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Innovation in the structuring of Islamic *Sukuk* securities

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Introduction

Islamic securities have become increasingly popular in over the last five years, both as a means of raising government finance through sovereign issues, and as a way of companies obtaining funding through the offer of corporate *sukuk*. In 2000 there were only three *sukuk* worth \$336 million issued, but in 2004 there were 64 issues worth almost \$7 billion, and in 2005 the figure will certainly exceed \$10 billion with 54 issues already either fully subscribed or announced.¹

The advantage of *sukuk* is that they are compliant with *shariah* Islamic law.² *Sukuk* are therefore attractive investment instruments for Islamic banks, *takaful* Islamic insurance companies and *shariah* managed funds that cannot invest in conventional securities that involve payment of *riba* or interest. In addition there are an increasing number of Muslims of high net worth who want their asset holdings to comply with Islamic law.

Aims and objectives

The paper examines the market for, and usage of, *sukuk*, notably as tools for liquidity management. There is also an analysis of different *sukuk* structures from a financial perspective. This examination includes *murabahah* and *ijara* based *sukuk*, the former offering a fixed return, and the latter, the most popular form of *sukuk*, a variable return.

¹ Data from *Islamic Finance Information Service*, London, December 2005. *ISI Emerging Markets*: www.securities.com

² Rodney Wilson, "Overview of the *sukuk* market", in Nathif J. Adam and Abdulkader Thomas, *Islamic Bonds: Your Guide to Issuing, Structuring and Investing in Sukuk*, Euromoney Books, London, 2004, pp. 3-17.

The potential for other more novel *sukuk* structures based on *musharakah* partnership contracts is examined, which would offer different types of financial risk, and could be attractive for portfolio diversification.

The major criticism of *ijara sukuk* is that the return is usually benchmarked to the London Inter-bank Offer Rate (LIBOR) on \$US dollar funds or the equivalent local rate in the case of issues in Malaysian ringgit. This is of course an interest rate, and although it is only used for pricing, and the payments associated with the *ijara* can be regarded as rents, the close link of the interest based pricing with *riba* worries many *shariah* scholars.³ In the paper alternative benchmarks based on real rather than monetary indicators are considered as a means of overcoming this problem. Macroeconomic indicators could be used for sovereign *sukuk*, and company performance indicators for corporate *sukuk*. Data on these variables is used for simulations of possible returns, so that these can be compared to the returns using interest based benchmarks.

The market for *sukuk*

So far *sukuk* issues have been largely confined to the Gulf countries and Malaysia, with the latter accounting for the overwhelming number of issues as table 1 shows, although the amounts are significant in the Gulf where the average size of each issue tends to be larger.⁴ The data for table 1 relates to the period from January to September 2005, and since then there have been some very large issues in the Gulf, notably the \$1 billion issues for the Civil Aviation authority of Dubai to fund the new terminal at the international airport, and the issuance of the largest ever Islamic *sukuk* security offering valued at \$2.8 billion. This offer is by the Ports, Customs and Free Zone Corporation of Dubai, the holding company of Dubai Ports World and the Jebel Ali Duty Free Zone.⁵ This interest free financing, which complies with Islamic *shariah* law, is being handled by the Dubai Islamic Bank, the oldest Islamic commercial bank in the world and the third

³ Muhammad Taqi Usmani, *An Introduction to Islamic Finance*, Kluwer Law International, The Hague, 2002, pp. 75-76.

⁴ Rodney Wilson "The implications of globalisation for Islamic finance", in Munawar Iqbal and Habib Ahmed, (eds) *Poverty in Muslim Countries and the New International Economic Order*, Palgrave Macmillan, London, 2005, pp. 27-44.

⁵ *Business Digest*, Dubai, December 5th 2005.

largest. The *sukuk* will pay 250-350 basis points over LIBOR, a very attractive rate providing a projected yield of 7.25-8.25 percent, and is convertible after two years into shares, the first ever Islamic securities structure of this type.

Table 1: Islamic securities by country: year to September 2005.

Country	Amount \$US	Issues	% share
Malaysia	4,205	255	65.7
UAE	750	2	11.7
Pakistan	600	1	9.4
Saudi Arabia	500	1	7.8
United States	200	1	3.1
Bahrain	80	1	1.2
Indonesia	61	3	1.0
<i>Total</i>	<i>6,396</i>	<i>264</i>	<i>100</i>

Source: *Islamic Finance News*, Kuala Lumpur, 19th December 2005, p. 28.

The currency in which the *sukuk* are denominated reflects the country of issuance, with the Malaysian ringgit dominating, the ringgit being pegged to the US dollar until 2005 when a modest upward float occurred once the rates were freed. Some capital controls on the Malaysian currency remain however, a legacy from the Asian economic crisis of 1997, and in practice the market for *sukuk* in Malaysia is mainly domestic, with the local banks, insurance and investment companies the major buyers and sellers. In the Gulf countries most issues are in US dollars, against which these currencies are pegged, although there is the possibility that with the introduction of a new unified currency for the Gulf Co-operation Council countries in 2010 the link with the US dollar may be replaced by a trade weighted basket. This could result in the new Gulf currency becoming the denominator of choice for *sukuk* issuance.

Table 2: Islamic securities by currency: year to September 2005.

Currency	Amount \$US	Issues	% share
Ringgit	4,405	256	68.9
US dollar	1,850	4	28.9
Bahrain dinar	80	1	1.2
Indonesia rupiah	61	3	1.0
<i>Total</i>	<i>6,396</i>	<i>264</i>	<i>100</i>

Source: *Islamic Finance News*, Kuala Lumpur, 19th December 2005, p. 28.

Although Citigroup was the leading *sukuk* manager in 2004 with five issues worth \$854 million, it was overtaken by its international rival, HSBC in 2005, as table 3 shows. The leading manager for most of 2005 was however the Malaysian investment bank, CIMB, although the full year figures are likely to see HSBC occupying the top slot. Standard Chartered and Deutsche Bank are the two other international banks with increasing experience of managing *sukuk*, a natural development given their major role in conventional bond, note and bill management. The other banks listed are Malaysian, apart from Dubai Islamic Bank, which as already indicated may become the leading manager as a result of the *sukuk* issued by the Ports, Customs and Free Zone Corporation of Dubai. Part of this *sukuk* funding is to finance the take-over of P & O Ports of the United Kingdom.⁶ As other Dubai based multinational companies expand worldwide the Dubai Islamic Bank should be well placed to manage further large *sukuk* issues. Emaar, the developer of some of the largest commercial real estate and residential projects in Dubai, is expanding its operations in Morocco and Saudi Arabia, notably in the latter Kingdom, where it is to be the co-developer of the \$26 billion King Abdullah City north of Jeddah which is planned to be one of the world's largest ports.⁷

⁶ *BBC News*, London, 29th November 2005.

⁷ Javid Hassan and Ali Al-Zahrani, "Abdullah launches mega economic city", *Arab News*, Jeddah, 21st December 2005.

Table 3: Major Managers of *sukuk* securities: year to September 2005.

Manager	Amount US\$	Issues	% Share
CIMB	1,323	47	20.7
HSBC	1,224	18	19.1
Aseambankers	531	39	8.3
AmMerchant Bank	506	50	7.9
Standard Chartered	316	28	4.9
Citigroup	300	1	4.7
Dubai Islamic Bank	283	2	4.4
Deutsche Bank	275	3	4.3
EON Bank	246	47	3.8
RHB Bank	201	45	3.1

Source: *Islamic Finance News*, Kuala Lumpur, 19th December 2005, p. 28.

***Sukuk* securities as a tool for liquidity management**

Before *sukuk* became available the only means for Islamic banks to obtain a return on liquid reserves was to place funds through the inter-bank market on a *murabahah* basis with institutions that would buy and sell commodities on their behalf, often through the London metal exchange. This resulted in a mark-up payment that was viewed as legitimate by *shariah* scholars as it was based on a real trading transaction rather than being simply a return on a monetary deposit. The problem for Islamic banks was that there were only a small number of institutions capable of managing funds in this way and hence charges were relatively high and returns were low.

With the advent of *sukuk* there are more diversified possibilities for liquidity management, although only the market in Malaysia can be considered liquid, as the volume of secondary trading in the Gulf is minimal to date, largely because demand

exceeds supply, and Islamic banks that acquire *sukuk* usually hold them to maturity, and are reluctant to sell.⁸

***Sukuk* structures**

As with conventional debt securities *sukuk* are issued for a fixed time period rather than in perpetuity as in the case of equity. The time period can vary from three months in the case of *sukuk* that are similar to treasury bills, to five or even ten years for those that resemble conventional notes. Most *sukuk* to date have either been *murabahah* or *ijara* based, with the former offering a fixed return like a bond, while the latter provides a variable return similar to a floating rate note.⁹

What makes a *sukuk* acceptable under *shariah* law is that it must be backed by a real asset such as a piece of land, a building or an item of equipment, and therefore when *sukuk* are bought and sold the purchaser and seller are dealing indirectly in a real asset, and not simply trading paper. With a *murabahah sukuk* an Islamic bank securitises its trading transactions with a proportion of the fixed mark-up providing the return to the *sukuk* investor, and the bank using the repayment from its trading client to repay the *sukuk* holder on termination of the contract.

In practice *salam* (or *bay' al salam*) structures have proved more popular for short run financing *sukuk* than *murabahah* as the latter usually involves commodity trading, the finance of which is not the aim of most *sukuk* issues. *Salam* simply refers to a sale in which payment is made in advance by the buyer, and the delivery of the asset is deferred by the seller. The period involved is usually short, as with *murabahah*, three month being typical. In practice a *salam sukuk* can be considered as a *shariah* compliant substitute for a conventional treasury bill issued for three months short term financing by governments, as the return and the period to maturity are fixed when the offer is made. Such *salam sukuk* have been issued by the Bahrain Monetary Agency at three monthly intervals since

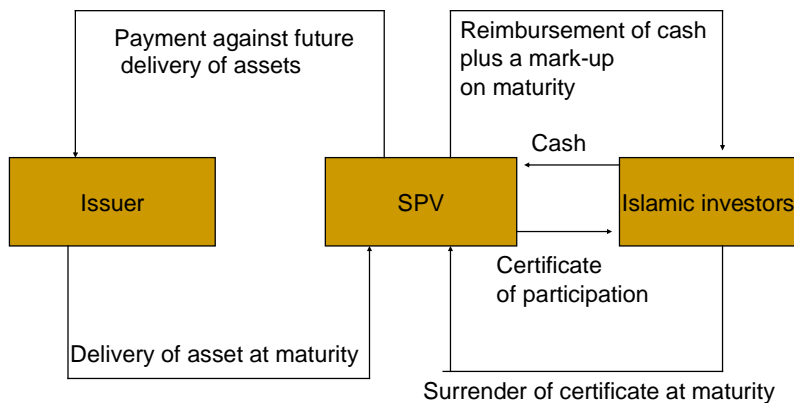
⁸ Ahmad Abbas, "Helping to build an Islamic capital market", *Banker Middle East*, Dubai, 1st October 2005.

⁹ Bilal Aquil, "Tracking the progress of *sukuk*", *Islamic Banking and Finance Magazine*, Dubai, 14th October 2005.

2002 as part of the short term financing facilities arranged on behalf of the Government of Bahrain.¹⁰

A typical *salam sukuk* structure is shown below, with a special purpose vehicle (SPV) created as a legal entity for the duration of the *sukuk* with the sole purpose of administering the payments made to the investors and holding the title to the assets on which the *sukuk* is based.¹¹ The SPV can be regarded as a non profit making trust, indeed the trust structures for which there is special provision for in English law are widely used for cross-border *sukuk* issues. As Malaysian law is very similar to English law, with comparable provision for trusts, this has facilitated the development of a market in *sukuk* in Kuala Lumpur.

Salam sukuk structure



The first stage in the operation of a *sukuk* is when the issuer (for example, the government of Bahrain) transfers a title to the assets to the SPV, which in turn issues

¹⁰ Bahrain Monetary Agency, *Islamic Banking and Finance in the Kingdom of Bahrain*, Manama, 2002, pp. 72-75.

¹¹ Adrian Dommissie and Wasif Kazi, "Securitisation and *shariah* law", *Middle East Banker*, Dubai, 1st July 2005.

certificates of participation to the investors, who may be Islamic banks, *takaful* Islamic insurance companies or investment companies that want to hold their liquid assets in a *shariah* compliant form. The certificates of participation represent an undivided right to an interest in the assets, which means that the assets cannot be sold to another party for the duration of the *sukuk*. In return for the certificates of participation the investors make an up-front payment which entitles the investor to a future refund of the investment plus a fixed mark-up agreed in advance. It is because the initial payment is in advance, or up-front, that designates the structure as *salam*.

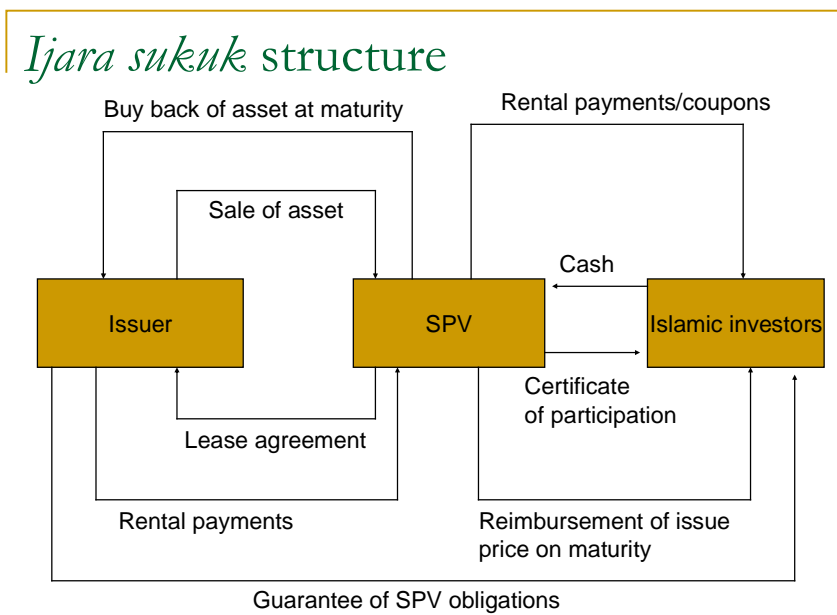
As the diagram shows the initial cash provided by the investors and collected by the SPV is used to make a payment to the issuer in return for an undertaking to deliver the asset at maturity. At that stage, typically after three months, the SPV takes delivery of the asset, but sells it back to the issuer. The proceeds from this sale are then used to reimburse the cash provided by the Islamic investors, and provide them with the pre-agreed mark-up return in relation to their investment. Before obtaining the return of their cash and the mark-up the investors have to surrender their certificates of participation to the SPV, implying they have no further right to an interest in the assets.

With an *ijara sukuk* the prime function of the SPV throughout its life is the management of the *sukuk*, in particular the receipt of rent from the client for the leased asset and the payment to *sukuk* investors.¹² When the *sukuk* matures the SPV no longer has a role, and consequently it is wound up and ceases to exist as a legal entity. With this arrangement the SPV has no other obligations apart from those involved with the specific *sukuk*, and therefore it has none of the risks associated with a bank, nor is it subject to bank regulation. In other words the SPV is bankruptcy remote, and hence is attractive to both the issuers and the investors. This is seen as a major advantage, justifying the relatively high legal costs of establishing the SPV. The risk assessment of the *sukuk* will simply depend on the client's perceived ability to make the payments to the SPV, which in the case of a government is the sovereign risk, and in the case of a company is the corporate

¹² Aseambankers, *Capitalising on Opportunities in the Sukuk Industry*, Kuala Lumpur, 2005, pp. 1-5.

risk. Not surprisingly this simple *ijara* SPV structure accounts for the overwhelming majority of *sukuk* issued to date.

The diagram below illustrating an *ijara sukuk* structure is similar to that for a *salam sukuk*, but variable rental payments are made rather than the mark-up being fixed. As with the *salam sukuk* the Islamic investors put in cash in return for certificates of participation which give them an undivided interest in the underlying asset. As the duration of the financing is much longer, usually at least five years, the title to the asset is held by the SPV, not the issuer, as the cash provided by the investors is used by the SPV to acquire the title from the issuer. It is the sale of the title that provides the issuer with the financing. As the issuer will continue to use the asset after it is sold there is a leaseback arrangement where the issuer pays rent to the SPV for the usufruct rights. It is these payments that enable the SPV to pay the investors a stream of rental payments representing the coupon on the *sukuk* security.



As *ijara sukuk* are typically issued for periods of at least five years it is usual for the investors to receive a direct guarantee from the issuer of the SPV obligations, as this provides assurance given that the ability of the SPV to fulfil its commitments ultimately

depends on the rental payments made by the issuer. This guarantee also includes the obligation by the issuer to buy back the asset at the end of the period of the lease for an amount that is equivalent to the original price at which the asset was sold. There can in other words be no capital gain or loss for the SPV or the issuer. It is the buy-back by the issuer that provides the funds for the reimbursement of the investors of the sum they originally invested, also without capital gains or losses. The rating of the *ijara sukuk* will depend on the rating agency's evaluation of the ability of the issuer to honour these commitments, and if the financial circumstances of the issuer change during the leasing period this may result in a downward or upward adjustment in the rating.¹³

Musharakah sukuk

As the majority of *sukuk* are *ijara* based this structure is well tried and tested, which reduces the legal costs and structuring fees involved with new issues. There is nevertheless an interest in innovation in *sukuk* by both issuers and law firms, partly because of the prestige involved in being first in the field with a new innovative product, but also more fundamentally because partnership structures based on *musharakah* are much closer to the traditional forms of business organisation and financing long practiced informally in the Muslim World.¹⁴ In the case of *istisna* structures, another possible innovative *sukuk*, their credibility comes from the practical consideration of them being well suited for project finance, which is increasingly important in Muslim states where governments are more and more reluctant to simply fund new infrastructure schemes from their own budgets, and there is a greater stress on private-public partnerships.

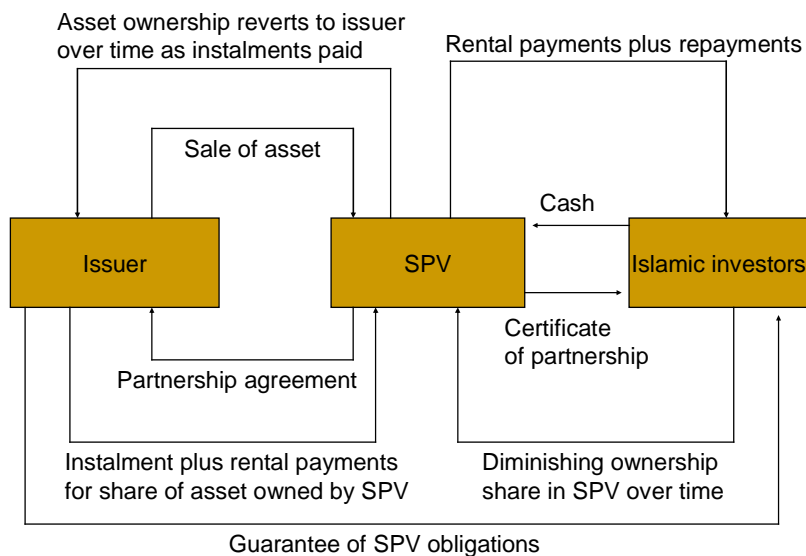
It is the diminishing *musharakah* structure that has the most potential for *sukuk* as this involves an Islamic bank or *shariah* compliant investment company providing up-front investment funding to the issuer, with both parties establishing an SPV to administer the *sukuk*. The financial structure is similar to an *ijara sukuk*, but the payments flows are quite distinct, both legally and operationally. The issuer sells an asset to the SPV while

¹³ Kristel Richard, (Standard and Poor's), "A closer look at *ijara sukuk*", *Banker Middle East*, Dubai, March 2005, pp. 1-5.

¹⁴ Muhammad Nejatullah Siddiqi, *Partnership and Profit Sharing in Islamic Law*, The Islamic Foundation, Leicester, 1985, pp. 9-18.

entering a partnership rather than a leasing agreement. The Islamic investors pay out cash as before, but receive certificates of partnership rather than simply certificates of participation. The legal implication is that both the investors and the issuer are partners in the SPV but that the share of the investors in the SPV will diminish over time as instalment payments are made by the issuer to repurchase the asset. It is these repayments, plus the rental paid by the issuer for the use of the asset, that provides the income stream for the investors. Whereas with a *salam*, *ijara* or *musharakah sukuk* the investors receive the return of their capital at the end of the period, with a diminishing *musharakah* structure they receive the return of their capital in instalments, with the final instalment terminating the partnership.

Diminishing *musharakah sukuk* structure



There is considerable flexibility with diminishing *musharakah sukuk* with respect to the payments schedule and amounts, as long as the parties agree on the terms when the partnership involving the SPV is established. The repayments will usually be monthly or quarterly, but they do not have to be in equal instalments. Smaller instalments could be made during the initial period of the *sukuk*, with most of the asset value or SPV capital remaining with the investors, but the amount of the instalment payments could increase in a liner fashion, or according to some predetermined formula. As the issuer increases their

share of the asset through the buy-back they might be expected to pay less rent for the remaining share, but this does not necessarily have to be the case, especially if there is capital appreciation in the value of the asset. In other words when instalment and rental payments are aggregated, they might be constant, diminishing or increasing over time, provided both parties agree to the formula used and the documentation is transparent.

Musharakah sukuk appear to be gaining in popularity and there have been several recent issues in both Malaysia and the Gulf. In December 2005 it was announced that Vastalux, an oil and gas servicing company, would issue a *musharakah sukuk* valued at RM 100 million with a five year maturity to finance the company's existing offshore operations off Peninsula Malaysia and in Sarawak.¹⁵ Another Malaysian company announced in October 2005 that it would be raising \$US 120 million through a *musharakah sukuk* to part finance the development of the international feeder port of Tanjung Api-Api in southern Sumatra, Indonesia.¹⁶ The largest *musharakah sukuk* to date, valued at \$550 million, was for Emirates Airlines to finance a new engineering centre in Dubai to service its aircraft. The SPV, designated 'Wings', entered into a *musharakah* partnership arrangement with Emirates for the development of the engineering facility, with the *sukuk* maturity being five years.¹⁷

***Sukuk* pricing and risk assessment**

The major criticism of *ijara sukuk*, as already indicated, is that the return is usually benchmarked to the London Inter-bank Offer Rate (LIBOR) on \$US dollar funds or the equivalent local rate in the case of issues in Malaysian ringgit. This is of course an interest rate, and although it is only used for pricing, and the payments associated with the *ijara* can be regarded as rents, the close link of the interest based pricing with *riba* worries many shariah scholars.

¹⁵ Bernama Newswire, "Vastalux issuing RM 100 million bond", *Pertubuhan Berita Nasional Malaysia*, Kuala Lumpur, 21st December 2005.

¹⁶ Eastern Oracle, "Malaysia's PT Orient to issue *sukuk musharakah* for Indonesian port", *IFIS Islamic Finance Weekly*, London, 3rd October 2005.

¹⁷ New Millennium Publishing, "First airline *sukuk* lead-managed by Dubai Islamic Bank", *IFIS Islamic Finance Weekly*, London, 14th October 2005.

The problem for the financiers is that they want the investors to regard the *sukuk* as identical to their equivalent conventional asset classes rather than being distinctive from a financial perspective, as this simplifies risk assessment. Investors are more relaxed if a security has a familiar structure rather than being unknown and untried. Hence the innovation with *sukuk* is solely legal; their distinctive characteristic being *shariah* compliance, but there has been no financial innovation.

Risk rating agencies are willing to rate *sukuk* because of their familiar structures, with assurance for investors provided by Standard and Poor's, the global leader, or Capital Intelligence, the agency that specialises in rating Middle Eastern banks. A dedicated Islamic *sukuk* rating agency has been established by the Islamic Development Bank, and the Rating Agency of Malaysia has acquired much experience of *sukuk* evaluation, but these use similar criteria to other rating institutions.

Financial innovation with *sukuk*

For *sukuk* to be distinctive from conventional securities financial engineering will be necessary to bring about new types of products. These may be initially more costly for the clients in terms of the rates that are offered to attract investors, and the latter may be uncertain and cautious about committing their funds to the unfamiliar. Conventional and Islamic banks involved with new types of *sukuk* will incur product development costs, often without the certainty that they can be recouped. Yet for those who do launch successful products the rewards could ultimately be high, as even if other institutions copy the same formula, the recognition that comes from being first in the field can be very helpful for longer term business generation.

The key to innovation is to focus on pricing and risk characteristics. For sovereign *sukuk* pricing could be based on real macroeconomic variables such as GDP growth rather than interest benchmarks. When GDP growth was high government tax revenue would usually increase more rapidly, especially for countries with income or sales taxes. This would enable governments to pay a higher return to investors in their sovereign *sukuk*. Conversely when GDP growth was lower, government revenue would be lower, implying

a reduced capacity to service debt and pay *sukuk* holders. In other words *sukuk* holders would be taking on some of the sovereign risk.¹⁸ By sharing risk with governments and reducing their obligations in times of difficulty, the risk of default would be reduced. This might enable sovereign *sukuk* based on GDP benchmarks to be more favourably rated than the present “conventional” *sukuk*.

Interest rate and GDP growth figures are shown in table 4 for Saudi Arabia and Malaysia, with non-oil GDP growth taken as a more stable indicator for Saudi Arabia given the volatility of international oil markets, and hence the Kingdom’s oil sector and overall GDP growth. As *ijara sukuk* typically pay at least 200 basis points over base interest rates, such as those on inter-bank deposits cited in the table, the average return over the period from 1999 to 2005 for investors would have been 5.69 percent on Saudi riyal denominated *sukuk* and 5.05 percent on Malaysian ringgit denominated *sukuk*. The riyal return including the premium is substantially higher than what might have been obtained on *sukuk* whose yield was based on Saudi Arabian non-oil GDP growth without any premium. In the case of ringgit denominated *sukuk* the return of an offering based on GDP growth would have been marginally greater than that on ringgit inter bank rates with the premium added.

¹⁸ Ali Arsalan Tariq, *Managing Financial Risks of Sukuk Structures*, MSc Dissertation, Loughborough University, September 2004, pp. 43-54.

Table 4: Saudi Arabia and Malaysian Interest Rates and GDP growth

	SR interest rates	Saudi non-oil GDP growth	RM interest rates	Malaysian GDP growth
1999	6.14	4.20	5.00	5.00
2000	6.67	4.30	2.50	8.60
2001	3.92	3.50	2.80	0.30
2002	2.23	4.20	2.70	4.20
2003	1.63	3.40	2.75	5.20
2004	1.73	5.70	2.70	7.10
2005	3.53	7.40	2.70	5.20
<i>Mean</i>	<i>3.69</i>	<i>4.67</i>	<i>3.02</i>	<i>5.08</i>
<i>SD</i>	<i>1.90</i>	<i>1.31</i>	<i>0.81</i>	<i>2.39</i>

Sources: Saudi Arabian Monetary Agency and Bank Negara, Malaysia

Investors in *ijara sukuk* are not only concerned with average returns however, but also with the volatility of the returns as a lower volatility will generally be preferred to a higher volatility by the risk adverse.¹⁹ The standard deviations from the means are shown in table 4, with significantly lower volatility for returns based on non-oil GDP growth than for returns based on inter-bank rates in Saudi Arabia. With this lower volatility investors might be willing to purchase riyal denominated *sukuk* without any premium on non-oil GDP returns even if there is a 200 basis points mark-up on Saudi inter-bank returns. In Malaysia the reverse is the case, as with the much higher volatility of GDP growth, a return based on this that is only marginally greater than the ringgit inter-bank rate would be unlikely to attract investors motivated only by financial returns.²⁰ In this case a premium would have to be paid by the *sukuk* issuer above GDP growth rates to ensure that the offer was fully subscribed.

¹⁹ Road shows may be needed to explain the issues to investors. See Paul McNamara, "How to sell *sukuk*", *Middle East Banker*, Dubai, 1st August 2005.

²⁰ Empirical evidence from Malaysia indicates that financial factors are more important than religious factors in determining the choices between Islamic and conventional securities, even for Muslim dealers. See Kamisan Gadar, *An Empirical Analysis of Islamic Bond Selection by Individual Dealers on the Kuala Lumpur Stock Market*, PhD thesis, Durham University, 2004.

In reality matters are more complicated, as an *ijara sukuk* with inter-bank rates used as the benchmark is like a floating rate note, where the market value of the note seldom varies from the maturity value, unlike a fixed rate bond. However once a benchmark that was not based on inter-bank rates is used, short and even medium term capital gains and losses would be possible, the extent of these depending on the time to maturity. If GDP growth rose relative to inter-bank rates, demand for the *sukuk* would increase given its higher return, and hence the price would rise. Conversely if GDP growth fell relative to inter-bank rates, investors who sold their *sukuk* in the secondary market would suffer capital losses. Therefore, as with fixed rate securities, prices would depend on interest rate expectations, but in the case of *sukuk* benchmarked against GDP growth, expectations about growth performance would also influence pricing.

Corporate *sukuk* could be benchmarked against indicators relating to the performance of the companies being financed. Share prices would be an inappropriate indicator, as this would blur the distinction between *sukuk* securities and equity investment. However the use of dividend or profit indicators would be entirely appropriate, which could be the basis for a new type of *sukuk* based on a *musharakah* partnership structure. *Musharakah* contracts are for fixed time periods, like *sukuk*, and involve profit and loss sharing. These *sukuk* would therefore have a downside risk, as capital cannot be guaranteed, but the returns offered by the companies being financed could compensate for these risks.

The profit shares would clearly have to be attractive, but under *musharakah* contracts investors are permitted to be remunerated for amounts in excess of their actual investment contribution, as long as losses are shared in direct proportion to the profit shares. The attraction for investors in *musharakah sukuk* would be that there was a pre-defined exit, and in addition early exit would be possible as the *musharakah* would be securitised. The illiquidity of traditional *musharakah* contracts, and uncertainty regarding the exit route, largely explains why this form of *shariah* compliant financial contract has failed to become popular.

Another possibility would be *mudarabah* based corporate *sukuk*, with investors sharing in the profits or dividends, but not in the losses, although as with *mudarabah* investment deposits with Islamic banks, there could be no absolute guarantee of capital values. With *mudarabah sukuk* the return would be lower than with *musharakah sukuk*, but companies would be expected to make some provisions in highly profitable years so that payouts could be maintained in less profitable or loss making years. *Shariah* boards have authorised this practice for investment *mudarabah* deposits with Islamic banks. For investors the returns profile would be smoother for *mudarabah sukuk* than for their *musharakah* equivalent, but the expectation would be for higher returns on average to compensate for the greater risk involved.

Conclusions

Although *sukuk* issues are taking off, with governments such as that of Indonesia planning substantial issues worth over \$500 million for 2006, there is the same financial risk of default with sovereign *sukuk* as with conventional debt instruments. Some of the countries issuing *sukuk* have experienced major debt servicing problems in the recent past, and there is the danger that history might repeat itself. Corporate issues by large and medium sized companies, especially those involved in real estate developments, also carry substantial risks if property prices start to decline, or if the high oil prices currently being enjoyed by the Gulf countries prove unsustainable.

Sukuk based on participatory structures, with risk sharing by investors, may be a way forward. The risk with these proposed structures is of variable returns rather than of default, which may well be more acceptable to informed investors in any case. *Sukuk* have taken off in terms of quantity, but the emphasis now needs to shift to quality. The Islamic scholars have shown their willingness to apply the principles of *ijtihad* or legal adaptation to the *sukuk* now being traded, but the finance specialists have arguably failed the industry to date. In financial terms the current *sukuk* offerings simply mirror their conventional equivalents. More financial engineering and imagination are clearly needed if new products are to be developed, with distinctive risk characteristics that will appeal to Muslims, and indeed non-Muslims seeking to diversify their risk portfolios.