Asian Islamic Banking Conference

Credit Risk Management in Islamic Financing
Some challenges and implications for required capabilities

July 5, 2010
Kuala Lumpur

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Agenda

- Context: Do we need to treat Islamic credit risk any differently?
- Unique credit risks in Islamic banking
- Implications for risk management capabilities required
Given the unique nature of Islamic financing, the question arises as to whether credit risk requires differentiated treatment compared to conventional banking.

**Context & key questions**

- **The business of credit risk mitigation**
  - As with their conventional counterparts, credit risk is arguably the most important risk area faced by Islamic banks because defaults can also trigger liquidity, downgrade and other risks.
  - The process of credit risk mitigation involves estimating and minimizing expected credit losses.

- **Do we need to treat Islamic credit risk any differently?**
  - The question arises as to whether credit risk requires special treatment in Islamic financing when compared to conventional banking?
    1. What are the additional (if any) complications in estimating the probability of default (PD)?
    2. Would there be any differences in the risk exposure (EAD) and expected losses given default (LGD)? If so, in what instances do such differences arise?
    3. What should Islamic banks be doing to navigate these risks?
How should Islamic banks navigate these risks across the financing value chain?

Navigating risk across the financing value chain

“How does product risk differ depending on the mode of Islamic financing?”

“How to ensure risk policies do not stifle product innovation?”

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“How to ensure risk policies do not stifle product innovation?”

“How will pricing / profit ratios be differentiated to account for different inherent risks?”

“How will this affect the credit scoring models?”

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“What types of collateral are Shariah-compliant, and how will this affect collateral management?”

“What is the Shariah-compliant treatment of default?”

“How do we deal with lack of profit disclosure by customers?”

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“How do we deal with lack of profit disclosure by customers?”
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- Context: Do we need to treat Islamic credit risk any differently?

- **Unique credit risks in Islamic banking**

- Implications for risk management capabilities required
In credit risk, the probability of default (of the customer) and the risk exposure (of the bank) are key areas of consideration.

**Probability of Default (PD)**
- Who would you lend to?
- What, how and where is the money going to be used?
- What is the repayment ability of the customer?

**Risk Exposure (EAD, LGD)**
- What is the bank’s exposure in relation to the different facility types offered?
- What is the bank’s right of recourse to the financed assets in the event of a default?
- And how much will be recovered from those assets?
Complexity in treating Islamic credit risk occurs because the risk levels are dependent on the type of financing contract being used.

Risk severity by Islamic contract type

- Profit sharing modes (Mudharabah / Musharakah) are seen as having the highest credit risk.
- For the Murabahah (cost plus margin) and Ijarah (leasing) modes, credit risk is arguably similar to that of conventional products.

Source: Risk management in Islamic Banking - a conceptual framework, Tariqullah Khan, 2004
In particular, credit risk treatment warrants special attention for the profit-loss (P-L) sharing type financing

**Mudharabah Financing Structure**
- **Periodic profits and return of capital**
- **Entrepreneur (Mudarib)**
- **Islamic Bank**
- **Provision of Mudharabah capital**

**Musharakah Financing Structure**
- **Islamic Bank**
- **Musharakah**
- **Partner (Customer)**
- x% ownership
- (100-x)% ownership

**Financing model**
- “Arms-length” equity investment
- “Partnership-type” equity investment

**Risk traits**
- Unsecured, subject to capital loss
- Similar to Mudharabah, but losses are normally shared in proportion to the capital contributed by each Musharik
These P-L sharing financing modes alter the conventional way of looking at ‘probability of default’ and risk exposure, leading to a new set of challenges

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<thead>
<tr>
<th>Challenges from P-L modes</th>
<th>Implications</th>
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<tr>
<td><strong>1. Difficulty establishing a statistically-based P-D model</strong>&lt;br&gt;• No recognizable default event&lt;br&gt;• Asymmetric information from customers</td>
<td>• How would we develop Basel II compliant scoring models given lack of statistical data (and standard way to identify default event)?</td>
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<td><strong>2. Limited recourse to financed assets; therefore higher EAD and LGD</strong>&lt;br&gt;• No collateral; subject to capital loss&lt;br&gt;• Limited recourse to financed assets&lt;br&gt;• Limited actions until facility end</td>
<td>• The loss given default can potentially be a 100% if the loss was not caused by negligence</td>
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<td><strong>3. Banks having to play a new ‘business operator’ role in client’s business</strong>&lt;br&gt;• Require participation of bank in activities (e.g. participation in customer’s business decisions) that are outside bank’s core competency area</td>
<td>• Bank needs to be able to ‘act as a business partner’&lt;br&gt;• Higher requirements and costs of loan monitoring, business participation</td>
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These challenges explain why these P-L sharing financing modes often form only a small percentage of an Islamic bank’s loan portfolio.

Loan portfolio composition by mode of financing

- **Murabahah**: 56%
- **Musharakah**: 33%
- **Istina**: 3%
- **Salam**: 3%
- **Ijarah**: 4%
- **Mudharabah**: 1%

Source: Bank Negara Malaysia Statistics

**General ‘risk aversion’**

- Islamic banks’ assets are typically concentrated in the less risky Murabahah and Ijarah contracts.
- Some banks opt for the safer ‘revenue sharing’ Mudharabah instead of true ‘profit sharing’.
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We have identified a number of key capability implications from P-L modes of financing

Challenges from P-L financing

- Difficulty establishing a statistically-based P-D model
- Limited recourse to financed assets; therefore higher EAD and LGD
- Banks having to play a new ‘business operator’ role in client’s business

Implications for required capabilities

- **A** Use clear customer segmentation in the financing strategy
- **B** Enhance collaboration between risk management, product development and customer segmentation teams
- **C** Develop industry expertise in economic sectors where the bank offers profit-loss sharing financing
- **D** Differentiate monitoring requirements for P-L financing but industrialize the process
A clear segmentation model is pivotal to ensure P-L financing is offered to the right customer

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**Implications for required capabilities**

- Use clear customer segmentation in the financing strategy
  - Be very clear about which customer segments the bank would offer profit-loss sharing financing to:
    - In consumer financing, for example, certain banks have only offered mudharabah loans to government employees, coupled with payroll deduction arrangements.
    - In corporate financing, banks could look at offering profit-sharing modes only to businesses with clear and sustainable record or a more assured revenue stream (e.g. financing of contractors for government infrastructure projects).
There needs to be closer collaboration among risk, product development and customer segmentation teams

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Implications for required capabilities

- Enhance collaboration among risk management, product development and customer segmentation teams

  - Review product development governance process e.g. embed risk specialists, segment owners within product development / innovation committees
  - Restructure KPIs to stimulate collaboration between these functions (e.g. product / segment development teams having risk compliance KPI, and risk specialists having some proportion of product innovation KPI)
Deeper industry expertise needs to be built in order for the bank to be an effective ‘business advisor’

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Implications for required capabilities

- Develop industry expertise in high-potential economic sectors where the bank offers profit-loss sharing financing
- Build a pool of industry specialists to monitor macro trends and provide input to refine segmentation criteria for P-L financing
- Conduct periodic limit review / changes for each segment depending on sector performance
- Have industry specialists to be the ‘voice of the bank’ in partnership (musharakah) financing arrangements to monitor and provide input to key business decisions of the customer
Monitoring requirements need to be differentiated, but processing should be industrialized to keep costs down.

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**Implications for required capabilities**

- Differentiate monitoring requirements for P-L financing but industrialize the process
- Differentiate level of stringency and requirements for monitoring, but **standardize and automate where possible in the back-office** (to minimize cost of ongoing monitoring)
- Enhance **information management capabilities** (MIS) to improve portfolio performance tracking and establish early warning mechanisms
Islamic banks should not allow deficient risk management capabilities to become a ‘drag force’ on product innovation and growth

• Many of the ‘riskier’ Islamic financing modes (e.g. profit-sharing based contracts) form an important source of differentiation over conventional banking

• Islamic banks should not allow inadequacies in its risk management capabilities to prevent them from harnessing this competitive advantage

• The right capabilities need to be developed or enhanced to ensure banks are using P-L financing arrangements for the ‘right’ customers and have the capability to be effective ‘business advisors’ to the customer