First International
Islamic Finance Conference
Labuan - Malaysia
(6-7 July 2004)

Islamic Risk Management
Instruments
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Section 1: The FX & Debt/Deposit issues
Islamic Institution and their risks

- Contrary to common beliefs, Islamic Banks, as Conventional Banks, are fully exposed to Forex and Interest Rate risks

>> The following example -based on the actual financials of an Islamic Institution financial- reinforce our opinion on this matter
Islamic Banks are exposed to FX fluctuations

• The FX issue:

>> As shown below, due to geographical diversification/mismatch of assets & liabilities, Islamic Banks are exposed to the effects of fluctuations in foreign currency exchange rates on both their financial positions and cash flows.

<table>
<thead>
<tr>
<th>2002</th>
<th>Saudi Arabia SR’000</th>
<th>Other GCC &amp; Middle East SR’000</th>
<th>Europe SR’000</th>
<th>North America SR’000</th>
<th>Latin America SR’000</th>
<th>Southeast Asia SR’000</th>
<th>Other countries SR’000</th>
<th>Total SR’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and balances with SAMA</td>
<td>6,051,287</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,051,287</td>
</tr>
<tr>
<td>Due from banks</td>
<td>2,458</td>
<td>24,210</td>
<td>90,308</td>
<td>185,248</td>
<td>-</td>
<td>132,575</td>
<td>71,400</td>
<td>560,594</td>
</tr>
<tr>
<td>Investments, net:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutaqara and murabahah</td>
<td>19,094,465</td>
<td>2,638,524</td>
<td>9,500,349</td>
<td>168,030</td>
<td>526,062</td>
<td>196,415</td>
<td>-</td>
<td>32,063,585</td>
</tr>
<tr>
<td>Installment sale</td>
<td>10,735,212</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10,735,212</td>
</tr>
<tr>
<td>Ijarah</td>
<td>4,303,778</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,303,778</td>
</tr>
<tr>
<td>Murabahah</td>
<td>560,119</td>
<td>27,267</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>587,377</td>
</tr>
<tr>
<td>Mushara</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>240,673</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>240,673</td>
</tr>
<tr>
<td>Total</td>
<td>41,170,985</td>
<td>391,091</td>
<td>841,157</td>
<td>353,273</td>
<td>126,840</td>
<td>239,049</td>
<td>194,441</td>
<td>4,404,582</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to banks</td>
<td>31,848</td>
<td>1,126</td>
<td>162,292</td>
<td>234,756</td>
<td>-</td>
<td>739,768</td>
<td>1,165,732</td>
<td>3,595,290</td>
</tr>
<tr>
<td>Customer credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current accounts</td>
<td>43,296,934</td>
<td>4,112</td>
<td>162,292</td>
<td>292,794</td>
<td>-</td>
<td>739,768</td>
<td>1,155,222</td>
<td>4,225,878</td>
</tr>
<tr>
<td>Total</td>
<td>43,328,781</td>
<td>4,112</td>
<td>162,292</td>
<td>292,794</td>
<td>-</td>
<td>739,768</td>
<td>1,155,222</td>
<td>4,225,878</td>
</tr>
<tr>
<td>Contingent liabilities</td>
<td>16,718,200</td>
<td>785,092</td>
<td>7,573,972</td>
<td>3,868,237</td>
<td>41,220</td>
<td>727,629</td>
<td>634,349</td>
<td>10,045,895</td>
</tr>
<tr>
<td>Credit risk</td>
<td>1,578,143</td>
<td>307,949</td>
<td>444,559</td>
<td>156,827</td>
<td>41,239</td>
<td>727,629</td>
<td>634,349</td>
<td>3,865,895</td>
</tr>
</tbody>
</table>

⇒ Resulting in the Following FX exposures:

<table>
<thead>
<tr>
<th>Currency</th>
<th>(Dr) Cr Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Dollar</td>
<td>(11,438,215)</td>
</tr>
<tr>
<td>Euro</td>
<td>(230,984)</td>
</tr>
<tr>
<td>Lebanese Lira</td>
<td>(223,604)</td>
</tr>
<tr>
<td>Bangladeshi Taka</td>
<td>(94,844)</td>
</tr>
<tr>
<td>Pound Sterling</td>
<td>(77,575)</td>
</tr>
<tr>
<td>Emirates Dirham</td>
<td>(70,722)</td>
</tr>
<tr>
<td>Other</td>
<td>(85,886)</td>
</tr>
</tbody>
</table>
Islamic Banks are exposed to Interest Rate risk

- The Debt/Deposit issue:

>> Assets and Liabilities Mismatch is also a concern for Islamic Banks. Indeed, such a mismatch, implies 2 other type of risks:

→ Liquidity Risk and

→ Interest Rate Risk

<table>
<thead>
<tr>
<th>2002</th>
<th>Less than Three months SR'000</th>
<th>From Three months to one year SR'000</th>
<th>From One year to five years SR'000</th>
<th>Over five years SR'000</th>
<th>Without maturity date SR'000</th>
<th>Total SR'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>4,218,204</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,218,204</td>
</tr>
<tr>
<td>Deposit with SAMA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,119,777</td>
</tr>
<tr>
<td>Investments, net:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mu'tajara and mu'tajara</td>
<td>8,662,065</td>
<td>17,283,291</td>
<td>6,138,529</td>
<td>-</td>
<td>-</td>
<td>32,083,885</td>
</tr>
<tr>
<td>by wakala</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installment sale</td>
<td>805,977</td>
<td>2,357,866</td>
<td>7,279,554</td>
<td>291,815</td>
<td>-</td>
<td>10,735,212</td>
</tr>
<tr>
<td>Islisnaa</td>
<td>106,684</td>
<td>639,135</td>
<td>2,352,004</td>
<td>1,205,955</td>
<td>-</td>
<td>4,303,778</td>
</tr>
<tr>
<td>Murabaha</td>
<td>150,402</td>
<td>301,488</td>
<td>135,487</td>
<td>-</td>
<td>-</td>
<td>587,377</td>
</tr>
<tr>
<td>Musharaka</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>358,519</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>358,519</td>
</tr>
<tr>
<td>Customer debt current accounts, net</td>
<td>992,921</td>
<td>38,538</td>
<td>1,477</td>
<td>-</td>
<td>-</td>
<td>1,032,936</td>
</tr>
<tr>
<td>Leased assets, net</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>181,317</td>
</tr>
<tr>
<td>Fixed assets, net</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>908,604</td>
</tr>
<tr>
<td>Other assets, net</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,585,446</td>
</tr>
<tr>
<td>Total</td>
<td>15,292,772</td>
<td>20,620,318</td>
<td>15,907,051</td>
<td>1,497,770</td>
<td>5,795,204</td>
<td>59,113,115</td>
</tr>
</tbody>
</table>

Liabilities and shareholders' equity:

<table>
<thead>
<tr>
<th>2002</th>
<th>Due to banks SR'000</th>
<th>Customer credit current accounts SR'000</th>
<th>Other customer accounts SR'000</th>
<th>Proposed gross dividends SR'000</th>
<th>Other liabilities SR'000</th>
<th>Shareholders' equity SR'000</th>
<th>Total SR'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>939,050</td>
<td>43,296,828</td>
<td>2,198,762</td>
<td>1,295,639</td>
<td>4,545,186</td>
<td>6,837,690</td>
<td>12,678,505</td>
</tr>
</tbody>
</table>

Maturity Mismatch
Islamic Financial Institutions’ risks

• Summary:
Three different kind of risks can be clearly identified:

⇒ The Foreign Exchange risk
⇒ The Interest Rate risk
⇒ The Liquidity risk

⇒ Islamic Financial Institutions need appropriate Sharia-Compliant hedging instruments
Section 2: Conventional vs. Islamic instruments
Conventional Hedging instruments...

• Hedging tools used and proposed by conventional banks are the following:

⇒ FX Swaps:
   Combination of both a **FX spot** and a **FX Forward** deal

⇒ Interest Rate Swaps:
   Exchange of a **Floating** against a **Fixed Interest rate cash flow**

⇒ Bonds:
   **Negotiable Debt** instrument (based on **Interest**)
...Not applicable to Islamic Banks

- These different mechanisms and instruments are in clear contradiction with Sharia principles:
  - These instruments refer to the concept of ‘riba’
  - The forward concept is not acceptable
  - Pure monetary flows (no underlying Assets) are prohibited
  - Debt instruments are not tradable under Sharia

New Islamic instruments have to be structured in order to meet Islamic banks’ needs
BNP Paribas has developed Sharia-compliant FX & IR swaps:

- Double Currency Exchange Deposit (equivalent to FX Swap)
- Murabahas Profit Exchange (equivalent IR Swap)

These Instruments have been approved in principle by BNP Paribas in-house Sharia Board

And are currently at the final stage of the legal documentation
The Double Currency Exchange Deposit

**Contractual Scheme**

1) Client 1 deposit on a Murabaha basis, an amount in a specified currency with Client 2 for a certain period of time.

2) At Maturity, Client 2 give back the deposit + profit to Client 1 in the currency of the deposit.

2 bis) At Maturity, Client 1 give back the deposit + profit to Client 2 in the currency of the deposit.

1 bis) Client 2 deposit on a Murabaha basis, an amount in a specified currency with Client 1 for a certain period of time (same maturity than Murabaha 1).

**Time Scheme**

Client 1 deposit with Client 2

Client 2 deposit with Client 1

**Master Agreement**

(Providing Netting Agreement)

Murabaha 1

Murabaha 2

Deposit + Profit
The Murabaha Profit Exchange

**Contractual Scheme**

1) Client 1 deposit on a Murabaha basis, an amount with Client 2 for a certain period of time.

2) At Maturity, Client 2 give back the deposit + profit to Client 1.

2 bis) On every Intermediate maturities:
Client 1 give back the deposit + profit to Client 1.

1 bis) Client 2 deposit on a revolving Murabaha basis (Total maturity = maturity of Murabaha 1, an amount with Client 2 for a certain period of time.

**Time Scheme**

Client 1 deposit with Client 2

Profit

Deposit + Profit

Deposit rolled over

Profit

Deposit + Profit

Deposit rolled over

Deposit + Profit

Deposit + Profit

**Master Agreement**
(Providing Netting Agreement)

Murabaha 1

Murabaha 2
Challenges raised by these structures

⇒ **Accounting issues:**
Can these structures allow an off-balance sheet treatment, as conventional tools?
Is it compatible with the standards set up by AAIOFI? Need for new standards?

⇒ **Legal issues:**
Can the agreement be equivalent and as secured as the conventional one? (ISDA agreement)

⇒ **Other issues:**
Should we allow early settlement / unwinding of the Swap?
Can we consider an endorsement by the IIFM?
Section 3: The Sukuk
Overview of the Sukuk market

• The Sukuk are another solution to resolve the liquidity risk and Maturity Mismatch.

• As of 03/09/2004 The Sukuk market is as follows:

  • The world stock of sovereign Islamic bonds raised is around US$ 3 billion

  • In comparison, in Malaysia, the value of outstanding Islamic corporate bonds stands at nearly US$ 16 billion

⇒ Given the growing demand on these instruments, the international Islamic debt capital market still need to be developed (new issues needed)
So far, three structures have been developed on the International Islamic Capital market:

- The Ijara Sukuk
- The Mixed Assets Sukuk
- The Sukuk Al-Salam
The existing structures (1): The Ijara Sukuk

- From a Sharia perspective, the Ijara Sukuk is a widely accepted format of Islamic Bond among Scholars.

- Indeed, the following Sharia constraints are observed:
  - It is Asset-Backed,
  - It complies with the principles of Risk-Sharing under Sharia law (through an Ijara) as opposed to the principle of time value for money,
  - The Return on the notes have the form of Rents instead of interest payments.

- Examples of Ijara Sukuk issues:
  - Bahrain Local & International Sukuk (since 2000)
  - Malaysia Global Sukuk (July 2002)
  - Qatar Global Sukuk (2003)
The Ijara Sukuk: The Structure

1) Sells the Assets

2) Cash

3) Lease Agreement

4) Rental Payments

5) Rental Payments / "Coupons"

6) Buys Back the Assets at maturity

7) Reimbursement of 100% of the issue price at maturity

Direct Recourse

Islamic Issuer

S.P.V.

Islamic Investors

2 Bis) Certificates of Participation (Sukuk al Ijara)
The existing structures: Mixed assets Sukuk

- In terms of structure, the Mixed Assets Sukuk is very close to the Ijara version

- From a Sharia perspective, it is also a widely accepted format of Sukuk among Scholars

- Example of Mixed Assets Sukuk issues:
  - Islamic Development Bank Global Sukuk (July 2003)
The Mixed Asset Sukuk: The Structure

1) Transfer of Murabahas deals
2) Cash
3) Purchase of the Assets (1 & 1 Bis)
4) Fixed Payment of the return on the Asset

Balance sheet of the SPV (Asset Side):
- 51% of Tangible Assets
- 49% of Murabahas

Direct Recourse

Islamic Ultimate Borrower

S.P.V. (Issuer)

Islamic Investors

1 Bis) Transfer of Leased Assets or Assets to be Leased back to Issuer
2 Bis) Certificate of participation
The existing structures (3): The Sukuk Al Salam

- Al Salam is a transaction where two parties agree to carry out the sale and the purchase of an underlying Asset to be delivered at a future date but at a price determined and fully paid on the day the contract is entered into.

- The Sukuk Al Salam structure is a well-accepted structure for short-term money market instruments (the Bahrain Monetary Agency issues 3-months maturity Sukuk Al Salam on a monthly basis).

- On a longer term, this structure still has to be tested with scholars. Tradability of such instrument is also a concern.
The Sukuk Al Salam: The Structure

1) Cash

S.P.V. (Issuer)

Islamic Investors

1 Bis) Certificates of Participation (Sukuk al salam)

Islamic Ultimate Borrower

Off-Takers

2) Payment against future delivery of the Assets

3) at maturity, Delivery of the goods

4) Undertaking agreement (instantly executed)

5) payment of price + margin

Islamic Investors

Off-Takers
The challenges and problems of these structures

⇒ **Assets issues:**

How to structure such type of Sukuk in case the potential Ultimate Borrower have no assets or if available assets are subject to negative pledges?

⇒ **Legal issues:**

Some jurisdictions do not allow foreigners (investors or SPVs) to own locally domiciled assets

⇒ **Tax issues:**

The purchase, the lease and/or the buy back of an asset could have important fiscal implications on the transaction
Section 4: A new perspective for Sukuk Structures
Need for new structures

Given the problems encountered in Structuring these three types of Sukuk, new structures have to be developed and which will have to respond to the following criteria:

⇒ Compliance with Sharia principles & supported by scholars
⇒ Acceptable to Islamic investors (same features than other Sukuk)
⇒ Structurally enhanced to appeal to crossover investors
⇒ Tradable
⇒ Easily documented and that could facilitate repetition

In this perspective, BNP Paribas has developed a structure that tends to comply with these criteria:

The Sukuk Al Murabaha
Sukuk al Murabaha - The Structure

- **Islamic Borrower**
  - Direct Obligation
  - Principal
  - Profit (& Principal @ maturity)
  - 3) Revolving International Commodity Murabaha Facility

- **Mudaraba (Issuer)**
  - 1) Funds
  - 2) Sukuk
  - 4) Profit (& Principal @ maturity)
  - No-withdrawal agreement (special exit conditions)

- **Manager/Mudarib**

- **Investors**
  - Investor 1 (Rub al Mal)
  - Investor 2 (Rub al Mal)
  - Investor 3 (Rub al Mal)
  - Investor 4 (Rub al Mal)
  - Investor 5 (Rub al Mal)
Sukuk al Murabaha - The Structure

Initial Steps in Setting up the Transaction

- **Step 1**: A Special Purpose Vehicle (Mudaraba) will be set up as the first step in the proposed issue of securities. This Mudaraba will be the issuing entity.

- **Step 2**: The Manager (Mudarib) will, on behalf of the Investors (Sukuk holders), enter into a revolving international commodity Murabaha with the Issuer. The funds raised via the Sukuk are applied towards this Murabaha scheme.

Periodic Profit Distribution

- Profit earned on the revolving Murabahas and accumulated by the Mudaraba will be passed on to the Sukuk holders.

At Maturity

- At the maturity of the Murabaha, the Issuer will reimburse the principal initially invested back to the Mudaraba. The Mudaraba in turn will redeem the Sukuk.
Advantages of the Structure

- **Easy to Structure:**
  The Sukuk al Murabaha is easier and faster to structure than a Sukuk al Ijara (Documentation ready for each step of the transaction)

- **No transfer of Tangible Assets:**
  Under the recommended structure the Issuer is not required to make any tangible asset transfers to a private entity, even in case of default

- **No due diligence on assets:**
  The assets backing the Sukuk al Murabaha structure are commodities priced on the LME which obviates the need for any due diligence on the assets

- **Same rating as the Issuer:**
  The international rating of the Sukuk will reflect the direct credit exposure on the Issuer by the Mudaraba and the Sukuk holders. This would give investors a greater level of comfort

- **No return volatility:**
  The return (fixed or floating) on the Sukuk is set at launch and is not subject to any change

- **Replicable Structure:**
  The Sukuk al Murabaha structure is elegant and is easily replicable
Compliance with Shariah Principles

**Reason 1: Sign off by scholars**
- The Sukuk al Murabaha structure has already been approved by some prominent Sharia Scholars and large Middle Eastern Islamic Banks.
- This format of Sukuk has already been issued by First Islamic Investment Bank, a Bahrain-based Islamic Investment bank. (US$ 75 mio, dual tranche: 3 & 5 yrs)

**Reason 2: Based on well established Islamic Instruments**
- A Restricted Mudaraba in order to use and hold the assets
- Sukuk representing a share in the Mudaraba’s Assets
- A Revolving International Commodities Murabaha
Reason 3: New, Shariah Compliant Tradability Feature

- From a Shariah perspective, the structure only allows Sukuk trading at specific dates:
  - Tradability allowed once the underlying Murabaha has matured and before it revolves (usually monthly or quarterly)

- Typically, Sukuk trading during the life of the revolving Murabaha would be considered from a Shariah point of view as debt trading (forbidden)

☑️ To assure tradability, BNP Paribas have developed a Shariah accepted additional structure in order to trade the Sukuk at any time and price, giving this Sukuk the same features as any other accepted types of Sukuk
Section 5: BNP Paribas in Islamic Banking
BNP Paribas: 19 years in Islamic Banking

- Islamic Investment Department within BNP Paribas with dedicated multi-product capabilities:
  - Large short term Murabaha deposits base since 1985
  - Co-arranger in Project Finance Islamic tranches
  - First Islamic capital protected fund structured by BNP Paribas
  - One of the first Islamic Equity fund

- 1985: 1st Murabaha Deposits
- 1996: Caravan Fund: One of the first US Islamic Equity Fund
- 1999: Faysal Shield Fund 1st Islamic Equity Linked Capital Guaranteed Fund
- 2002: Al Hidd Project 1st Islamic Project Finance coupled Export Credit Guaranteed Facility
BNP Paribas’ Islamic Banking Unit Organisation

Islamic Banking Unit:
Head: J-M Riegel
Dty. Head: A. Raad

Selected Panel Of Clients

Origination & Marketing
Supervision
Structuring
Execution

Treasury
Asset Management
Structured Finance
Equities
Commodities Export & Project
Fixed Income
The Sharia Board of BNP Paribas

BNP Paribas SSC is composed of well-known and highly commended scholars and is the first International Bank to include in its Sharia Board scholars from both the Middle-East and Asia (Malaysia):

- **Dr. Nizam Yaquby - Bahrain** (Chairman of BNP Paribas’ SSC)
- **Dr. Abdul Sattar Abu Ghuddah – Syria** (based in Saudi Arabia)
- **Dr. Mohamed Daud Bakar - Malaysia**
Your contacts at BNP Paribas

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