FINANCIAL INNOVATION AND ENGINEERING IN ISLAMIC BANKS

By

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WORLD BANK – BRSA - PBAT JOINT WORKSHOP
ON
“INNOVATIVE PRODUCT DEVELOPMENT IN ISLAMIC BANKS”
2-3 MARCH, 2017
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THE İMPORTANCE OF PRODUCT DEVELOPMENT

- We live in an ever-changing world where new products are introduced almost on a daily basis.

- How creative, innovative and useful the product is can play a vital rule in how well it is received and sold.

- The growth of any industry depends largely on its ability to successfully create and launch new products and services.

- As such, successful institutions are the ones that are able to continually develop new superior products and services that can deliver unique benefits with real added value to their customers.
PRODUCT DEVELOPMENT CRİTİCAL SUCCESS FACTORS

- Clear strategy and focused vision
- Planning and execution
- Market research
- Innovative product features
- Availability of resources
- Management commitment
- Critical Success Factors
- Time to market

But how can we achieve innovation?
İNNOVATION
**TYPES OF INNOVATION ACTIVITIES**

- **Simple Modification**
  - A set of activities leading to minor modifications or adaptations to existing products
  - Usually used with a reactive product development strategy

- **Radical Innovation**
  - Creating a completely new service or product from scratch, which is a riskier approach
  - Usually used with proactive product development strategy
Islamic financial products and services are different by nature as they are required to adhere to Shariah requirements in addition to the legal and regulatory framework. Therefore, innovation in Islamic finance becomes more challenging.

The product structure has to strike a balance between:
- Shariah compliance;
- Regulatory requirements; and
- Commercial viability

But, are Islamic products any different?
- Financial products are designed to fulfil a need
- Retail products are more likely to be genuinely needed
- The end result of the product may be identical or very similar to conventional ones
- It is the structure and the process that determine whether the product is Shariah compliant or not (but this needs to be explained properly to the customers)

Hence, so far the differentiation factor is still missing from Islamic retail products.
Innovation in Islamic financial institutions can be achieved through any of the following financial engineering methods:

**Reverse Engineering**
- Used to replicate the effect of conventional products, while keeping the contractual framework in compliance with Shariah requirements.
- Focuses on the technical side of the product and does not give a priority to the ultimate outcome of the product and its impact on the welfare of the customers.

**Innovative Engineering**
- Requires the use of applied research and strong knowledge base in finance and Shariah to create a completely new product that is unique in nature, fulfils both the technical and financial requirements and at the same time achieves Maqasid Al-Shariah.
Based on the type of engineering method applied, Islamic financial products can be classified into the following types:

1. **Pseudo-Islamic product**
   - Designed using Islamic contracts to achieve the economic effect of a prohibited transaction
   - Conforms to the legal form only; does not fulfil the substance of Shariah or serve the social needs
   - Example: organized Tawarruq

2. **Shariah-compliant product**
   - Based on Islamic principles, serves to satisfy a need that is acceptable from Shariah point of view
   - Satisfies the form and substance of Islamic law, but fails to pay attention to social goals
   - Example: most current Islamic financial products fall under this category

3. **Shariah-based product**
   - Designed to “satisfy the form and substance of the Islamic law”
   - Contributes positively to achieving maqasid al-Shariah
   - Example: innovative products such as Mudaraba-based overdraft for businesses
**ACHIEVING MAQASİD AL-SHARİAH THROUGH PRODUCT DEVELOPMENT AND FINANCİAL ENGINEERING**

- In order to fill the gap between the theory of Islamic finance and the actual practice of the industry, *Maqasid Al-Shariah* should be incorporated in the processes of product development and financial engineering. This can be done by incorporating additional technical steps to the product development process as follows:

<table>
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<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Product objective(s) should be in line with all the essential Maqasid</td>
</tr>
<tr>
<td>2.</td>
<td>Concept selection process should include a benefits and risk analysis covering: customers &amp; the society, not only to the institution</td>
</tr>
<tr>
<td>3.</td>
<td>The nature and features of the product should be designed to achieve both the essentials and the desirables Maqasid</td>
</tr>
<tr>
<td>4.</td>
<td>Legal agreements should be fair and non-bias</td>
</tr>
<tr>
<td>5.</td>
<td>The benefits and risk analysis should be presented to the Shariah scholars as part of the product approval process</td>
</tr>
<tr>
<td>6.</td>
<td>Shariah audit: should report on whether the product has achieved the desired results of positive contribution towards achieving Maqasid Al-Shariah</td>
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Product Development Process

STAGE 1
Concept Development

STAGE 2
Product Definition & Analysis

STAGE 3
Product Implementation

STAGE 4
Product Launch

STAGE 5
Post Launch Monitoring & Review

Identifying the needs of the parties of the transaction

Identifying the underlying asset for the transaction

Full analysis of the transaction cash flow

Chose the most appropriate mode of Islamic finance to design the solution

Full understanding of the risk-return characteristics of the transaction

Investigate the possibility of adding credit enhancement tools
EXAMPLES OF SUCCESSFUL PRODUCT İNNOVATİON

✓ BUSINESS OVERDRAFT
✓ SUPPLY CHAİN FİNANCE
✓ LİQUİDİTY PRODUCTS FOR CENTRAL BANKS
ISSUES WITH TRADITIONAL MUDARABA

- Mudaraba is a partnership agreement whereby one party provides capital (Rab al Mal) and the other party provides labour (Mudarib) with the aim of making profit.

- Although Mudaraba is preferred from a Shariah point of view, it has some major issues that make banks reluctant to use it:

  - **Moral Hazards**
    - Fraud
    - Falsified financial disclosure

  - **Agency problems**
    - Aggressive risk-taking
    - Uninformed decisions

  - **Adverse Selection**
    - Only those who anticipate losses will approach the bank to share it with them

- This solution has been designed specifically to solve these issues whilst adhering to AAOIFI Shariah Standards.
BUSINESS OVERDRAFT BASED ON MUDARABA

- Shariah Compliant: based on Mudaraba
- Flexible: allows the client to utilise any amount of funds up to the agreed limit (Mudaraba Capital) as and when required to support its working capital
- Reduced risk: uses a set of control functions that reduce the inherent risks of the Mudaraba as a financing solution
- Improved protection: provides greater protection to the bank whilst using the most preferred Islamic financing structure
- Efficient: offers very low transaction cost (compared to other Islamic financial structures) and it can be utilised for multiple purposes including overdraft, working capital and project finance.
STAGE 1. The client and the bank agree on the profit sharing ratio and the expected profit rate.

STAGE 2. The client can use bank’s funds (Mudaraba capital) as and when required subject to the agreed limit.

STAGE 3. The bank sends a monthly statement showing the amount of Mudaraba capital utilised in the month and the advance profit payment payable by the client for the relevant month.

STAGE 4. Client makes the monthly advance profit payments on the relevant payment dates.

STAGE 5. The client sends his quarterly management accounts and a confirmation of the achievability of the expected profit rate, based on current business performance.

STAGE 6. At maturity, the client sends the final management accounts, the bank calculates the profit for the entire Mudaraba period and makes payment adjustment (if needed).
Shariah compliant, commercially viable & practical solution

- Accountancy system
- Past financial performance
- Projected accounts

Advance profit payments made on monthly basis (on account)

Quarterly Accounts (completed by the client & reviewed by the bank)

Strict eligibility criteria

On-going Monitoring

Stream of monthly income

Control to reduce potential losses

Profit calculation

Final calculation

Profit reserve amount that can help in stabilizing future profit payments & offset capital losses

Mudaraba profit is calculated from gross profit, not from the net profit

Sale of goods/services only above the cost price

CONTROLS
# RISK MANAGEMENT

<table>
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<tr>
<th>Risk mitigation tool</th>
<th>Benefits</th>
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<tr>
<td>Contractual obligation of not selling the goods/services for a price less than the</td>
<td>Minimises fraud, moral hazard and agency issues</td>
</tr>
<tr>
<td>cost, without written prior permission of the Rab al Mal</td>
<td></td>
</tr>
<tr>
<td>Calculation of Mudaraba profit from gross profit (turnover minus cost of sales)</td>
<td>Minimises fraud, moral hazard and agency issues</td>
</tr>
<tr>
<td>instead of net profit</td>
<td></td>
</tr>
<tr>
<td>Creation of a Profit Reserve for the Rab al Mal</td>
<td>Provides protection to Rab al Mal</td>
</tr>
<tr>
<td>(the difference between the bank’s actual share from the Mudaraba profit and</td>
<td></td>
</tr>
<tr>
<td>expected profit agreed with the client. This amount will be put as a reserve for</td>
<td></td>
</tr>
<tr>
<td>the benefit of the bank to be used only in case of loss or to top up the profit to</td>
<td></td>
</tr>
<tr>
<td>achieve the expected profit rate)</td>
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The solution can be used in providing different types of financing solutions in accordance with local laws and regulations of each market.
BENEFITS FOR THE CUSTOMER & THE BANK

- **Customer**
  - **Convenience** (agreed facility available for utilisation as & when required)
  - **Flexibility** (meets any financial needs of the business)
  - **Easy** (no complex procedures to follow)
  - **Competitive** (when compared with other Islamic products)

- **Bank**
  - **Moderate risk profile** (enhanced monitoring mechanism)
  - **Additional protection** (profit reserve amount)
  - **Regular income** (advance profit paid on monthly basis)
  - **Efficient** (low transactional cost)
Supply Chain

SUPPLY CHAIN FİNANCE (SCF)
SUPPLY CHAIN FINANCE (SCF)

Supply Chain Finance products are generally used to facilitate supply transactions carried out by SME clients.

Supply Chain Finance can be structured to service various scenarios, depending on many factors including the client's needs, the type of the transaction and the source of the goods.

The table below illustrates some variations of the product based on the type and source of goods.

<table>
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<tr>
<th>No</th>
<th>Variations</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Client owns the required goods</td>
<td>Musawama / Wakala</td>
</tr>
<tr>
<td>2</td>
<td>Client needs to purchase the goods from within the country</td>
<td>Wakala</td>
</tr>
<tr>
<td>3</td>
<td>Client needs to purchase goods from outside country</td>
<td>Musharaka LC</td>
</tr>
<tr>
<td>4</td>
<td>Client needs to manufacture the goods or construct a building</td>
<td>Istisna’</td>
</tr>
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Based on the needs of the client and the type of transaction, Supply Chain Finance can be offered as follows:

A- Supplier Finance: offered to SMEs supplying goods to major corporates. Such goods may be already owned by the SME or can be purchased from third party suppliers to be further sold to corporates clients.

B- Distributer Finance: offered to facilitate the trading relationship between the SMEs and their suppliers. The Bank can finance the SME’s purchases from their main suppliers to be further sold to retail customers.
NEW LIQUIDITY SOLUTIONS
The lack of proper liquidity products is not only hindering the growth of Islamic financial institutions but it also puts them at higher risks as their ability to liquidate their assets, when needed, is limited.

Central banks are not doing enough to offer their licensed Islamic banks proper solutions that fulfil their needs. A lot of central banks do not offer Islamic products, and most of those who do, offer one or two products only, which is usually far less than what on offer for conventional banks.

Therefore, there is a dire need for a solution that can allow central banks to offer proper liquidity solutions to their licensed Islamic institution.
NEW İNNOVATİVE LİQUİDİTY SOLUTIONS

LIQUIDİTY MANAGEMENT SOLUTIONS

Liquidity Absorption

- Islamic Treasury Bills “i-TB”
- Islamic Overnight Deposit “i-OD”

Liquidity Injection

- Intraday deposit “i-ILF”
- Deposit with charge over i-TB / Sukuk “i-Repo”
- Discounting of i-TB / Sukuk
THANK YOU

Q & A