

Shari'ah and Sukuk: A Moody's Primer

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INTRODUCTION

Sukuk, sometimes known as Islamic Bonds, are better described as 'Trust Certificates' or 'Participation Securities' that grant the investor a share of an asset along with the cashflows and risk commensurate with such ownership. While such a description may be consistent with conventional Asset-Backed Securities ("ABS"), this report shows that the underlying credit risk of such investments can have more in common with conventional unsecured lending.

As a rating agency, Moody's focuses on the credit risk and expected loss on an investment relative to its promise. Aside from any quantitative analysis (which draws upon our existing methodologies), Moody's will always consider the legal integrity of the structure as it is the transaction documentation that governs the cashflows and the risk to which the investor is exposed. In this context, Shari'ah or Islamic law adds an extra dimension to the legal analysis that needs to be considered if its inclusion has a material effect on the credit risk profile of the Sukuk.

The interrelated topics of Sukuk, Shari'ah and Islamic Finance are extensive and a complete treatise is beyond the scope of this paper. Our intention is to introduce some of the basic concepts and terminology and focus on issues relevant to a Moody's credit risk analysis. A separate report¹ deals extensively with the implications for Islamic financial institutions.

The Sukuk Market

The core principles of Islamic Finance are over 1500 years old, but the issuance of Sukuk (singular *Sakk*) are a relatively recent phenomenon. It began in Malaysia in 1990 with the small issuance of RM120mm (\$30mm) from a Shell Malaysia subsidiary and has progressed to the recent RM10bn (\$2.7bn) RACB transaction. Impressively for what began as a 'conventional' financial system, around 75% of all Malaysian corporate borrowing was Islamic in 2005.

¹ A Guide to Rating Islamic Financial Institutions - Moody's Investors Service April 2006 (97226)



The past 5 years, however, have seen a rapid growth in this type of transaction across the countries in the Gulf, with a \$3.5bn PCFC Sukuk (DPWorld) pushing such structures firmly into the international eye. This issue generated \$11.4bn of orders with over 50% placed with non-Muslim investors. Indeed, the €100mm issuance from the German state of Saxony-Anhalt illustrates that such financing methods need not be limited solely to Islamic issuers or jurisdictions.

***\$41bn issued globally,
\$30bn in Malaysia,
\$11bn in the Gulf with 45%
average growth since 2001***

***Rapid Malaysian market evolution
as a result of coordinated
regulatory and governmental
efforts***

***Numerous supranationals are
involved in improving liquidity,
transparency, accounting and
regulation of Sukuk products***

***The increased demand for Islamic
financing in Malaysia***

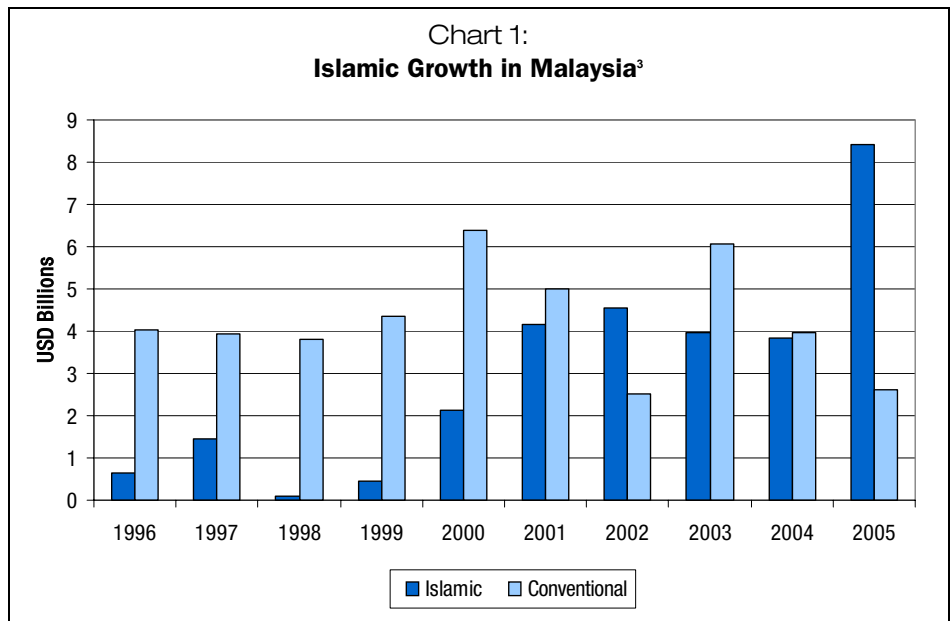
***Provision of regulatory framework
in 2004 has had a significant
effect on issuance***

With approximately \$41bn² issued globally thus far, the \$11bn from the Gulf is still relatively small but the growth rate, while volatile, has averaged at around 45% a year since 2001 (this excludes the billions of dollars of Islamic project and non-Sukuk financings). This rate is expected to continue as part of the more recent systemic Middle Eastern growth in long-term debt financing combined with the drive to tap the deep pool of Islamic liquidity.

As such, the evolution of the Malaysian market suggests that Shari'ah forms of financing have the potential to become dominant in Islamic countries, although we shall see below differences in Shari'ah opinion, regulations and local markets currently preclude a single, global, Islamic market. Some key factors in the case of Malaysia:

- A market with single regulatory authority and a proactive government
- Securities Commission has provided a clear and comprehensive framework for Sukuk in 2004, documentation/reporting is standardised where possible
- Expenses incurred in issuing such securities are tax deductible
- Ratings are mandatory, which leads to consistent, benchmarked, risk-based pricing

Now the supranational Islamic bodies listed in the appendix are making great efforts towards harmonising the global market but with so many countries active, consensus will take time. Initiatives such as the "The Islamic Financial Services Industry: Ten Year Master Plan (2006 – 2015)" produced by the Islamic Development Bank and the Islamic Financial Services Board are important steps to this goal.



SHARI'AH (ISLAMIC 'LAW' AND PRINCIPLES)

***300 Islamic financial institutions
\$250bn of assets
10-15% growth per year***

Conservative estimates⁴ suggest that there are approximately

- 250 Islamic mutual funds with \$300bn of assets under management
- 300 Islamic financial institutions with over \$250bn of assets, (10-15% growth/year)
- \$200bn estimated to be held in Islamic 'windows' of conventional banks

² Various Sources: Islamic Capital Market Fact Finding Report - IOSCO July 2004. Liquidity Management Centre BSC website. Commerce International Merchant Bankers (CIMB) Berhad. Growth rate is volatile, this figure is an annualised average rate

³ Source: CIMB Berhad

⁴ Islamic Finance Gears Up - Mohammed El Qorchi - IMF Dec 2005, IFSI Ten Year Master Plan – IFSB & IDB Draft 2006, Islamic Banker

All are managed according to Islamic investment principles. Such principles form part of 'Shari'ah', which is often understood to be 'Islamic Law', but it is actually broader than this in that it also encompasses the general body of spiritual and moral obligations and duties in Islam.

Three main Shari'ah sources:

- **Qur'an**
- **Sunnah**
- **Hadith**

Within Shari'ah, there are many principles that relate to finance and trade. The majority originate from the:

- Qur'an, the first source of Islamic jurisprudence
- Sunnah, the way of the Prophet Muhammed (PBOH)
- Hadith, the narrative records of the Prophet's (PBOH) life, actions and sayings

The principles that are most relevant to our understanding of Sukuk follow below.

The Importance of Assets

Shari'ah requires that financing is raised for trading in, or construction of, specific and identifiable assets

Shari'ah requires that financing should only be raised for trading in, or construction of, specific and identifiable assets. Trading in 'indebtedness' is prohibited, so the issuance of conventional bonds would not be compliant as they are usually traded and represent interest based funding for general corporate purposes. A non-interest bearing loan however, could be traded if priced at par value.

Thus, all Sukuk returns and cashflows should be linked to assets purchased, or (in the case of project finance) those generated from an asset once constructed and not simply be income that is interest based. This requirement for 'tangibility' has consequential effects in other areas, such as derivatives.

Trading in 'indebtedness' is prohibited

For borrowers to raise compliant financing they will need to utilise assets in the structure (note this could be equity, as we shall see below). These borrowers that provide the assets are commonly referred to as 'originators'.

It is worth noting that equity financing is Shari'ah compliant and fits well with the risk/return precepts of Islam.

Prohibition of Interest or 'Riba'

Money is a measuring tool for value and not an 'asset'

As Shari'ah considers money to be a measuring tool for value and not an 'asset' in itself, it requires that one should not be able to receive income from money (or anything that has the genus of money) alone. This generation of money from money (simplistically interest) is 'Riba', and is forbidden.

This generation of money (income) from money, or more simplistically interest is 'Riba', and is forbidden

The implications for Islamic financial institutions and securitisations are that the trading/selling of debts or receivables for anything other than par is not permissible. However it should be noted that for some of the existing Sukuk, some Shariah boards seem to accept that, as long as such receivables are a 'small' portion of the overall income flows, their presence is acceptable (although there is some variation in the definition of 'small'). Moreover, it is worth noting that Malaysia, which has a comprehensive Islamic capital market, does not place receivables in the category of money and hence allows Sukuk to be 100% backed by receivables. This is a major difference between the two regions (Far East and the Gulf) and affects the overall liquidity potential of a global 'Islamic Capital Market' but there is discussion in this field and more harmonisation is expected to result.

Interest-based late payment penalties are 'Riba' and cannot be paid to investors...

Another consideration is that interest-based late payment penalties cannot be charged. Sukuk structures allow for delayed payment or redemption (up to a certain extent, after which an event of default would be declared), without requiring it to compensate investors.

...but can be paid to charity as a disincentive for delays

Such fees are sometimes permissible if payable to charity or alternatively some preset fixed amount may be accepted. This attempts to maintain the incentive for timely payment, although the loss of such income for the investor would be considered in our rating analysis if there was the potential for extended delay with no Sukuk default/termination.

Prohibition of Uncertainty or 'Gharar'

Gharar is widely understood to mean uncertainty in the:

- **contractual terms**
- **in the existence of an underlying asset in a contract**

This principle and its consequences for Sukuk is currently among the most studied in the context of Islamic finance. It is widely understood to mean uncertainty in the contractual terms and/or the uncertainty in the existence of an underlying asset in a contract. The prohibition of the former is positive from a transaction perspective, but the latter creates issues for Islamic scholars when considering the application of derivatives.

The concept of 'Maslahah' or 'Public benefit', denotes that, if something is overwhelmingly in the public good, it may yet be transacted

'Ijtihad' means the 'efforts' of Scholars to study and reinterpret the Islamic sources of jurisprudence

Shari'ah Boards monitor transactions and operations of Islamic financial institutions to ensure compliance with Shari'ah

There is a lack of binding precedent and uncertainty regarding matters of Shari'ah

Many Sukuk transactions are governed by English or New York law due to their 'creditor friendly' nature

Consequences of Shari'ah non-compliance or disputes should be specified in advance in order to minimise exposure to such risk

A key issue is that derivatives in the first instance do not represent a share or claim on a tangible asset and that the exchange of cashflows (in currency swaps for example) may incorporate *Riba* or interest. Such instruments could also potentially be used for speculation/gambling purposes, known as *Maysir*, which falls foul of the principle that all profit should be earned.

However, a couple of points to note are that exchange of cashflows, where backed by assets, should be permissible – but the universe of liquid Sukuk is unlikely to be liquid or deep enough to facilitate the equivalent of conventional derivative contracts in the near future.

Shari'ah also incorporates the concept of *'Maslahah'* or *'Public benefit'*, denoting that, if something is overwhelmingly in the public good, it may yet be transacted – and so the hedging or mitigation of avoidable business risks, may fall into this category but there is still much discussion to come.

Evolution of Shari'ah and 'Ijtihad'

In recent years, there has been a significant increase in the economic and intellectual resources devoted to understanding Islamic finance and this is resulting in continuing debate amongst Shari'ah scholars.

This concept is recognised in Islam and is called *'Ijtihad'*. This literally means 'effort', but is used in the context of Islamic scholars and their 'efforts' to study and reinterpret the Islamic sources of jurisprudence mentioned above where there is no universally clear directive. For investors, arrangers and issuers this 'evolution' has an impact on the nature of Sukuk structures and their possibilities.

Shari'ah Boards

Islamic Financial institutions and funds typically have a Shari'ah Board that monitors transactions and operations to ensure compliance with Shari'ah. These boards are staffed with Shari'ah scholars who are regarded as expert in Islam, particularly as it relates to finance. Given that Shari'ah is core to the operations of any Islamic financial institution, these boards have significant authority regarding investment decisions and potential financings (which must all be Shari'ah compliant). However, the rapid growth of the sector is leading to a shortage of such individuals. Many investors simply defer to the wisdom and experience of the boards of the issuers.

Interaction with Legal Environment

Like transactions in any new jurisdiction, there may be a lack of precedent and uncertainty regarding matters of law. Shari'ah is similar in that it introduces a new type of 'legal' concern, which is unlikely to be quantifiable for the purposes of cashflow analysis, but on which opinions must be provided if there are any material and contingent credit risks. If such issues are left unresolved, it may preclude the assignment of a rating.

It is worth noting that for the benefit of the global investor community, many of existing Sukuk transactions are governed by English or New York law due to their 'creditor friendly' nature. The consequences of Shari'ah non-compliance or disputes should be specified in advance in order to minimise exposure to such risk, with one solution being that, if both parties agree at the outset that the transaction is Shari'ah-compliant, they waive the right to dispute it in future. However, this would likely not be binding on a new party if subsequently transacted in the secondary market and the divergence of views could affect liquidity.

Most countries in the Gulf have a 'Civil Code' and, while Shari'ah is acknowledged as one source of law, it is not the law enforced in the courts. Any commercial disputes would tend to fall before a commercial court with Shari'ah courts taking precedence only for 'personal' affairs.

It should also be noted that written contractual obligations are encouraged by Shari'ah, and a Shari'ah Court (to date only present in Saudi Arabia) should respect these obligations. However, Shari'ah principles may still be considered by such courts in any judgement and it is also unlikely that such courts would be familiar with such complex financial structures (which first require all documents be translated into Arabic). Again, the lack of precedent (binding or otherwise) is a key issue.

Shari'ah Compliance and Credit Risk

Moody's ratings address credit risk and not legal compliance of an instrument with Shari'ah

Moody's believes that Shari'ah is more a matter of expert opinion and not objective fact

Sukuk documentation may have incorporated non-compliance with Shari'ah as an event of default

14 Types of Sukuk specified by AAOIFI but two form the bulk of current issuance

Detailed analysis shows that Sukuk performance may not be governed by assets but more the originator/borrower

Moody's analysis falls into two categories:

- ***Asset-Backed Sukuk, ratings dependent on assets***
- ***Unsecured (Repurchase) Sukuk, ratings dependent on borrower***

Moody's applies its conventional methods for structured and corporate finance to Sukuk.

Legal framework in certain countries remains both untested and uncertain

Moody's has been asked if it would provide ratings regarding the compliance of a Sukuk with Shari'ah. Moody's ratings address credit risk and not legal compliance of an instrument with Shari'ah (or English or New York law for that matter).

However, Moody's believes that Shari'ah is more a matter of expert opinion and not objective fact, and that this leaves open a possibility for dispute. Indeed, on one occasion we are aware of, the lack of Shari'ah compliance was used by one party to try to renege on its contractual obligations; however, the English governing law clause brought the case before an English court which then upheld the terms of the original contract in accordance with English Law. This was seen as a positive development for this immature asset class.

Sukuk documentation may have incorporated non-compliance with Shari'ah as an event of default, resulting in an accelerated repayment of the Sukuk through a 'purchase undertaking' by the originator (described below). In such circumstances, Moody's would perform some type of liquidity analysis to ensure that the originator would have the ability to redeem the Sukuk earlier than anticipated if such event were to occur.

SUKUK STRUCTURES

While there are 14 types of Sukuk specified by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), only two of these have formed the volume of the issuance thus far and these are discussed in more detail below, future papers will cover other structures.

As noted earlier, Sukuk are notes or certificates that represent ownership of a pool of underlying assets, hence Sukuk holders should be entitled to the ongoing cashflows and proceeds of sales from those assets. A key issue to note is that Sukuk are not a completely new asset class requiring a new science to analyse, but rather that such securities employ existing financial engineering techniques to create 'asset-backed' or securitisation structures that are **also** Shari'ah-compliant. While it may initially appear that many Sukuk have assets at their core, a detailed analysis of the commercial terms and legal structure shows that, for some, Sukuk performance is not governed by these assets – indeed, the credit risk is really that of the sponsor or originator.

From Moody's perspective, our analysis of such structures falls into two categories:

- Asset-Backed Sukuk, for which the ratings are primarily dependent on a risk analysis of the assets
- Unsecured (Repurchase) Sukuk, for which ratings are primarily dependent on the riskiness of the borrower/sponsor/originator/lessee

Again, it should be emphasised that, while most Sukuk will have assets in the structure, Moody's will only consider them to be asset-backed or asset-secured if the key securitisation elements are in place to ensure that Sukuk holders have beneficial title and realisable security over the assets. If this is not the case, then our rating is likely to be governed more by the borrower or originator and our conventional corporate finance analysis applies.

In both cases, the Shari'ah aspect of the Sukuk may add a further element of 'legal' complexity. However, in carrying out its credit risk analysis, Moody's applies its conventional methods for structured and corporate finance.

This allows Sukuk investors to benefit from Moody's credit expertise and skills gained in rating such securities over the last century. Sukuk issuers too benefit from a well established and globally credible rating process.

Uncertain Legal Environment

Moody's notes that the legal framework in certain countries in the Middle East (and in any new jurisdiction) remains both untested and uncertain and there may be little or no guidelines/precedent with regards to bankruptcy practices. Our credit analysis includes assessment of the country's inherent domestic risks, including political risks, legal uncertainties and the efficiency of the local financial markets.

Many issuers tend to be sovereign-linked, this can be positive or negative for investors

Systemic issues affect both conventional and Islamic financing

Asset backed non-recourse Sukuk are a subset of conventional ABS technology

Asset pool performance is modelled from data provided by originator and market analysis

Different methods are applied dependent on asset type and granularity

Cashflows used to pay principal and income due to Sukuk holders

Cashflows passed through liability model to deduce expected losses on our Sukuk

Analysis irrelevant if the legal structure does not support investors' rights to the underlying assets and their cashflows

Many large borrowers in the Middle East tend to be state-owned or government linked entities and while this means that they may benefit from some credit support, it may also protect the borrower from investor claims in a bankruptcy/default scenario.

As such, we recognise that these factors can affect the severity of losses in such a scenario, but that these issues affect all transactions (conventional or otherwise) within the country, and are not just specific to Sukuk. These systemic factors are captured in the Moody's Local Currency Guidelines and Foreign Currency Ceilings published by our Sovereign Risk Unit, their input factors into our credit risk analysis of the assets and/or the corporate borrower.

Asset Backed Sukuk

Market participants involved in securitisation will be familiar with the issues that exist in creating non-recourse Sukuk whose credit risk performance is determined solely by the underlying assets. While there are many reasons for borrowers to pursue a strategy of asset backed financing, one key driver is that the rating of such instruments can be significantly higher than the unsecured rating of the borrower, thus allowing them to raise secured financing at a lower cost.

Moody's has published detailed methodologies on specific types of securitisable assets and these approaches are equally applicable to Sukuk assets. However, we provide below a generic introduction to analysing an asset backed sukuk.

Asset Cashflows and Credit Risk

As per conventional methods, Moody's requires performance data to be provided by the originator on the Sukuk assets. In new markets (such as the Middle East), provision of wider statistical data on the overall market for those assets is also recommended

A key element in the data required is the default rate of the assets and the corresponding recovery levels on those assets following a default.

Depending on the granularity of the pool we have different approaches but essentially the data is combined with:

1. A statistical loss distribution for highly granular portfolios (e.g. *Ijara* mortgages - RMBS, auto loans - ABS)
2. A correlation structure model for non-granular portfolios (e.g. corporate loan portfolios – CDOs/CLOs, commercial leases - CMBS)

This allows us to model the cashflows generated by the asset pool.

It should be noted that any other material factors (such as currency risk, hedge agreements, taxes, etc) that affect the structure will also be modelled. The final result is a complete 'set' of asset pool loss scenarios, each with the probability of their occurrence (a loss distribution).

Liability Structure and Expected Loss

We then process these cashflows through a model that replicates the waterfall of payments and any structural enhancements (interest coverage triggers, reserve funds, etc) specified in the Sukuk documentation. In some scenarios, a high default rate on the underlying assets will result in impairment to the Sukuk and a loss to the amount due to Sukuk holders.

Every scenario will have a loss rate (0-100%); we take this loss and multiply it by the probability of its likelihood. By summing all these probability weighted losses, we obtain the expected loss for the Sukuk which then maps to a Moody's rating.

Legal Structure⁵

The two steps above provide the primary quantitative input into the rating; however, such analysis becomes irrelevant if the legal structure does not support Sukuk holders' rights to the underlying assets and their cashflows. Investors do not hold such rights directly but through a special purpose vehicle (SPV), which is usually set up to issue the Sukuk and purchase the assets (with the Investors' funds) from the originator. Below we set out some key issues in ensuring that the Sukuk performance is driven by the assets and not linked to the performance (credit risk) of the originator.

⁵ The authors would like to thank Luma Saqqaf and Linklaters for their comments

SPV Setup and Bankruptcy Remoteness

SPV exists for Sukuk holders to take beneficial/actual title to assets and to redistribute the cashflows

Currently, very few 'new market' jurisdictions have specific securitisation laws and hence support for SPVs. The Sukuk SPV is essentially a single-purpose company that exists solely for Sukuk holders to take beneficial/actual title to the underlying assets and to redistribute the cashflows generated according to the preset contractual terms. As such, it is important that nothing can push the SPV into bankruptcy and that all parties waive this right (known as 'non-petition'). It should be highlighted that this is not the case in many of the recent Sukuk thus far, indeed it is possible to see the SPV owned by the originator thus preventing the originator de-linkage expected in asset backed deals.

No Trust law in place, but contractual arrangements with 'security agents' can be utilised

Trust law is commonly used in securitisations to create security over a pool of assets in favour of the investors. Very few jurisdictions can facilitate such trusts (English Law is the most common), so the Gulf countries have developed other (untested) mechanisms to try and replicate security via contractual arrangements with a 'local security agent'. These agents are usually reputable, local financial institutions but do not have the fiduciary responsibilities required of Trustees. Such agents also become key when purchasing local assets, as in many jurisdictions these cannot be sold to non-nationals.

Transfer/True Sale

True Sale required to ensure assets can not be 'reclaimed' from Sukuk holders in the event of originator insolvency

It is critical that the beneficial title of the Sukuk assets legally belong (via the SPV) to the Sukuk holders with no prior liens, mortgage, security or any other encumbrances. If that is not the case, then, in the event of the originator/borrower/mortgage holder becoming insolvent, there is a risk of 'Claw Back', i.e. the possibility that those assets may now be reclaimed by the administrator of the insolvent estate and will not be available to repay Sukuk investors. This would leave them bearing unexpected losses on their investment which has no relation to the assets. Subject to accounting regulations 'True Sale' may also allow de-recognition of the assets from the originator's balance sheet.

Enforceability and Security

If underlying assets are secured legal opinions are reviewed on the ability to take such security upon underlying obligor default

All transaction documents should be valid, binding and enforceable and while this is facilitated by the usual choice of English or New York law, underlying loan enforceability is dependent on local law and in new markets, this may not be widely tested. In the case of secured loans, e.g. *Ijara* mortgages or auto loans, the lender needs to be able to repossess the property or car in the event of the underlying borrower defaulting. The more effective the recovery process and higher the recovery value on such assets, the better for the Sukuk cashflows and the lower the loss passed on to investors.

Originators/Serviceers

If originator maintains links with underlying borrowers, Sukuk may have credit linkage despite 'True Sale'

Where the underlying assets are consumer linked (mortgages, credit cards, auto-loans etc) there is still a dependence on the originator despite the fact that they have been sold to our Sukuk SPV. The originator (e.g. a mortgage provider) usually maintains the business 'relationship' with the underlying consumers and continues to collect payments (e.g. on *Ijara* mortgages) on behalf of the Sukuk holders.

May need preset mechanism to transfer Servicing responsibility to replacement upon distress

In this capacity, the originator is referred to as a 'servicer' and despite satisfaction of all the regular securitisation conditions above, a default of a servicer would still have an adverse effect on our Sukuk performance. Where applicable, some assessment of their credit quality would be required and upon distress, some preset mechanism to facilitate the transfer of their responsibilities and obligations to a replacement institution.

The asset backed Sukuk described above are currently the minority but given their closeness to the Shari'ah ideal and increasing legal expertise in the region, it is likely will we see an increase of this type of securitisation structure going forward.

Caravan I Sukuk was a securitisation of automobile inventory and associated rent and lease contracts

One such structure was the SR98mm (USD26mm) Caravan I Sukuk issued in Feb 2004. This securitised the automobile inventory of HANCO, a car leasing company based in Saudi Arabia and was the first transaction of its kind in the region. The SPV purchased the inventory (2344 vehicles) and hence the associated cashflows (lease and rental contracts), from the originator.

The schedule of payments to Sukuk holders were funded from the lease payments due and the sale proceeds of ex-rental vehicles. A minimum profit rate (or yield) of 6% was paid according to pre-set schedule determined by the current principal balance. While Sukuk Structures backed by lease payments are known as *Ijara* Sukuk, Caravan utilised a 2 tier structure designed to circumvent certain KSA limitation was based on AAOFFI Standard 18 Investment Sukuk.

***Ijara* (Sale and Leaseback) Sukuk**

Many of current Sukuk are essentially a Sale and Leaseback or 'Ijara' structure with lease payments providing income stream

The underlying can be a single asset or a portfolio of assets

However most are conducted on a non True Sale basis so repayment and risk/performance is not asset based but originator based

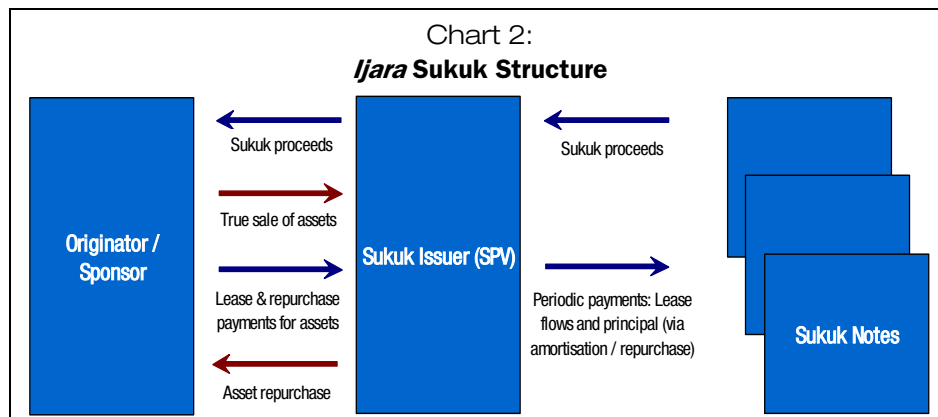
Assets in a Sukuk can be share of a joint venture or 'Musharaka'

The PCFC Sukuk used a Musharaka based structure but allowed for partial redemption in equity

Sukuk holders contribute capital and originator contributes assets and management under contract

Currently, the majority of Sukuk seen to date has been of a simple 'leasing' or *Ijara* nature. In such structures, the originator seeking financing 'sells' the asset to the Sukuk SPV for a value equal to the financing provided, and then leases it back. The lease payments provide the fixed income stream which may be benchmarked to an index.

For simplicity, we consider a single asset in this example but it could easily be a portfolio of assets (which are then leased) or a pool of *Ijara* leases. A mismatch in the term of the lease and Sukuk may expose the investor to the refinancing risk on the underlying asset.



Sukuk principal repayments can be bullet or amortising, but the critical difference is in how such repayments are effected. Most common thus far is a **'purchase undertaking'** from the originator or an affiliate to repurchase the asset at maturity (or upon early termination) for an amount equal to the principal repayment(s) due. Where this is the case, the actual market value of the asset is not relevant. Sukuk holders are not exposed to this market risk and there is no material excess cashflow. In some structures in addition to the sale, lease and purchase agreements there may be insurance coverage also, further increasing asset de-linkage.

The asset itself can be a plot of land, a building, or anything else tangible and lease-able. If the Sukuk is a 'True Sale' securitisation, then there will be a correspondence of the income streams with the actual rental and market value of the asset(s). If not, then it is an unsecured exposure and the asset only exists in the structure to facilitate its Shari'ah compliance. The payment streams to investors are only nominally linked to the underlying asset cashflows and value. In either case, the Sukuk notes represent an equity share in those assets.

***Musharaka* (Joint Venture) Sukuk**

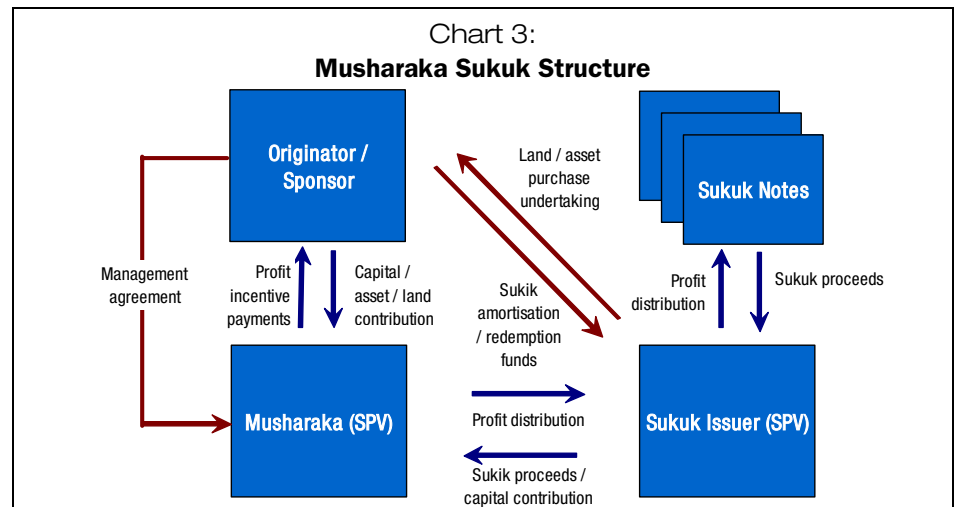
The *Musharaka* structure aims at replicating asset ownership by setting up a joint-venture ("*Musharaka*") jointly-owned by the Sukuk issuer (usually incorporated as a special purpose vehicle) and the originator. The issuer and originator's shareholdings in the *Musharaka* represent their respective capital contributions based on a parity agreed at the outset, usually comprised of:

1. capital from the issuer (e.g. investor's Sukuk proceeds)
2. specific assets and 'management skills' from the originator

It should be noted that the landmark PCFC (DP World) transaction is one example of this type off structure but incorporates additional key elements such as partial redemption in equity if an IPO occurs prior the Sukuk maturity, this was the first such 'convertible' Sukuk.

The *Musharaka* is run under a management agreement by the originator, which operates the assets and invests the funds held in the JV in accordance with a predefined business plan. Under this structure, Sukuk holders are entitled to the Issuer's rights in the JV – in other words, they have rights to receiving payments from the Issuer's equity ownership in the *Musharaka*, as opposed to having rights to indebtedness on borrowed monies, as is the case for conventional corporate bonds.

Here the company raising finance is not a borrower or originator in the strictest sense but something in between. Recent Sukuk documentation has used the term 'originator' (perhaps in anticipation of 'True Sale' structures) so we will apply this convention but 'borrower' could easily be substituted and may more accurately reflect the risk to the Sukuk principal.



Income stream usually dependent on 'expected' profit distributions from 'Musharaka'

Principal repayments effected via a purchase undertaking by the originator

Discussions on the nature and benchmarking of 'Profit Rates' still ongoing

Some structures may amortise through regular repurchase of the assets

Again, most Musharaka Sukuk not conducted on a True Sale basis so repayment and risk/performance is not purely asset based

The nominal amount initially raised may be redeemed either through a number of pre-scheduled instalments over time or at maturity. In each case this is achieved by application of the purchase undertaking agreement, which stipulates that the originator is required to buy out a portion or the totality (at maturity) of the Issuer's shares in the *Musharaka* at a price equal to the value of the Sukuk to be redeemed.

As Shari'ah prohibits the payment of interest, any income streams of Sukuk holders will be based on a share of income/profit generated. Such income can be paid:

1. over the duration of the transaction, as a profit distribution

In accordance with the performance of the *Musharaka*, a 'business plan' describes the 'expected' profit and it is usually split according to pre-set ratio. This profit is comparable to a bond yield.

2. at maturity only, via the redemption amount

Here the income/profits receivable accrue over time and are paid at maturity. This is comparable to the yield structure of a zero-coupon bond.

In both cases, a 'profit rate' is usually specified which can be compared with its 'fixed income' equivalents and benchmarked accordingly. This sometimes causes discussion as to whether the 'profit rate' is an 'expectation' or 'promise' of payment level (the latter would have Shari'ah implications) and, if the rate is linked to an index, whether it is being used to merely quantify a return (seemingly acceptable) versus implicitly driving the return (*Riba*). Some market participants propose that this crossover is a necessary intermediate step to help build a functioning Islamic/Sukuk Market. The precise description of the profit distribution and business plan is key part of the offering documentation and will be considered in our analysis.

Should the cash flows generated by the assets under the business plan of the *Musharaka* not be sufficient to fund these payments, the Issuer may have the option to call the purchase undertaking. In some cases, the income stream may actually be directly funded by the purchase undertaking, without preliminary recourse to profit distribution.

In these particular cases, Moody's believes that the ability of the issuer to repay Sukuk holders is fully reliant upon the existence of the purchase undertaking agreement, as it gives the issuer either the option or the obligation – it might vary – to require the originator to repay both nominal and income (interest equivalents). This is especially the case if the Issuer has the *obligation* to exercise the purchase undertaking. However, this is also true if the Issuer only has the *option* to exercise the purchase undertaking as, the cash flows generated by the *Musharaka* are generally unlikely to be sufficient to redeem the Sukuks, thus resulting in the Issuer exercising the purchase undertaking anyway.

As a result, our analytical approach for *Musharaka* transactions is likely to be a two-step approach, focusing on the:

1. characteristics of the purchase undertaking agreement and
2. credit quality of the originator/borrower.

Purchase Undertaking Agreements

Presence of such undertakings fundamentally alter the credit risk dynamics of the Sukuk

As noted earlier, the presence of a purchase undertaking fundamentally alters the credit risk dynamics of the Sukuk structure. Where present, investors have credit exposure to the corporate or sovereign entity providing the undertaking, and an analysis of the assets becomes secondary.

Moody's analysis of such purchase undertakings would focus on its

1. enforceability or strength in the local jurisdiction
2. ranking or priority in the capital structure of the originator

Indeed, we would seek to assess the legal framework governing the agreement. In particular, we would need to ensure that the purchase undertaking is enforceable under the law of the country in which the Sukuk Issuer and the originator are domiciled, and would review a legal opinion in that respect.

Moody's focuses on enforceability and ranking purchase undertakings

In addition, we would need to check the ranking of the purchase undertaking agreement versus the senior unsecured obligations of the originator, and would again review a legal opinion to confirm this point. A pari-passu ranking could result (subject to Moody's being comfortable with all other aspects of the transaction) in the Sukuk being rated on par with the senior unsecured issuer rating of the company. Contractual or structural subordination with diminished recovery prospects would likely result in notching the Sukuk down from the senior unsecured issuer rating; in accordance with Moody's methodologies (see Related Research). This differs significantly with asset-backed sukuk where the rating assigned is not linked to the originator.

Credit Quality of the originator / sponsor / borrower / lessee

Despite the assets, the Sukuk may have credit dependency or linkage to the entity raising finance

As we can see despite the assets in the structure, the Sukuk may have credit dependency or linkage to the entity raising finance. In a *Musharaka* or a non 'True Sale' *Ijara* Moody's needs to conduct a credit risk assessment on the entity required to redeem (via the purchase undertaking) the Sukuk. This will in turn drive the credit quality of the Sukuk and its rating (depending upon their ranking versus the senior unsecured obligations of the originator).

To do so, Moody's will apply the rating methodology specific to the industry of the originator, including a joint-default analysis for Government-Related Issuers (GRIs, see Related Research) when appropriate. Where the lessee is a sovereign or Government Related Issuer the rating of the Sukuk may be strongly correlated with that of the country.

Potential uplift arising from the shareholding in the Musharaka

If some security present, then rating uplift possible

Moody's believes that, in most corporate sukuk transactions, the credit quality of the Sukuks is likely to be exclusively supported by that of the originator through the purchase undertaking. Indeed, although it might be argued that Sukuk holders could benefit from an additional uplift owing to the shares they hold, via the Issuer, in the *Musharaka*, transaction documents tend to prevent them from having any recourse or claims against the assets located in the *Musharaka* in a bankruptcy scenario. However, Moody's acknowledges that there might be some instances, where sukuk holders could benefit from some form of security on the assets of the *Musharaka*, but this would be carefully assessed on a case-by-case basis, following review of the transaction legal opinions.

CONCLUSION

Like 'Green' investing, universe of eligible securities is limited by Islamic criteria based on moral and ethical considerations

With its Arabic terminology and unusual prohibitions, Shari'ah and its application to financing can be quite mystifying for the outsider. This paper hopes to provide a small part of the education required for investors to take more informed investment decisions and explain the impact of 'Islamic compliance' on our credit ratings.

A good analogy is one of ethical or 'Green' investing. Here the universe of investable securities is limited by certain criteria based on moral and ethical considerations, but those available are still a subset of the existing financial system.

'Conventional' investors can participate

Islamic Finance is also a subset of the global market and there is nothing that prevents the 'conventional' new markets investor from participating in the Islamic market. In terms of risk analysis, there is an additional 'legal' layer that should be considered, but the performance of such securities is still driven by cashflows regardless of whether they are sourced from assets or a corporate/sovereign obligor.

Moody's existing skills, approaches and methodologies applicable

As such, Moody's analysis of such structures falls into either structured or corporate finance and we apply our existing approaches and methodologies. Where Shari'ah can materially affect the credit risk, it will be considered.

APPENDIX A – KEY INSTITUTIONS IN ISLAMIC FINANCE

Accounting & Auditing Organisation for Islamic Financial Institutions (AAOFI)

Initially founded in 1991 by Islamic and Central banks of 24 countries AAOFI is a self regulating body for the Islamic capital markets it attempts to harmonise the disparate accounting standards for financial instruments across the Islamic world. Applying conventional (IFRS) standards may not always be appropriate for new products (Sukuk or otherwise) and as such a key goal is that of clear and accurate disclosure of the financial risks faced by Islamic banks and encourage prudent policies. It has played a key role in formulating Shari'ah via public debates and published 56 standards (similar to IFRS formats) covering Shari'ah, accounting, auditing, governance and ethics. To date only a few countries (including Bahrain, Jordan and Iran) require full compliance with AAOFI standards.

Islamic Financial Services Board (IFSB)

This was formed in 2002 by 20 regulatory & supervisory authorities of countries with Islamic institutions and with participation from other supranationals. The IFSB currently has 88 members including, as well as the International Monetary Fund, the World Bank, Bank for International Settlements, the Islamic Development Bank, the Asian Development Bank, and 63 financial institutions from 16 countries.

It currently promotes two main standards, the Guiding Principles of Risk Management and Capital Adequacy Standard for Islamic Institutions. It has also issued a draft exposure on corporate governance for institutions offering Islamic financial services. The IFSB is currently preparing standards on supervisory review process, transparency and market discipline, special issues in capital adequacy and governance of investment funds

Liquidity Management Centre (LMC)

Formed in 2001 in Bahrain by the Central Bank with Private partnership, its goal is to “To enable Islamic financial institutions to manage their liquidity mismatch through short and medium term liquid investments structured in accordance with the Shari'ah principles.” As such, they seek to pool compliant assets and issue tradable, fair yielding Sukuk. However, the high demand for Sukuk by such institutions has meant that they are not widely traded and it has become more of a market maker with over \$1billion issued to date.

Islamic Development Bank (IDB)

The IDB was established in 1975 in Jeddah and has a current membership of 56 countries. It plays a key role in fostering social and economic development in accordance with Shari'ah and helps to promote regulatory standards and procedures in the Islamic financial sector. The IDB is also a key sponsor of AAOFI.

International Islamic Financial Market (IIFM)

The IIFM was established in 2002 in Bahrain. The IIFM mandate is to establish, develop and promote the creation of an Islamic Financial Market by facilitating cross border investment between all Islamic financial institutions and creation of a secondary market.

The Global Shariah Supervisory Committee (SSC), which was established by the IIFM Board of Directors and seeks to harmonise the application of Shariah to new Islamic products.

APPENDIX B – RELATED RESEARCH

For a more detailed explanation of Moody's approach to this type of transaction as well as similar transactions please refer to the following reports:

Structured Finance

Special Reports

- Securitisation Potential in the Middle East, Upcoming in Q3 2006
- Securitisation in New Markets: Moody's Perspective, June 2006
- Moody's Modelling Approach to Rating Structured Finance Cash Flow CDO Transactions, September 2005.
- Introduction to Moody's Analysis of Securitization Transactions and Structures, reprinted June 1995
- Clawback Risk in EMEA Securitisation Transactions, March 2005.
- Subordination, Diversification and the Expected Loss Approach to Credit Risk, February 1997
- Rating Mezzanine Securities in Structured Finance Transactions: The Impact of an Expected Value Approach, February 1999
- The Lognormal Method Applied to ABS Analysis, July 2000
- The Combined Use of Qualitative Analysis and Statistical Models in the Rating of Securitisations, July 2001

Special Comment

- Default & Loss Rates of Structured Finance Securities: 1993-2005, April 2006 (97234)

Corporate Finance

Rating Methodology

- Notching for Differences in Priority of Claims and Integration of the Preferred Stock Rating Scale, November 2000 (61860)

Special Comments

- The Incorporation of Joint-Default Analysis into Moody's Corporate, Financial and Government Rating Methodologies, February 2005 (91617)
- Understanding Moody's Corporate Bond Ratings and Rating Process, May 2002 (74982)
- Summary Guidance for Notching Secured Bonds, Subordinated Bonds, and Preferred Stocks of Corporate Issuers, September 2001 (70456)

Islamic Banking & Finance

Special Comments

- Moody's Involvement In Rating Islamic Financial Institutions, April 2006 (97113)
- A Guide to Rating Islamic Financial Institutions, April 2006 (97226)
- Regulation and Supervision: Challenges for Islamic Finance in a Riba-based Global System, January 2004 (81128)
- Finance in a Riba-Based Global Economy?
- Culture or Accounting: What Are The real Constraints For Islamic Finance in a Riba-based Global Economy ?, January 1002 (63369)

Sovereign Risk

Rating Methodologies

- The Application of Joint Default Analysis to Government Related Issuers, April 2005 (92432)
- Revised Policy with Respect to Country Ceilings, November 2005 (95051)
- Piercing the Country Ceiling: An Update, January 2005 (91215)

Special Comment

- Default and Recovery Rates of Sovereign Bond Issuers, 1983-2005, April 2006 (97086)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

APPENDIX C – GLOSSARY OF ISLAMIC TERMS

adl	A trusted and honourable person, selected by both parties to a transaction. Somewhat analogous to a trustee
amana/ amanah	Literally means reliability, trustworthiness, loyalty, honesty and is an important value of Islamic society in mutual dealings. It also refers to deposits in trust, sometimes on a contractual basis
bai/ bay	contract of sale, sale and purchase
bai al-salam	Advance payment for goods. Whilst normally the goods would need to exist before a sale can be completed, in this case, the goods are defined (such as quantity, quality, and workmanship) and the date of delivery fixed. Usually applied in the agricultural sector where money is advanced for inputs to receive a share in the crop.
fatwa (pl. fatawa)	an authoritative legal opinion based on the Shari'ah
fiqh	Practical Islamic jurisprudence. Can be regarded as the jurists' understanding of the Shari'ah
gharar	uncertainty in a contract or sale in which the goods may or may not be available or exist, also ambiguity in the consideration or terms of a contract – as such, the contract would not be valid
hadith	the narrative record of the sayings, doings and implicit approval or disapproval of the Prophet
halal	Permissible. In Islam there are activities, professions, contracts and transactions which are explicitly prohibited (haram) by the Qur'an or the Sunnah. Barring these, all others are halal. An activity may be economically sound but may not be allowed in Islamic society if it is not permitted by the Shari'ah
Hanifite laws	An Islamic school of law founded by Iman Abu Hanifa. Followers of this school are known as Hanafis
haram	Unlawful. (see halal) Describes activities, professions, contracts and transactions which are explicitly prohibited by the Qur'an or the Sunnah
hawala	Bill of exchange, promissory note, cheque or draft. A debtor passes on the responsibility of payment of his debt to a third party who owes the former a debt. Thus the responsibility of payment is ultimately shifted to a third party. Hawala is used in developing countries as a mechanism for settling international transactions by book transfers
ijarah/ijara	Lease, hire or the transfer of ownership of a service for a specified period for an agreed upon lawful consideration. An arrangement under which an Islamic bank leases equipment, a building or other facility to a client for an agreed rental
ijarah wa iqtina/ ijarah muntahla bittamleek	a leasing contract used by Islamic financial institutions which includes a promise by the lessor to transfer the ownership of the leased property to the lessee either at the end of the lease or by stages during the term of the contract
ijtihad	Literally effort, exertion, industry, diligence. As a legal term, it means the effort of a qualified Islamic jurist to interpret or reinterpret sources of Islamic law in cases in which no clear directives exist
istisna'a	A contract of sale of specified goods to be manufactured with an obligation on the manufacturer to deliver them on completion. It is a condition in istisna'a that the seller provides either the raw material or the cost of manufacturing the goods
maisir/ maysir	the forbidden act of gambling or playing games of chance with the intention of making an easy or unearned profit

<i>mudaraba/ mudarabah</i>	A form of contract in which one party (the <i>rab-al-maal</i>) brings capital and the other (the <i>mudarib</i>) personal effort. The proportionate share in profit is determined by mutual consent, but the loss, if any, is borne by the owner of the capital, unless the loss has been caused by negligence or violation of the terms of the contract by the <i>mudarib</i> . A <i>mudaraba</i> is typically conducted between an Islamic financial institution or fund as <i>mudarib</i> and investment account holders as providers of funds
<i>mudarib</i>	the managing partner or entrepreneur in a <i>mudaraba</i> contract (see above)
<i>musharaka/ musharakah</i>	An agreement under which the Islamic bank provides funds which are mingled with the funds of the business enterprise and maybe others. All providers of capital are entitled to participate in management but are not necessarily obliged to do so. The profit is distributed among the partners in a pre-determined manner, but the losses, if any, are borne by the partners in proportion to their capital contribution. It is not permitted to stipulate otherwise.
<i>murabaha</i>	A contract of sale with an agreed profit mark-up on the cost. There are two types of <i>murabaha</i> sale in the first type, the Islamic bank purchases the goods and makes them available for sale without any prior promise from a customer to purchase them and this is termed a normal or spot <i>murabaha</i> ; the second type involves a promise from a customer to purchase the item from the bank and this is called <i>murabaha</i> to the purchase order. In this latter case, there is a pre-agreed selling price that includes the pre-agreed profit mark-up. Normally it involves the bank granting the customer a <i>murabaha</i> credit facility with deferred payment terms, but this is not an essential element
<i>qard al hasana/ qard hassan</i>	A virtuous loan in which there is no interest or mark-up. The borrower must return the principal sum in the future without any increase
<i>rab-al-maal</i>	the investor or owner of capital in a <i>mudaraba</i> contact (see above)
<i>rahn</i>	a mortgage or pledge
<i>riba</i>	Simplistically interest. Sometimes equated with usury, but its meaning is broader. The literal meaning is an excess or increase and prohibits the generation of income from money
<i>riba al-fadi/ riba al-buyu</i>	a sale transaction in which a commodity is exchanged for the same commodity but unequal in amount or quality; or the excess over what is justified by the counter-value in an exchange/ business transaction
<i>salam</i>	a contract for the purchase of a commodity for deferred delivery in exchange for immediate payment
<i>Shari'ah/ Shari'ah</i>	in legal terms, the body of Islamic law as extracted by the <i>mujtahids</i> from the sources of law – the <i>Qur'an</i> and the <i>Sunnah</i> ; however, the <i>Shari'ah</i> rules do not always function as rules of law as they incorporate “obligations, duties and moral considerations that serve to foster obedience to the Almighty”
<i>Sukuk</i>	participation securities; coupons; investment certificates
<i>Sunnah</i>	The way of the Prophet Mohammed (PBOH) including his sayings, deeds, approvals and disapprovals as preserved in the <i>hadith</i> literature. It is the second source of revelation after the <i>Qur'an</i>
<i>takaful</i>	A <i>Shari'ah</i> -compliant system of insurance based on the principle of mutual support. The company's role is limited to managing the operations and investing the contributions
<i>Ummah</i>	The community or nation. Used to refer to the worldwide community of Muslims
<i>wakala</i>	agency; an agency contract which generally includes in its terms a fee for the agent
<i>Zakah/ Zakat</i>	A tax that is prescribed by Islam on all persons having wealth above an exemption limit at a rate fixed by the <i>Shari'ah</i> . Its objective is to collect a portion of the wealth of the well-to-do and distribute it to the needy. The way it is distributed is set out in the <i>Qur'an</i> . It may be collected by the state, but otherwise it is down to each individual to distribute the <i>Zakat</i>

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