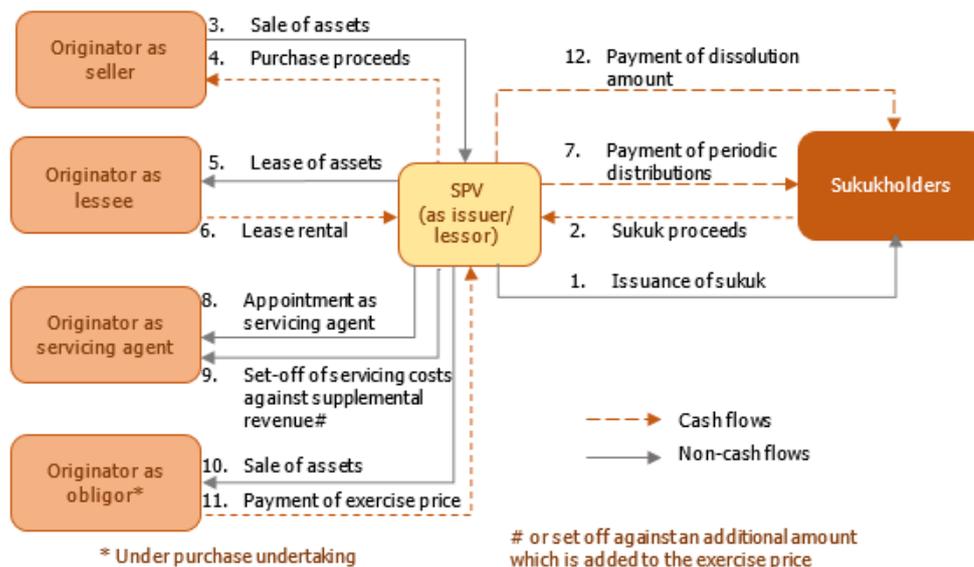
The ijarah (sale and leaseback) sukuk structure is one of the most popular structures in the domestic sukuk market. Ijarah sukuk issuances in the domestic market have typically been structured either as fixed income corporate credit instruments or asset-backed securities (ABS). In the former, the issuer SPV is usually a wholly-owned subsidiary of the originator and the sukuk represents an undivided beneficial interest in assets owned by the originator/seller. The assets are leased back to the originator/seller for ijarah rental payments that are matched to the periodic income distributions under the sukuk. On the occurrence of a dissolution event, an event of default or at the end of the lease period, the seller/originator will exercise a purchase undertaking to purchase the assets. The proceeds of the exercise price received by the SPV will be used to redeem the sukuk. If the sukuk is asset-backed, the issuer will be an orphan SPV and sukukholders will have recourse to the ijarah assets similar to bondholders in a conventional securitisation.

While the basic ijarah sukuk involves a sale by an originator of certain physical assets to an SPV which would then lease the assets back to the originator, transactions involving other asset classes are possible. In addition to land, buildings or airports, software and associated intellectual property rights have been used as the underlying assets of ijarah-based structures in the past. Where it is not feasible to transfer a legal and/or registered title in the identified assets to the SPV, a transfer of a beneficial or equitable ownership in the underlying assets to the SPV may be undertaken instead. As there is no true sale of the assets, the recourse available to sukukholders in a default scenario is a contractual claim against the originator for its failure to honour the relevant purchase undertaking, which puts sukukholders in a position similar to conventional unsecured bondholders. An ijarah sukuk can be structured to allow profit-only periodic distributions or alternatively, as fully or partially amortising financial instruments.

The seller/lessee/obligor in an ijarah executes a purchase undertaking in favour of the issuer (as trustee for sukukholders). The obligor gives a purchase undertaking which gives the right to the SPV to oblige the obligor/originator to buy the asset back to ensure redemption of the sukuk (put option). The sale undertaking provides the mechanism for the lessee (call option) to call on the SPV to sell the asset prior to the maturity date. Upon maturity or upon exercise of the option to purchase the assets, the SPV will sell and the obligor will buy back the underlying asset to fund redemption. Where the ability of the issuer to repay the sukuk is conditioned on the originator's exercise of a legally binding purchase undertaking, the assigned rating would be linked to that of the originator. The ranking of the originator's financial obligations in respect of the purchase undertaking vis-à-vis the originator's

senior unsecured obligations would drive any differential between the sukuk rating and the senior unsecured rating on the originator.

**Exhibit 3: Ijarah Sukuk Transaction Configuration**



1. The originator establishes an issuer SPV which issues sukuk representing an undivided ownership interest in the assets that are the subject of the Sale and Purchase Agreement (SPA) or lease/ijarah agreement (identified assets), as well as a right to payment of periodic distributions and the dissolution amount.
2. Sukukholders purchase the sukuk and pay the proceeds to the SPV which declares a trust over the proceeds and the assets acquired using the proceeds.
3. The SPV enters into an SPA or a head lease agreement for a pre-defined period which transfers the originator's ownership or a beneficial interest in the identified assets to the SPV.
4. The purchase price will be equivalent to the principal amount of the sukuk issuance.
5. The SPV leases or sub-leases the asset back to the originator under an ijarah agreement in consideration for the periodic lease rentals.
6. The originator, as lessee, makes periodic rental payments to the SPV, as lessor and trustee.
7. The SPV uses the rental payments to fund the periodic profit distributions to the sukukholders.
8. The SPV appoints the originator as the servicing agent for the lessor/SPV to carry out its obligations as lessor under the ijarah agreement for major maintenance, insurance and taxes.
9. Costs incurred by the originator in the capacity of servicing agent will be set off against the supplemental revenue due from the originator in its capacity as lessee.
10. At the scheduled maturity of the sukuk or on a dissolution event, the SPV sells the assets back to the originator/seller.
11. The pre-agreed repurchase or exercise price payable by the obligor is equal to the dissolution amount payable to sukukholders which in turn is equivalent to any amounts still owed under the terms of the sukuk (typically the outstanding nominal value of the sukuk and any accrued and unpaid periodic distribution).
12. The issuer SPV pays the dissolution amount to sukukholders.

MARC Ratings' Experience with Ijarah Sukuk

### **TSH Sukuk Ijarah Sdn Bhd's RM100 Million Sukuk Ijarah Commercial Paper Programme and RM300 Million Sukuk Ijarah Medium-Term Notes Programme (2008)**

MARC Ratings assigned initial short- and long-term ratings of MARC-1<sub>IS</sub>/Stable and AA-<sub>IS</sub>/Stable ratings to TSH Sukuk Ijarah Sdn Bhd's CP and MTN programmes respectively. The ijarah sukuk structure provided for the originator, TSH Resources Berhad (TSH), to sell (via a sale and purchase agreement) and lease back identified assets to/from the seller/originator TSH (via an ijarah agreement) from time to time. The sale and purchase agreement documents the sale and transfer of a beneficial (not legal) ownership interest in the underlying assets. The issuer, a wholly-owned subsidiary of TSH, leased the identified assets to its parent entity for fixed ijarah payments determined prior to the issuance of the sukuk ICP and sukuk MTN. TSH provided a purchase undertaking to acquire the identified assets at the exercise price upon maturity and/or occurrence of event of default.

Sukukholders ultimately rely on TSH's corporate credit quality rather than the sukuk structure to derive the cash flows used to service and repay the sukuk. Accordingly, MARC Ratings considered the default risk of the sukuk to be linked to the credit strength of originator and determined that the sukuk should be rated at the same level as TSH's senior unsecured debt obligations.

### **ABS Logistics Berhad's Asset-Backed Sukuk Al-Ijarah (2007)**

MARC Ratings assigned initial ratings of AAA<sub>IS</sub> and AA<sub>IS</sub> respectively to two of five classes of asset-backed sukuk issued by bankruptcy-remote special purpose vehicle ABS Logistics Berhad (ABS Logistics). The issuer financed the purchase of a portfolio of 23 warehouses from integrated logistics provider, Tiong Nam Logistics Holdings Berhad (Tiong Nam) and its subsidiaries by issuing RM300 million of sukuk in five classes: Class A, Class B and Class C (the senior sukuk), Class D (mezzanine sukuk) and Class E (subordinated sukuk). The rated classes were the RM100.0 million Class A sukuk, RM20.0 million Class B sukuk and RM40.0 million bank-guaranteed Class C sukuk. The RM44.5 million Class D mezzanine sukuk and RM95.5 million Class E subordinated sukuk were not rated. The transfer of the warehouses was structured as a true sale.

ABS Logistics then entered into an ijarah (lease) agreement as lessor to lease the warehouses to Tiong Nam Logistics Solutions (TNLS) for a period of up to ten years, corresponding to the tenure of the sukuk. The ijarah rentals were fixed irrespective of the actual rental collections at TNLS which would be a function of rental rates in the warehouse market as well as actual occupancy rates at those warehouses. Periodic distributions and capital repayments on the sukuk would be funded by monthly ijarah rentals made by the lessee during the tenure of the transaction as well as the proceeds from either the repurchase of the properties via a call option exercised by the lessee or sale of the properties to third parties prior to the final legal maturity. The call option's exercise price would be the higher of the market value of the properties and the aggregate amount required to redeem all the outstanding senior sukuk and any accrued profit. If the call option is not exercised, the sukuk trustee would initiate proceedings to sell the warehouses to third parties.

Unlike corporate-backed ijarah sukuk which focuses on an analysis of the originator, MARC Ratings' analysis for asset-backed ijarah sukuk focuses on the properties' cash flow and value. In order to assign ratings to the Class A and Class B senior sukuk, MARC Ratings estimated the sustainable net cash flow (NCF) that the securitised properties would likely generate looking through property market

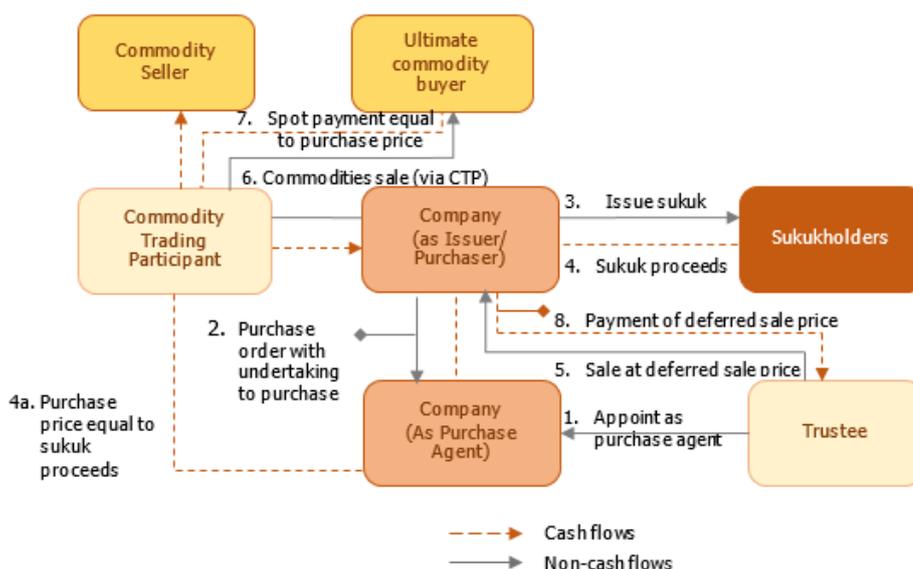
cycles. Using a direct capitalisation approach to derive MARC Ratings' appraisal of the warehouses' sustainable value, the NCF is divided by a capitalisation rate which takes into account the type of property, its competitiveness and the tenant profile. MARC Ratings' valuation for the warehouses was used to size the Class A and Class B Senior Sukuk tranches, based on the agency's loan-to-value (LTV) limits for the target rating levels of AAA<sub>IS</sub> and AA<sub>IS</sub> respectively. This transaction featured structural credit enhancement through tranching securitisation whereby the first losses are borne by the holders of the subordinated tranche. The originator retained the mezzanine tranche. Additionally, for ABS transactions where a single seller/lessee or seller-affiliated lessees exist, MARC Ratings requires the lessee to be rated at least A- for any asset-backed structure that has AAA tranche(s).

The amortising structure of the sukuk was assessed to significantly reduce refinancing risk, leaving only a modest amount of Class A and Class B sukuk exposed to refinancing risk prior to their respective final legal maturities.

### **Murabahah Sukuk Structure**

The murabahah sukuk structure has been used extensively for structuring Shariah-compliant commercial paper and medium-term note programmes in the domestic sukuk market. Murabahah structures are an alternative structure that may be employed to raise capital expenditure and general working capital requirements. A number of past domestic murabahah sukuk issuances were structured based on the concept of bai' 'inah (a two-party pre-arranged asset sale and buyback). Under a bai' 'inah structure, the SPV buys the asset from the originator and sells the same asset back to the company at a higher deferred price. The recent murabahah sukuk issuances have been based on tawarruq (commodity murabahah).

Tawarruq, meanwhile, refers to a cost-plus deferred sale of Shariah-compliant commodities involving a commodity buyer and a commodity seller. The commodity transaction, similar to the sale in a bai' 'inah structure, facilitates the financing. After the sale of the commodities has taken place, the issuer's deferred payment obligation replaces the commodities as the sukuk's underlying asset, which is a point of contention for some Shariah scholars in other Islamic finance jurisdictions who view the trading of the sukuk as tantamount to trading in debt. In Malaysia, secondary market tradability of murabahah sukuk is allowed by the SC's SAC. The issuance of murabahah sukuk tawarruq in Malaysia has been greatly facilitated by the Bursa Suq Al-Sila', an international commodity trading platform launched by Bursa Malaysia in 2009 for the domestic Islamic financial and capital market. All transactions executed through Bursa Suq Al-Sila' provide for a real transfer of ownership and physical delivery of the commodities if required although physical delivery rarely, if ever, occurs. Nonetheless, murabahah sukuk may also be structured to facilitate project financing as seen in the RM600 million murabahah sukuk issuance by TTM Sukuk Berhad which will be discussed in more detail in this methodology.

**Exhibit 4: Murabahah Tawarruq Sukuk Transaction Configuration**

1. The trustee, on behalf of the potential sukukholders, appoints the issuer as purchase agent to purchase and sell Shariah-compliant commodities.
2. Prior to the date the relevant tranche of sukuk murabahah is issued, the issuer (acting as purchaser for itself) issues a purchase order to the purchase agent for the purpose of purchasing the commodities. The purchase agent appoints the Commodity Trading Participant (CTP) to purchase the commodities on a spot basis from the commodity seller.
3. The issuer issues sukuk which represent an undivided ownership interest in underlying Shariah-compliant commodities and subsequently after the commodities are sold to the purchaser, the right to receive the deferred sale price.
4. Proceeds from the issuance of sukuk will be used to pay the purchase price of the commodities purchased on a spot basis from the commodity supplier through the CTP.
- 4a. The commodity purchase price will be an amount equivalent to the sukuk proceeds.
5. The trustee sells the commodities to the issuer (pursuant to the issuer's irrevocable undertaking in the purchase order) at a selling price that is payable on a deferred basis, either on a lump sum (one-off payment) or periodic basis. The deferred sale price is a price equivalent to the purchase price and a profit margin.
6. Upon completion of the aforementioned purchase, the issuer sells the commodity on a spot basis through the CTP for a cash consideration equal to the purchase price.
7. The sale of the commodities to the ultimate commodity buyer generates cash proceeds for the issuer.
8. In the case of sukuk murabahah with periodic payments, the issuer will make periodic payments towards the deferred sale price. For sukuk murabahah without periodic payments, the one-off payment to be made will be equivalent to the deferred sale price. Once payment of all amounts outstanding on the deferred sale price have been made, the sukuk will be cancelled.

MARC Ratings' Experience with Murabahah Sukuk

### **TTM Sukuk Berhad's RM600 Million Sukuk Murabahah (2010)**

MARC Ratings assigned an initial AAA<sub>is</sub> rating to TTM Sukuk Berhad's (TTM SPV) RM600 million Sukuk Murabahah. TTM SPV was established as a funding vehicle to undertake the issuance of RM600 million Sukuk Murabahah.

An equal joint venture of Malaysia's national oil company Petroliam Nasional Berhad (Petronas) and Thailand's PTT Public Company Ltd (PTT), Trans Thai-Malaysia (Thailand) Ltd (TTMT) is the owner and operator of the second phase of the Trans Thailand Malaysia (TTM) gas pipeline and separation project. The TTM project consists of gas pipelines and a gas separation plant (GSP) to transport and process natural gas from the gas reserves in the Thai-Malaysia Joint Development Area to southern Thailand and on to Malaysia's Kedah state. TTM Project Phase II has been fully operational since June 2010. Issued in November 2010, the sukuk matures in 2024.

The sukuk were issued under the principle of murabahah based on a commodity murabahah structure. TTM SPV was appointed as the purchase agent for the sukukholders to purchase and sell Shariah-compliant commodities. The sukuk proceeds were used to pay for the purchase price of the commodities. TTM SPV, in the capacity of purchaser, subsequently purchased the commodities from the sukukholders at a deferred sale price and sold the commodities on a spot basis. The purchase and onward sale of the commodities were concluded on the same day. The proceeds generated from the sale of the commodities were loaned to TTM SPV's parent Trans Thai-Malaysia (Thailand) Ltd (TTMT) to fund the capital costs and working capital requirements for TTM Project Phase II. The source of repayment for the sukuk is from TTMT's repayment of the intercompany loan which had been structured to match the maturity profile of the sukuk. A linkage to TTMT was established through cross-acceleration and cross-default provisions between the sukuk and the syndicated bank loan taken to finance the first phase of the gas pipeline and separation project.

The sukuk transaction was considered to be a project financing for the purposes of rating given that TTMT's debt service capacity is derived from cash flows generated by underlying project assets and contracts. MARC Ratings noted that the term of the financing did not exceed the anticipated useful life of the assets, which, in turn, is closely related to the remaining life of the natural gas reserves supporting the need for the assets. MARC Ratings' analysis of project economics was considered along with the credit strength of TTMT, the credit quality of the offtaker and the financial strength of project sponsors in arriving at the rating decision. The principal methodology used in the rating was our project finance rating methodology.

The final sukuk rating incorporated rating uplift from the project's standalone credit profile based on MARC Ratings' assessment of ringgit liquidity support that TTMT or TTM SPV is likely to receive from national oil company PETRONAS in the event foreign exchange restrictions are imposed by the Thai government and affect TTMT's ability to convert Thai baht-denominated payments into US dollars for onward remittance to TTM SPV. (TTMT and the sole offtaker are domiciled in Thailand and project revenues are denominated in US dollar or the Thai baht equivalent.) The strategic importance of the project to its sponsors as critical pipeline infrastructure for the Trans Thai-Malaysia gas pipeline and separation project was factored into the support assessment. Apart from TTMT's availability-based capacity revenues under the project's long-term services agreement, credit strengths of the transaction, as highlighted in subsequent rating reviews, include the sustained high pipeline utilisation

rates by sole offtaker and the operational reliability of the pipelines, all of which have helped TTMT to maintain overall sound credit metrics.

### **DRB-Hicom Berhad's RM1.8 billion Sukuk Murabahah Programme (2011)**

MARC Ratings assigned an initial rating of AA-*is* to DRB-Hicom Berhad's (DRB-Hicom) *tawarruq*-based Sukuk Murabahah Programme. The rating assigned to the programme was placed at the same level as the issuer's long-term senior unsecured debt rating consistent with the sukuk's status as direct, unconditional, unsubordinated obligations of the issuer and *pari passu* ranking with all other present and future obligations of the issuer with similar priority of claim as provided in the transaction documents. MARC Ratings considered the sukuk to be a senior unsecured obligation, taking into account amongst others, the sukuk's protective covenants which notably include maximum debt to equity ratios to be adhered to at both issuer level and consolidated level, and a minimum debt service cover ratio at issuer level. The principal methodology used in the rating was MARC Ratings' corporate debt methodology and group rating methodology. DRB-Hicom is a domestic conglomerate with businesses in the automotive, services and property and infrastructure sectors.

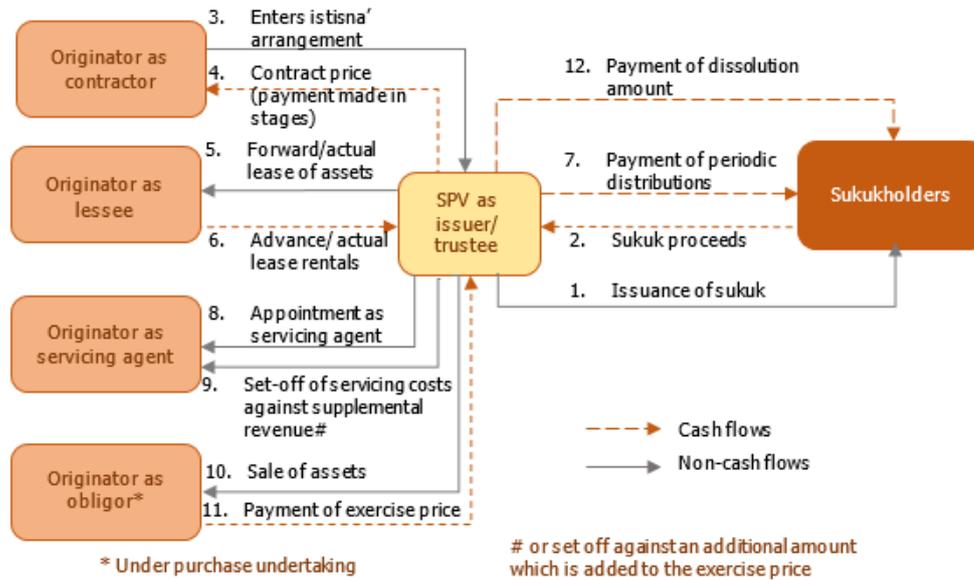
The transaction structure provides for the purchase of qualifying commodities by the issuer of the Sukuk Murabahah using the sukuk proceeds, acting in the capacity of agent (*wakil*) for the sukukholders. In the second leg of the transaction, the issuer, acting in the capacity of purchaser, buys the commodities from the sukukholders' appointed agent in the Bursa Suq Al-Sila' at cost price plus a profit margin on a deferred basis. The sukukholders are entitled to receive the purchase price plus profit payable by DRB-Hicom on a deferred basis.

### **Istisna' Sukuk Structure**

Istisna' sukuk are defined by the SC as "certificates of equal value evidencing the certificate holder's undivided ownership of the asset, including the rights to receivables arising from the underlying contract". The istisna' sukuk structure has primarily been used for project financing in the domestic market. The asset does not have to exist at the time of sukuk issuance; rather, the asset will be delivered in the future. The sukuk can be structured such that advance rentals may be paid by the originator under a forward lease to fund distributions to sukukholders prior to the delivery of the asset. The istisna' arrangement that is most commonly seen in domestic istisna' sukuk issuances is essentially a procurement arrangement under which the originator procures the construction of the asset that is to be delivered by another party.

Similar to most domestic murabahah sukuk structures, istisna' sukuk structures also involve *bai' 'inah*, selling and buying back between the issuer and sale to the originator as obligor, as the case may be. The istisna' sukuk can also be structured to represent an ownership right in the istisna' asset instead of the deferred selling price which the issuer is obliged to pay on a future date.

**Exhibit 5: Istisna' Sukuk Transaction Configuration**



Istisna' Sukuk Structure

1. The originator establishes an issuer SPV which issues sukuk representing an undivided ownership interest in the underlying asset or transaction, as well as a right to payments of periodic distributions and the dissolution amount.
2. Sukukholders purchase the sukuk and pay the proceeds to the SPV which declares a trust over the proceeds and acts as trustee for the sukukholders.
3. The originator enters into an istisna' contract with SPV to procure the construction and delivery of the project asset in consideration of the proceeds.
4. As purchaser, the SPV makes payment of the contract price in stages against construction milestones. The asset purchase price corresponds with the principal amount of the sukuk.
5. The istisna' financing may be structured in combination with a forward ijarah to provide for returns to sukukholders prior to the delivery of the assets and during the construction of the asset. The originator may undertake to lease the project asset from the SPV under a forward lease agreement known as ijarah mawsufah fi al-zimmah for the tenure of the sukuk.
6. During the construction period of the project asset, the originator pays advance rental. If an event of default occurs prior to the delivery of the project asset, the SPV will be required to refund all advance rentals to the originator. During the operational phase of the assets, the originator pays actual rentals under a lease of the completed istisna' assets.
7. The SPV distributes the payments of advance rental during the construction period and actual rentals after the delivery of the assets. The rentals will match the periodic distribution amounts to sukukholders.
8. The SPV appoints the originator as its servicing agent to repair, maintain and insure the assets.
9. Costs incurred by the originator in the capacity of servicing agent will be set off against the supplemental revenue due from the originator in its capacity as lessee. Alternatively, there may be a provision for these amounts to be added to the exercise price.
10. At maturity, the originator acquires the istisna' assets from the SPV.
11. The exercise price typically equals the principal outstanding under the issuance plus any accrued but unpaid distribution amounts.
12. The issuer SPV uses the exercise price it has received to pay the dissolution amount to the investors.

MARC Ratings' Experience with Istisna' Sukuk

## **Konsortium Lebuhraya Utara-Timur (KL) Sdn Bhd's RM780 million Redeemable Secured Serial Sukuk Istisna' (2005)**

MARC Ratings assigned an initial rating of A+<sub>IS</sub> to the sukuk, the proceeds of which were used to fund the construction of a greenfield urban toll road, the Duta Ulu Klang Expressway (DUKE). The issuer, Konsortium Lebuhraya Utara-Timur (KL) Sdn Bhd (Kesturi), was a single purpose private limited company who was awarded the concession to design, build, finance, operate, manage and maintain DUKE.

The sukuk was structured as a parallel istisna'; under an istisna' purchase agreement, the issuer agreed to cause the project (defined as the design and related construction works of the expressway in accordance with the turnkey construction contract) to be constructed and delivered to the lead manager (representing sukukholders) as consideration for the agreed istisna' purchase price. The istisna' purchase price would be equal to the nominal value of the sukuk and would be disbursed in one lump sum. The lead manager then entered into a second istisna' transaction, an istisna' sale agreement under which the lead manager agreed to cause the project to be constructed and delivered to the issuer as consideration for the agreed istisna' selling price. The selling price would be equal to the original asset purchase price plus profit payable according to an agreed payment schedule. The sukuk proceeds were used to finance the project.

The principal methodologies used in the sukuk rating were the project finance and toll road rating methodologies. The initial rating reflected MARC Ratings' expectation that the construction of the project would be completed on time or with minimal delays with experienced turkey contractor and adequate construction risk transfer arrangements in the form of a lump-sum, turnkey construction contract with back-to-back coverage of liquidated ascertained damages. However, delays in land acquisition by the government and approval for tolling on Section 1 of the highway were encountered, causing delays in completion of the toll road and commencement of tolling.

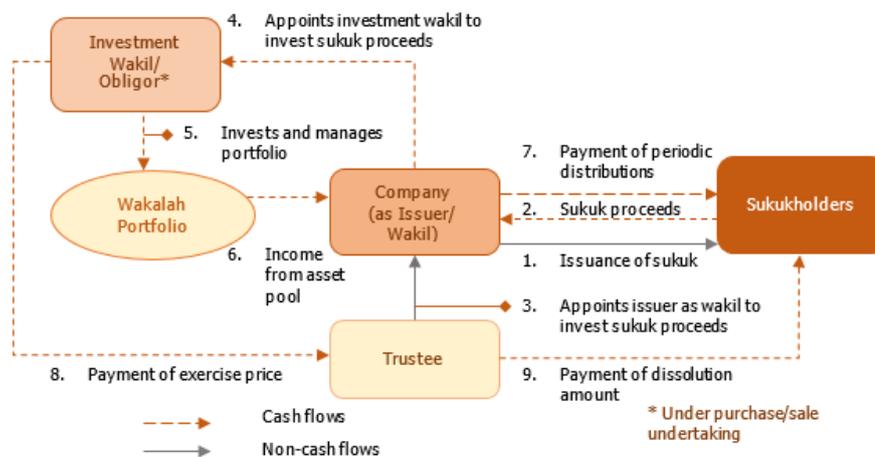
DUKE was partially opened in January 2009 and commenced tolling in the following month. Although the toll road saw steady traffic growth, actual traffic volumes were below original 2004 traffic projections. (Toll revenues for fiscal 2009 were estimated to be around 57% of projections.) The slower-than-anticipated ramp-up period had put Kesturi at risk of tripping covenants and debt service shortfalls, with an approaching sukuk maturity in October 2010. (The amortization of the sukuk was spread over nine years, commencing in year 2010.) These risks were subsequently addressed through a successful refinancing of the sukuk; the sukuk buyback and full redemption was completed on October 28, 2010.

## Wakalah Sukuk Structure

The wakalah is an agency-based contract under which an agent or wakil is appointed to act on behalf of the principal based on agreed terms and conditions. A wakalah structure can be employed when the sukuk underlying assets include non-tangible assets such as investments, non-real estate ijarah assets and receivables. Wakalah bi al-istithmar, a wakalah contract entered for the purpose of investment, has become one of the most commonly used sukuk structures for recent issuances due to flexibility afforded to the issuer with regard to the mix of assets constituting the wakalah portfolio. The wakalah structure can accommodate comparatively “asset light” structures in which the proportion of fixed assets is limited to half or a third of the wakalah portfolio.

The wakalah sukuk may be supported by a guarantee for credit enhancement purposes. The SC’s shariah ruling on the issuance of wakalah bi al-istithmar allows for a kafalah (guarantee) to be provided by any of the following parties: a third party, the wakil/sub-wakil appointed by the issuer or a related party or associated company of the issuer. The SAC further requires the kafalah to be a separate arrangement from the wakalah and lays down the amount that may be guaranteed under the sukuk structure as: (i) nominal amount of the sukuk and/or profit/rental arising from bai’ bithaman ajil, murabahah, istisna’ and ijarah contracts; (ii) principal amount arising from musharakah, mudharabah and wakalah contracts; or (iii) any amount due and payable to investors upon dissolution of the wakalah arrangement.

**Exhibit 6: Wakalah Bi Al-Istithmar Sukuk Transaction Configuration**



1. An issuer, typically a SPV but not necessarily, issues sukuk representing an undivided ownership interest in, amongst others, the wakalah assets, as well as a right to payments of periodic distributions and the dissolution amount.
2. Sukukholders purchase the sukuk and pay the proceeds to the issuer which declares a trust over the proceeds and the wakalah assets.
3. The sukuk trustee appoints the issuer as agent or wakil to invest the proceeds of the sukuk issuance in a pool or portfolio of wakalah assets pursuant to a wakalah (agency) agreement. The wakil will select the portfolio of assets in accordance with the eligibility criteria. The wakil, in turn, appoints a sub-wakil to invest the sukuk proceeds into an investment portfolio selected in accordance with specified criteria. The wakalah assets may be acquired from one or more sellers and can include Shariah-compliant financial assets that meet Shariah guidelines in addition to tangible assets.

4. The investment wakil is responsible for maintaining the underlying assets and replenishing the portfolio with additional underlying assets from time to time, if so required under the wakalah agreement.
5. The investment wakil collects income generated from the wakalah assets.
6. The return on the wakalah assets are used to fund the periodic profit distributions. Investors can only receive the profit return agreed at the outset as periodic distribution payments; any excess will be kept by the wakil as an incentive fee.
7. The obligor will exercise the purchase undertaking it has granted to the sukuk trustee upon the scheduled maturity of the sukuk or following the occurrence of a dissolution event and the issuer will sell its rights, benefits and entitlements in the wakalah assets to the obligor.
8. The sukuk trustee pays the dissolution amount to sukukholders using the exercise price received from the obligor. Upon full payment to the sukukholders, the sukuk will be cancelled.

#### MARC Ratings' Experience with Wakalah Sukuk

The following examples of our rated wakalah sukuk are both on-balance sheet structures involving issuers who are operating entities as opposed to issuer SPVs. In the second example, the issuer is also the wakil and the obligor.

#### **Tanjung Bin O&M Berhad's RM470 million Sukuk Wakalah (2013)**

MARC Ratings assigned an initial rating of AA<sub>-IS</sub>/Stable to Tanjung Bin O&M Berhad's sukuk which were structured based on the Islamic principle of wakalah bi al-istithmar. Under this transaction, the issuer Tanjung Bin O&M Berhad assumed the roles of wakil and obligor. The sukuk proceeds were primarily utilised to part-finance the acquisition of a power plant operation and maintenance (O&M) business. The latter operates and maintains a 2,100 MW coal-fired independent power plant in Tanjung Bin, Johor, under a long-dated operation and maintenance agreement (OMA). The seller was an entity linked to the issuer, its parent entity and offtaker through a common indirect major individual shareholder. The economic substance of the transaction, in MARC Ratings' view, is akin to a monetisation of the aforementioned OMA which was novated to the issuer/wakil pursuant to the acquisition.

In light of the operational and financial linkages between the issuer, offtaker and its parent, MARC Ratings' sukuk analysis focused on the credit strength of O&M contract counterparty Tanjung Bin Power Sdn Bhd and parent/O&M sub-contract counterparty Malakoff Power Berhad. The payment of the periodic distributions are funded by O&M revenues received under the OMA. Sukukholders have recourse to O&M sub-contractor/parent Malakoff Power Berhad (rated AA<sub>-</sub>/Stable) through an unconditional and irrevocable cash deficiency support undertaking provided by the latter to cover debt service shortfalls. The undertaking is intended to mitigate the risks of operating cash flow shortfalls and O&M contract termination.

#### **Sime Darby Berhad's RM3.0 billion Perpetual Subordinated Sukuk Wakalah Programme (2016)**

MARC Ratings assigned an initial rating of AA<sub>IS</sub>/Negative to Sime Darby Berhad's (Sime Darby) sukuk wakalah programme. Structured as a subordinated obligation based on the principle of wakalah bi al-istithmar also, the sukuk was rated two notches lower than the issuer's existing senior unsecured debt rating in accordance to MARC Ratings' methodology on corporate subordinated debt and

hybrid securities. The perpetual subordinated sukuk met MARC Ratings' criteria for equity recognition and were assigned 50% equity credit. The perpetual sukuk's hybrid-like features include cumulatively deferred periodic distributions. Additionally, Sime Darby's payment obligations under the programme rank after its senior unsecured obligations.

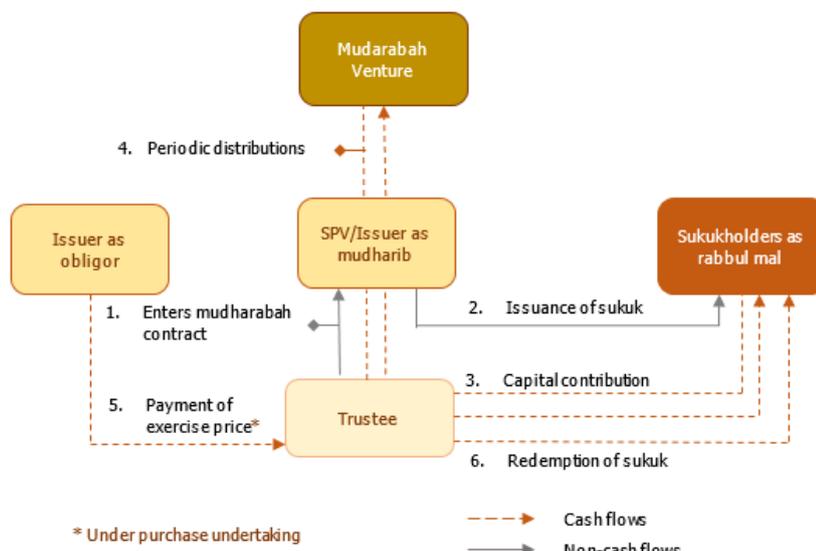
The sukuk proceeds may be used to finance investment in a wakalah portfolio comprising ijarah assets, a commodity murabahah investment and investment assets. MARC Ratings considers the sukuk rating to be driven by the originator's rating given that ultimate repayment of the sukuk relies on Sime Darby's ability to purchase the underlying assets at maturity or upon a dissolution event, pursuant to terms of a purchase undertaking granted to the sukuk trustee (Maybank Trustees Berhad). Sukukholders also rely upon the originator for payment of the periodic distributions. MARC Ratings views the position of the sukukholders as similar in nature to that of bondholders under a conventional subordinated bond.

### Mudharabah Sukuk Structure

Mudharabah sukuk, similar to musharakah sukuk, are a form of equity-based partnership whose intent is to finance a business venture. Unlike the musharakah structure, however, the mudharib (entrepreneur) does not contribute any form of capital and the rabbul mal (investor/the party providing the capital) bears the loss to the extent of contributed capital unless the loss is caused by the negligence or breach of contracted terms by the mudharib in managing the venture. Mudharabah sukuk are certificates of equal value evidencing the sukukholders' undivided ownership interest in the mudharabah venture. The issuer may be an SPV or the corporate itself. If the issuer is the corporate itself, it will also assume the role of mudharib.

A guarantee on mudharabah capital may be provided by a third party, with or without imposition of a fee, according to the Shariah rulings applicable to the issuance of domestic sukuk mudharabah. The rabbul mal may also request for rahn (collateral) as a means to mitigate capital loss arising from the mudharib's negligence and misconduct.

**Exhibit 7: Mudharabah Sukuk Transaction Configuration**



## Mudharabah Sukuk Structure

1. The originator establishes an issuer SPV (or issues sukuk itself) and enters into a mudharabah arrangement as mudharib with the trustee acting on behalf of investors/sukukholders as rabbul mal. As mudharib, the issuer has the authority to manage the mudharabah venture.
2. Sukukholders purchase the sukuk and pay the proceeds to the SPV which declares a trust over the trust assets (the rights and entitlements of the sukukholders under the venture) for the benefit of the sukukholders. The sukuk represents each of the sukukholders' undivided proportionate beneficial interests in the mudharabah venture.
3. Pursuant to the subscription of the sukuk, the sukukholders provide mudharabah capital for the venture.
4. Sukukholders receive a share of profits generated by the mudharabah venture based on the pre-agreed profit sharing percentages agreed between the mudharib and the rabbul mal as set out in the mudharabah agreement. The venture's losses are to be borne solely by sukukholders as rabbul mal. In addition to its profit share, the mudharib may be entitled to incentive fees calculated at the end of the venture and upon liquidation of the mudharabah if the profit generated by the venture exceeds a specified profit threshold. In respect of sukuk with periodic distributions, the SPV distributes the mudharabah profits it receives to sukukholders as periodic profit distributions. One-off distributions on the respective sukuk maturity dates will be made in the case of sukuk without periodic distributions.
5. The issuer will purchase the trust assets from the trustee and pay the relevant exercise price upon maturity of the sukuk or occurrence of a dissolution event pursuant to the purchase undertaking it has granted to the sukuk trustee. A guarantor may guarantee the obligations of the issuer in respect of the purchase undertaking under a separate guarantee agreement with the issuer.
6. The mudharabah venture is dissolved at the end of the mudharabah term (or mudharabah financing period) following payment in full to sukukholders.

## MARC Ratings' Experience with Mudharabah Sukuk

### **Weststar Capital Sdn Bhd's RM900 million Sukuk Mudharabah Programme (2012)**

MARC Ratings assigned an initial rating of AA-*is* to Weststar Capital's (Weststar Capital) Sukuk Mudharabah Programme. An issuing vehicle fully owned by Weststar Aviation Services Sdn. Bhd (Weststar), Weststar Capital assumed the role of issuer, mudharib and obligor under the mudharabah transaction. As mudharib under an unrestricted mudharabah contract with the trustee acting on behalf of sukukholders, Weststar Capital was permitted to manage and administer the collection of income from the mudharabah venture without any restrictions.

The mudharabah venture consisted of Weststar's Shariah-compliant business of primarily providing offshore helicopter services and the sukuk proceeds were mostly applied to the repayment of existing debt at the operating holding company. Profits generated from the mudharabah venture will be shared between the rabbul mal and the mudharib according to a pre-agreed profit-sharing ratio (PSR) of 99:1 while losses will be borne solely by the rabbul mal. The sukuk mudharabah represents the sukukholders' undivided proportionate beneficial interests in the trust assets (the undivided rights and entitlements of the sukukholders under the mudharabah venture). Weststar was appointed investment wakil to manage the mudharabah venture pursuant to a wakalah agreement. Weststar also guaranteed the obligations of Weststar Capital in respect of the purchase undertaking provided to the trustee by the latter. Upon the exercise of the purchase undertaking at the respective sukuk maturities or declaration of a dissolution event, and the payment of the exercise price, the

mudharabah venture and the trust over the trust assets would be dissolved and the sukuk mudharabah would be cancelled.

The sukuk were secured by a deed of assignment of Weststar's rights to revenue and income to be received under five 10-year service contracts with five oil majors, a third party first legal charge over the 11 medium-sized AW-139 AgustaWestland helicopters, of which 10 were being used to fulfil the contracts, and an assignment of all insurance and takaful policies taken out on the assets of the issuer and Weststar.

The transaction structure provided for the ring-fencing of a defined percentage of revenue collections from the five service contracts for sukuk and additional cash trapping from the revenue collections to maintain the covenanted minimum finance service coverage ratio of 1.25 times. The transaction structure also incorporated contract termination triggers to execute disposal of aircraft collateral in the event of unexpected early terminations of the aforementioned service contracts and Weststar's failure to substitute the contract(s) in 90 days. This had been incorporated to mitigate the impact of contract terminations, given that the contracts can be terminated at any time without a cause. Although the net loan-to-value ratio (after adjusting for cash in designated accounts) of the transaction was projected to be high at 132% and 119% early in the life of the transaction (2012 and 2013) before declining to 90% in 2015, MARC Ratings assessed the risk of multiple without-cause terminations as low at the time of assigning the rating.

The rating was based primarily on the following factors: (i) the credit quality of the payment flows generated by the five service contracts; (ii) the favourable position of the sukuk in payment waterfall and (iii) the structural features of the transaction as outlined above. At the time the initial rating was assigned, most of the five oil majors had national scale equivalent "AAA" or "AA" band credit ratings. The availability-based fixed monthly standing charges Weststar was receiving on the five service contracts had been designed to cover all fixed costs including financing costs and salaries and the termination risk associated with such service contracts in the domestic context had been historically low.

Early redemption and subsequent cancellation of the then outstanding sukuk mudharabah was effected in February 2015. (The programme was set up to have a tenure of up to 8.5 years after the first issue.)

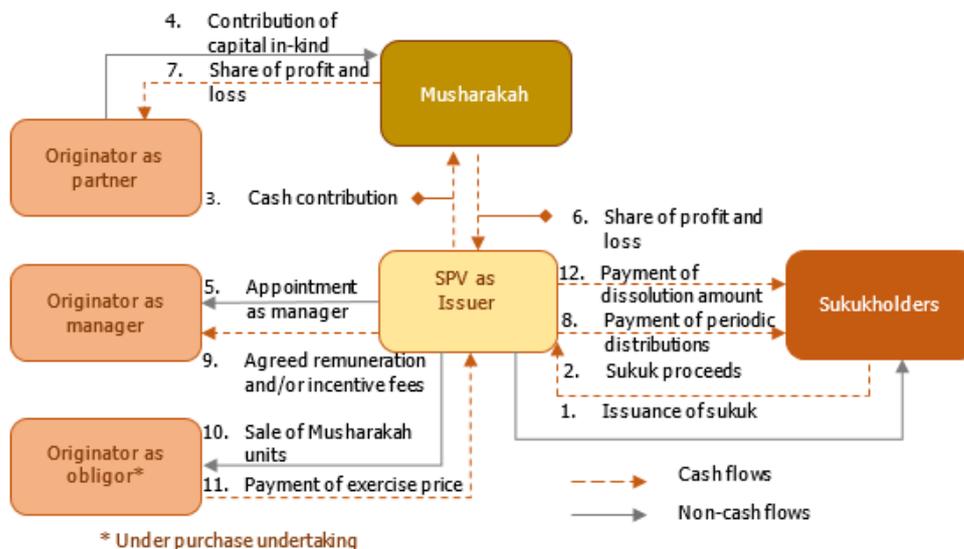
## **Musharakah Sukuk Structure**

In Malaysia, the musharakah structure has been applied to a wide range of sukuk transactions including receivables-backed issuances, project financing and contract financing. Musharakah is a form of partnership that entails profit and loss sharing. Musharakah sukuk is defined by the SC as certificates of equal value evidencing the sukukholders' undivided ownership interest in the musharakah venture. Its popularity derives from its suitability for transactions in which there is no underlying tangible asset and more recently, for the issuance of Basel III additional Tier 1 (AT1) or Tier 2 (T2) capital sukuk. Musharakah sukuk issuances by banks can be structured to absorb losses prior to or at the point of non-viability in order to qualify as AT1 and T2 bank capital. Bank Negara Malaysia's (BNM) Capital Adequacy Framework (Capital Components) for banking and financial institutions requires qualifying Additional Tier-1 capital sukuk under Basel III to be structured using unrestricted non-exchange-based structures such as musharakah, mudharabah or wakalah.

In a typical musharakah structure, investors enter into one or a series of musharakah ventures (partnership agreements) between themselves to finance the musharakah venture(s). The issuer acts as an agent to carry out the venture in an agent's capacity and receives the capital contributions. In return for the capital contributions, the issuer issues musharakah sukuk. The issuer may be an SPV or the corporate itself.

A kafalah/guarantee on musharakah capital may be provided by a third party, with or without imposition of a fee, according to the shariah rulings applicable to the issuance of domestic sukuk musharakah.

**Exhibit 8: Musharakah Sukuk Transaction Configuration**



Musharakah Sukuk Structure (with purchase undertaking)

1. The originator establishes an issuer SPV which issues sukuk representing an undivided ownership interest in the asset, transaction or project, as well as a right to payments of periodic distributions and the dissolution amount. The originator can also issue the sukuk without establishing an SPV as is usually the case when banks issue musharakah sukuk. The sukukholders share the ownership of the underlying musharakah assets with the originator.
2. Sukukholders purchase the sukuk and pay the proceeds to the SPV which declares a trust over the proceeds and acts as trustee for the sukukholders.
3. As trustee, the SPV enters into a musharakah arrangement with the originator and contributes the proceeds of the sukuk issuance as an in-cash contribution to the musharakah. The SPV is allocated a number of units or shares in the musharakah.
4. The originator makes a contribution in cash or in kind to the musharakah, and is allocated a number of musharakah units or shares in proportion to its capital contribution. The risk associated with the physical asset that is contributed as capital is assumed by the musharakah.
5. The SPV, in the capacity of trustee, enters into a management agreement, pursuant to which the originator will be appointed as manager to manage the musharakah in accordance with the musharakah business plan.
6. The capital contributions of partners are subject to profit sharing in any ratio agreed between the partners at the time of entering the musharakah contract. The profit generated by the musharakah venture is used to meet the periodic distribution amounts.

7. The originator receives profits from the musharakah venture in accordance to the pre-agreed profit sharing ratio. Any losses are to be borne in proportion to the capital contributed by the partners.
8. The SPV uses its share of musharakah profits to fund the periodic profit distributions to the sukukholders. Surplus profit may be set aside in a reserve account to fund shortfalls in the event that profits for a period are insufficient to cover the periodic distribution amount.
9. In addition to its share in profit as a partner, the profit generated by the musharakah venture in excess of a specified profit threshold is typically paid to the originator in the form of an incentive fee for its services as manager of the musharakah.
10. The trustee sells the SPV's units or shares in the musharakah on a periodic basis, which the originator is obliged to purchase at a pre-agreed price pursuant to a purchase undertaking. Where the issuer is the corporate and not an SPV and a purchase undertaking is granted, the issuer will also assume the role of obligor with respect to the purchase undertaking.
11. The originator buys the musharakah units or shares of the SPV at periodic intervals until 100% of the units or shares are fully owned by the originator by the musharakah end date.
12. The issuer SPV uses the proceeds from the sale of musharakah units to fund the payment of the dissolution amount to the sukukholders.

MARC Ratings' Experience with Musharakah Sukuk

### **Musyarakah One Capital Berhad's RM2.5 billion Sukuk Musyarakah Programme (2005)**

MARC Ratings assigned a rating of AAA<sub>IS</sub> to the receivables-backed sukuk issued under the programme. Musyarakah One Capital Berhad (Musyarakah One) was incorporated for the purpose of issuing sukuk musharakah to finance the acquisition of receivables from TIME Systems Integrators Sdn Bhd (TSI). Under the Sukuk Musyarakah Programme (the Programme), government receivables generated from TSI's supply contracts were sold on a periodic basis to Musyarakah One via an absolute legal assignment. The receivables comprise the rights, title, interests and benefits to the Government of Malaysia's (GOM) payment obligations to TSI, pursuant to the contract and letter(s) of award to supply teaching equipment and for the provision of related services to various schools and certain government areas in implementing a programme for teaching Science and Mathematics in English.

Sukukholders were not exposed to performance risk and set-off risk as receivables are securitised subsequent to delivery, installation, testing and commissioning of teaching equipment and the GOM did not have the right to set-off any claims against the securitised receivables. Subsequent to each delivery of equipment and/or services, the GOM issues a Sijil Utama, which stipulates the contract sum payable by the GOM as well as the repayment schedule in respect of the contract sum, which will be on a deferred payment basis. The assigned rating of AAA<sub>IS</sub> was based on the credit quality of the sole obligor, the GOM, consistent with our rating approach for receivables securitisation transactions of this nature.

### **Matang Highway Sdn Bhd's RM70.0 million Sukuk Musharakah (2008)**

MARC Ratings assigned an initial rating of AA-<sub>IS</sub> to the RM70.0 million sukuk musharakah issued by Matang Highway Sdn Bhd (Matang), a wholly-owned subsidiary of Zecon Berhad (Zecon). Matang was established to undertake the issuance of the sukuk, the proceeds of which were used to finance

the construction of a highway linking Kuching city to the state of Sarawak's new Federal Administrative Centre (FAC) under a turnkey design and build contract awarded by Jabatan Kerja Raya Sarawak (JKR Sarawak) to Zecon.

Musharakah and mudharabah contracts were both applied in the structuring of the sukuk. Matang issued musharakah sukuk to investors in return for their capital contributions to the musharakah venture. Acting as an agent for investors, Matang then entered into a mudharabah arrangement with Zecon as the entrepreneur. Cash flows generated from construction under the turnkey contract were the intended primary source of sukuk profit payments and capital repayment. The initial rating of AA-<sub>IS</sub> on the fully amortising three-year sukuk was based on the credit quality of the sole obligor, JKR Sarawak, and expected satisfactory performance of Zecon under the turnkey contract. MARC Ratings' assessment of obligor credit quality took into consideration the prompt payment record of JKR Sarawak and the implicit government support for the federal government-approved project.

Consideration was given to the sukuk's protective covenants and the designated accounts set up to capture construction receipts. Although this financing structure was essentially non-recourse to the originator of the trust assets, the creditworthiness of Zecon became a key driver of the sukuk's rating as a result of unforeseen delay in construction progress of the highway, and deviation from expected collections. MARC Ratings lowered the sukuk rating to A<sub>IS</sub> in the second year of the issuance to reflect the deterioration in the credit risk of the contract financing transaction. The sukuk was eventually redeemed in full, with credit support from Zecon.

### **Projek Lebuhraya Usahasama Berhad's RM23.35 billion Sukuk Musyarakah Programme (2011)**

MARC Ratings assigned an initial rating of AAA<sub>IS</sub> to PLUS Berhad's RM23.35 billion Sukuk Musyarakah Programme. PLUS Berhad is a wholly owned subsidiary of PLUS Malaysia Sdn Bhd (PLUS Malaysia), a 51:49 joint venture company incorporated by UEM Group Berhad and Employees Provident Fund Board for the purpose of acquiring all assets and liabilities of Plus Expressway Berhad (PEB) including PEB's Malaysian highway concession assets.

Under the sukuk programme, investors of each tranche shall form a musharakah venture as part of the financing arrangement, via subscription of the relevant sukuk. The sukukholders shall, via the trustee, form a musharakah partnership amongst themselves to invest in the underlying assets via subscription of the sukuk to be issued by PLUS Berhad. Upon receiving proceeds from the sukuk programme, the issuer will declare that it holds on trust the underlying assets for the benefit of the sukukholders. The sukuk issued by PLUS Berhad will be repaid with future operating cash flows from the acquired portfolio of tolled expressways, the concessions of which will be novated to the issuer.

The sukuk represents the undivided proportionate interest of the respective sukukholders in the musharakah venture. Income from the musharakah venture shall be distributed periodically to the sukukholders. The periodic distribution shall be made semi-annually or such period to be determined prior to each issuance of the sukuk. In the event of any shortfall between the periodic distribution and the expected periodic distribution for such relevant period, PLUS Berhad shall make good any difference. Any income in excess of the expected periodic distribution shall be retained by PLUS Berhad as an incentive fee. PLUS Berhad also provided a purchase undertaking to purchase the sukuk from the trustee either on the maturity date of the sukuk or on the dissolution date, whichever is earlier. PLUS Berhad is entitled to set off the exercise price with any top-up payments made.

The principal methodologies used in the rating are the toll road rating methodology and government-related issuer rating methodology. The final rating incorporated a two-notch support uplift from PLUS Berhad's standalone credit assessment on the basis of the government's high direct and indirect ownership level including its golden share in the entity, the government's strong track record of providing support to the tolled expressways concessions that comprise the tolled expressways portfolio of PLUS Berhad as well as the guarantee by the government for the unsecured sukuk to be issued by the company.

### **CIMB Islamic Bank Berhad's RM2.0 billion Tier 2 Junior Sukuk Programme (2015)**

MARC Ratings assigned an initial rating of AA+/Stable to CIMB Islamic Bank Berhad's (CIMB Islamic) RM5.0 billion Tier 2 Junior Sukuk Programme which was structured using a musharakah structure. The Basel III-compliant Tier-2 capital sukuk was rated one notch lower than CIMB Islamic's financial institution rating of AAA to reflect the subordinated position of the sukuk relative to CIMB Islamic's deposit liabilities and other liabilities of the bank except those ranking equally in right of payment or subordinated to the junior sukuk. As a core subsidiary of AAA-rated parent bank, CIMB Bank Berhad (CIMB), CIMB Islamic's financial institution rating was equalized with that of CIMB.

The junior sukuk was structured as a musharakah between investors and the issuer for participation in the issuer's Islamic banking operation and any other approved Shariah-compliant asset (trust asset). The investors contributed cash while the issuer could contribute cash or capital in kind to the musharakah venture. CIMB Islamic was appointed as the manager of the trust asset. The junior sukuk entitle the sukukholders to an undivided share of beneficial ownership in the trust asset and a right to share income generated by the trust asset in proportion to their undivided ownership. Any profit derived from the musharakah venture would be distributed based on a pre-agreed profit sharing ratio but losses would be borne in proportion to each partner's share of capital. The manager was entitled to retain any surplus cash flow from the venture in excess of periodic distributions as an incentive fee. Income from the musharakah venture would be distributed periodically while any shortfall between the expected periodic distribution and the actual income generated from the musharakah venture would be paid by the bank as an advance part payment of the exercise price. CIMB Islamic provided a purchase undertaking to purchase the sukukholders' interest in the musharakah venture at the exercise price upon maturity of the sukuk, the occurrence of defined dissolution events or upon optional redemption while the sukuk trustee gave a sale undertaking in favour of CIMB Islamic.

## SUKUK RATING SYMBOLS & DEFINITIONS

### LONG-TERM RATINGS

Long-Term Ratings are assigned to sukuk issuances with maturities of more than one year. These ratings specifically assess the likelihood of timely payment of the instrument issued under the various Islamic financing contract(s).

#### Investment Grade

<b>AAA<sub>IS</sub></b>	Extremely strong ability to make payment on the instrument issued under the Islamic financing contract(s).
<b>AA<sub>IS</sub></b>	Very strong ability to make payment on the instrument issued under the Islamic financing contract(s). Risk is slight with degree of certainty for timely payment marginally lower than for instruments accorded the highest rating.
<b>A<sub>IS</sub></b>	Strong ability to make payment on the instrument issued under the Islamic financing contract(s). However, risks are greater in periods of business and economic stress than for instruments with higher ratings.
<b>BBB<sub>IS</sub></b>	Adequate ability to make payment on the instrument issued under the Islamic financing contract(s). Vulnerable to moderately adverse developments, both internal and external.

#### Non-Investment Grade

<b>BB<sub>IS</sub></b>	Uncertainties exist that could affect the ability to make timely payment on the instrument issued under the Islamic financing contract(s).
<b>B<sub>IS</sub></b>	Significant uncertainty exists as to timely payment on the instrument issued under the Islamic financing contract(s). Slight adverse developments could impair ability to make timely payment.
<b>C<sub>IS</sub></b>	Possesses a substantial risk of default, with little capacity to address further negative changes in financial circumstances.
<b>D<sub>IS</sub></b>	Failed to make scheduled payment on the instrument issued under the Islamic financing contract(s).

**Note:** Long-term Ratings from AA to B may be modified by a plus (+) or minus (-) suffix to show its relative standing within the major rating categories. Bank-guaranteed issues will carry a suffix (bg), corporate-guaranteed issues (cg), issues guaranteed by a financial guarantee insurer (FGI) (fg), and all other support (s) when such guarantees or support give favourable effect to the assigned rating.

### SHORT-TERM RATINGS

Short-Term Ratings are assigned to Sukuk issuances with original maturities of one year or less, and are intended to assess the likelihood of timely payment of the instrument issued under the various Islamic financing contract(s).

#### Investment Grade

<b>MARC-1<sub>IS</sub></b>	Extremely strong capacity to make timely payment on the instrument issued under the Islamic financing contract(s).
<b>MARC-2<sub>IS</sub></b>	Strong capacity to make timely payment on the instrument issued under the Islamic financing contract(s). Timeliness of payment is slightly susceptible to adverse changes in operating circumstances and economic conditions.
<b>MARC-3<sub>IS</sub></b>	Adequate capacity to make timely payment on the instrument issued under the Islamic financing contract(s). Moderately adverse changes in operating environment and economic conditions may weaken financial capacity to make timely payment.

#### Non-Investment Grade

<b>MARC-4<sub>IS</sub></b>	Vulnerable to non-payment of instrument issued under the Islamic financing contract(s). Capacity to make payment on the instrument is dependent upon favourable business, financial and economic conditions.
<b>D<sub>IS</sub></b>	Failed to make scheduled payment on the instrument issued under the Islamic financing contract(s).

**Note:** Ratings will also carry a suffix (bg) for bank-guaranteed issues, (cg) for corporate-guaranteed issues, (fg) for FGI-guaranteed issues, and (s) for all other supports when such guarantees or supports give favourable effect to the assigned rating.

### RATING OUTLOOK

Rating Outlook assesses the potential direction of the rating on the Sukuk over the intermediate term (typically over a one to two-year period). The Rating Outlook may either be:

<b>POSITIVE</b>	which indicates that a rating may be raised;
<b>NEGATIVE</b>	which indicates that a rating may be lowered;
<b>STABLE</b>	which indicates that a rating is likely to remain unchanged; or
<b>DEVELOPING</b>	which indicates that a rating may be raised, lowered or remain unchanged.

## **APPENDIX 1: OWNERSHIP AND RECOURSE TO UNDERLYING ASSETS: KEY ISSUES AND JURISDICTIONAL DIFFERENCES**

### ***What are the differences between legal ownership and beneficial ownership?***

Beneficial ownership generally does not give rise to recourse to the assets, i.e. sukukholders with beneficial ownership do not possess the right to cause the sale or other disposition of any of the underlying assets in the event of default. The legal ownership remains with the borrower. Sukukholders with beneficial ownership of underlying assets usually have a standing which is similar to conventional unsecured bondholders unless the sukuk is secured. If the sukuk is secured, the security is typically granted to the SPV issuer by the originator and is separate from the underlying assets. With legal ownership, legal title to the underlying assets passes to the issuer SPV. On default by the borrower, sukukholders possess more than a security interest and are able to exercise certain rights of ownership and control over these assets.

### ***Is beneficial ownership recognized in the Shariah laws of Muslim countries?***

IFSB defines sukuk as “certificates that represent the holder’s proportionate ownership in an undivided part of an underlying asset where the holder assumes all rights and obligations to such asset” (IFSB, 2005). Many Shariah scholars hold the view that asset-backed sukuk adhere perfectly to the Shariah requirement of ownership in sukuk origination but raise concerns over the legal status of beneficial owners.

In many Middle Eastern jurisdictions including the UAE, the split of legal and beneficial title is not recognised by local law. Most of the sukuk structures in the market, by implication, would not meet the Islamic Financial Services Board’s (IFSB) requirement that sukukholders assume all rights and obligations attached to the assets. Typically, these asset-based structures convey only a beneficial, unregistered ownership or an equitable interest in the underlying assets.

The position of the beneficial owner under the legal framework of the jurisdiction of enforcement (i.e. the jurisdiction in which the asset is located) is also pertinent to the issue of legal transferability of the assets. For example, there is no concept of trust or beneficial ownership under UAE law. In Malaysia, the separation of legal and beneficial ownership of real property is recognised under commercial real estate law. The seller/originator holds the real property as bare trustee for the beneficial owner and cannot, as bare trustee, dispose the land to another without the consent of the beneficial owner. The Shariah Advisory Council of Bank Negara has also resolved that both legal and beneficial ownership are recognised from a Shariah perspective provided that all rights and liabilities attached to the underlying assets are attained by the beneficial owner. This is to ensure that sukukholders will enjoy both beneficial title and realisable security over the assets and associated cash flows.

### ***Do sukukholders bear any of the asset ownership risks?***

We have taken asset ownership risks to mean risks relating to asset performance, its maintenance, destruction as well as liability to third parties. The first refers to the risk that underlying assets in sukuk do not produce the desired income while the second pertains to the maintenance of the underlying assets. Unless the risk of asset impairment is transferred to another party, sukukholders bear this risk as well. Technically, ownership risks of the underlying assets would only be transferred to sukukholders where the transfer of ownership has been perfected, as seen in an asset-backed sukuk. The issuer

SPV would be responsible for the maintenance, repairs, and insurance. For example, in an ijarah sukuk structure, structural maintenance and insurance obligations pertaining to the commercial real estate that is to be leased cannot be passed on to the lessee.

### **Do the sukukholders have recourse to sukuk underlying assets?**

The rights of sukukholders in the event of default will vary depending on whether the sukuk structure is an “asset-based” or an “asset-backed” structure. The issuer SPV does not have legal title to the underlying assets in an asset-based sukuk; it merely has an equitable interest in the assets that does not confer any rights to cause the sale or disposition of the underlying assets on default of the sukuk. In asset-backed sukuk, the issuer SPV will have legal title to the underlying assets which, in turn, confers rights of ownership and control over such assets on default of the sukuk. The perfected ownership interest helps ensure that the assets of the issuer will not be consolidated with the assets of the originator in the event of the latter’s insolvency. Where cross-border transactions involving offshore SPV issuers are concerned, enforceability against the assets could still be challenging notwithstanding a true sale.

Where cross-border transactions are concerned, additional jurisdictional law considerations also have a bearing on sukukholders’ right to recourse to underlying assets. Where a declaration of trust is not valid to confer the undivided, *pro rata* interest in the sukuk assets of the sukukholders, an agency declaration would be required to create a relationship of principal and agent, as opposed to trustee and beneficiaries, between the SPV and the sukukholders.

Do the creditors of the originator have the right of recourse to assets transferred to an issuer SPV pursuant to a sukuk issuance in the event of the originator’s insolvency or receivership?

The transfer of assets from the originator may take place by way of an outright sale, assignment or novation or a trust may be declared over the assets in favour of the SPV issuer. The originator must surrender effective control of the assets for the assets to be placed beyond the reach of the originator and its creditors. An outright sale facilitates isolation, which should be confirmed by a legal opinion.

In the absence of an outright sale, there is the risk of a claw-back of the assets in the event of the originator’s insolvency. If the transfer of the underlying assets qualifies as a true sale, the creditors of the originator have no right of recourse to the assets. Additionally, payment to the sukukholders will also continue uninterrupted if the underlying assets continue to perform. Conversely, if the relevant court concludes that the transfer of the assets was not a sale, but rather a financing transaction in which the sukuk is merely secured by the underlying assets, the sukukholders would have to share the value realised from the assets with other creditors in the event of the originator’s liquidation. Where the originator undertakes to repurchase the assets from the issuer at maturity of the sukuk or upon a pre-defined early termination event, it may be inferred that the sale has not been structured in a manner that actually transfers both the substantial risks and rewards of ownership from the originator to the SPV. Similarly, the SPV should be an “orphan”; its activities should not be controlled by the originator.

## **APPENDIX 2: THE ROLE OF THE SPECIAL PURPOSE VEHICLE (SPV)**

### ***Is SPV a necessity in sukuk structures?***

For asset-backed sukuk/asset securitisations, the SPV is a must for the transfer of assets from the originator to be characterised properly as a true sale. The purpose of creating a SPV is to create an entity that is bankruptcy-remote; assets sold to the SPV are isolated from creditors of the originator and are not at risk should the originator become insolvent.

### ***What are the main functions of SPV in sukuk structures?***

The main function of a SPV in asset-based sukuk structures is to facilitate the issuance of the sukuk. The SPV will issue sukuk to sukukholders/investors (the certificate holders) and invest the proceeds in assets. The SPV is set up for the sole purpose of declaring a trust and holding the assets of a sukuk issuance. Typically the SPV delegates all of its trustee functions, except the core holding of the asset to a professional trustee.

### ***Is ownership of SPV usually designed in sukuk structures?***

The SPV in an asset-based structure is a separate legal entity from the originator but is typically a wholly-owned subsidiary of the originator. The SPV would issue sukuk on the basis of its parent's creditworthiness and the parent would place its own management in the SPV. Only in asset-backed sukuk structures does the SPV have to be an orphan SPV to limit the risk of sukukholders' recourse to underlying assets being successfully challenged in the courts.

### ***How are SPVs usually managed? What are the contracts used in SPV operations and the mechanism of operations?***

The SPV will normally have a very modest share capital and will have no staff, and will be subject to limitations on its purpose and the activities in which it may engage, restrictions on indebtedness outside the transaction as well as other liabilities (non-financial obligation). This will lower the risk that the SPV will be declared insolvent. In an asset-based structure where the SPV is a wholly-owned subsidiary of the originator, the parent typically place its own management in the SPV. The financial statements of the SPV would be reflected in the consolidated financial statements of the parent. In contrast, the SPV in an asset-backed structure is independent of the originator, both in terms of ownership and management. The directorship of the SPV is independent of the originator and the SPV's balance sheet is separated from that of the originator to ensure it will be unaffected by the insolvency of the originator.

In cross-border sukuk issuances, the SPV issuer is usually incorporated in a low-tax or no-tax jurisdiction.

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