



THE PAKISTAN CREDIT RATING AGENCY LIMITED

TITLE | **RATING METHODOLOGY FOR ISLAMIC FINANCIAL INSTRUMENTS (SUKUK)**

AUTHOR | **SHAHZAD SALEEM**

DESIGNATION | **CHIEF OPERATING OFFICER**

EMAIL | **shahzad@pacra.com**

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## Introduction

A sound financial ecosystem is critical for functioning of any economy. It is defined by interaction of providers of funds - savers, users of funds - borrowers, financial institutions, and regulators. This system ensures smooth flow of funds between savers and borrowers; wherein, financial institutions provide platform for their interaction. Regulatory oversight safeguards the sanctity of this system.

Like all systems, financial system has its own set of challenges. The most prominent being “Risk”; the risk that some participant may not be able to meet its commitments. All participants do their best to manage this risk to maximize their return. This is not possible unless we have independent information on this risk. Here comes expertise of rating agencies, providing independent opinion on credit risk. Flow of funds is only possible when the provider of funds has confidence that user of funds will be able to return these in a timely manner and as committed. Ratings help build this confidence. A higher rating means higher likelihood of timely repayment compared to a low rating.

Sukuk is an emerging financial instrument utilized by corporates, financial institutions, and governments across the globe to meet funding requirements. The ability to break this financial instrument (Sukuk) into small pieces that can be offered to multitude of investors makes it attractive for both investors and issuers. Structures may vary. However, underlying commitment remains timely redemption or repayment of the committed amount – original investment and profits. The Rating Methodology of Sukuk firstly bifurcates the Sukuk as Asset based or Asset backed. Each structure is assessed differently. In Asset based Sukuk, major focus is on credit risk of issuer of Sukuk while in Asset backed Sukuk, asset securitization structure is evaluated.

## Understanding Sukuk

Sukuk (plural of sakk – legal instrument), frequently referred as “Islamic bonds”, are certificates with each sakk representing a proportional undivided ownership right in tangible assets or a business venture (Accounting and Auditing Organisation for Islamic Financial Institutions - AAOIFI). Sukuk may take any mode of financing – Musharaka, Modarabah, Murabaha, Waqala, Salam, Istisna, Ijarah.

## Sukuk Rating

Sukuk Rating is an opinion on relative creditworthiness of an instrument to fulfil committed obligations. The credit risk to Sukuk holders is that the promise to honour financial obligations that interalia include rentals, profit sharing, buying back the assets, as and when due may not be fulfilled. Sukuk rating has benefits to both investor and issuer. For investor, rating quantifies the risk of timely honouring of financial risk relative to other Sukuks. For issuer, Sukuk rating has multitude of benefits: i) It supports pricing or assessment of required returns, ii) It increases accessibility to capital markets, and iii) increases confidence of investors. In many jurisdictions, Sukuk rating has been made mandatory.

Rating opinion follows a forward looking, through the cycle approach and is assigned after a rigorous analytical process. Sukuk Rating, in line with other financial instruments rating scales, follows nine alphanumeric categories ranging from AAA to C. “AAA” is the highest rating that can be assigned. This rating reflects highest credit quality of instrument reflecting extremely strong capacity for repayment. D is for “default” and reflects the factual state of default of Sukuk or issuer of Sukuk.

Sukuk Rating Scale		
Rating	Definition	Details
AAA	Extremely Strong	Highest credit quality. Lowest expectation of credit risk. Exceptionally strong capacity for timely payments
AA	Very Strong	Very high credit quality. Very low expectation of credit risk. Very strong capacity for timely payments
A	Strong	High credit quality. Low expectation of credit risk. Strong capacity for timely payment
BBB	Adequate	Good credit quality. Currently a low expectation of credit risk. Adequate capacity for timely payment
BB	Inadequate	Moderate risk. Possibility of credit risk developing. There is a possibility of credit risk developing, particularly as a result of adverse economic or business changes over time
B	Poor	High credit risk. A limited margin of safety remains against credit risk. Capacity for continued payment is contingent upon a sustained, favorable business, and economic environment.
CCC-C	High Default Risk	Very high credit risk. Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments.
D	Default	Obligations are currently in default.

## Sukuk Structure

From rating and risk perspective, the underlying structure of Sukuk is important. Sukuk are either Asset based or Asset backed. In an Asset based Sukuk, issuer sells certain assets to Sukuk holders with a promise to buy these back in an agreed manner. Although an asset is used in the structure, it may not drive the return to Sukuk holders and issuer's promise is not entirely depended on performance of underlying asset. Thus assessment of issuer's overall profile is critical to form a rating opinion. Asset backed Sukuks provide separately identified ring fenced assets to Sukuk holders. Here commitments to Sukuk holders are met through cash flows emanating from these assets.

Rating methodology for Asset based and Asset backed Sukuk follow different factors. Following analysis helps ascertain which methodology to utilize:

Distinguishing framework for Asset backed and Asset based structure		
Sukuk Structure	Asset Backed	Asset Based ( Issuer backed)
Transaction	Identified assets are transferred to a separate entity that makes the sale to Sukuk holders and raises funds	Assets are sold by Issuer to the Sukuk holders with a promise to buy back
Ownership of Asset	Legal ownership of assets with exclusive rights	Beneficial ownership of asset with liquidation rights at par with other creditors
Source of rentals/profit payments	Cash flows from underlying assets	Issuer's cash flows
Asset location	Separate entity carries the asset	Asset stays on Issuer's balance sheet
Credit Risk	Value and Performance of underlying asset	Performance of issuer



Event of Default	No recourse to Issuer	Recourse to Issuer
Recovery	Clawback/liquidation of identified assets	Sukuk holders' rights are similar to unsecured creditors
% of Sukuk Issue	10%	90%

## Rating Methodology | Asset based (Originated backed ) Sukuk

The credit risk in an asset based Sukuk terminates into the issuer of the Sukuk. Most often Asset based Sukuk are known as Originator backed Sukuk. Here, in case of default, Sukuk holders have recourse to issuer not the asset. Therefore Sukuk holders would not have any preferential position and would stand along with other unsecured creditors. This clearly means that to establish credit quality, rating agency would evaluate issuer's business model and supporting organizational structure, governance standards, risk management and technological framework, and performance trends. Evaluation of financial risk remains one of the critical rating factors to arrive at Sukuk rating opinion.

The key risk elements are divided into three qualitative – Ownership, Governance, and Management - and two quantitative - Business and financial risk – factors. Analytical assessment of each factor is conducted in the following manner:

### Qualitative Factors:

Qualitative risk profile is assessed by soliciting information from client and most of the time having a direct interaction with sponsors, management, and/or directors and conducting a visit to plant site and head offices.

<b>Ownership</b>	
Key assessment areas	
Business Acumen	Owner's business understanding and knowledge of market dynamics
Sustainability	Formal succession plans and clarity of role amongst family members
Financial support	<ul style="list-style-type: none"> <li>▪ Ability of sponsor to arrange funds or find alternate resources when in need</li> <li>▪ Willingness of sponsor to support the issuer measured by looking at shared brand name, size of investment versus other investments of sponsors</li> </ul>
<b>Governance</b>	
Key assessment areas	
Board Structure	<ul style="list-style-type: none"> <li>▪ Number of board members relative to size and complexity of business operations.</li> <li>▪ Independence is another key factor. Independence of chairman is considered a good governance practice.</li> <li>▪ Level of delegation of board oversight to committees of the board</li> </ul>
Members Profile	Qualification and experience of board members
Board Effectiveness	Number of board meetings, attendance and level of active participation
Financial Transparency	Composition of audit committee, quality of internal and external auditors, and public disclosure of the issuer



**Management and Controls**

Key assessment areas

Organizational Structure	Complexity or Simplicity of organizational structure relative to organizational and business needs, adequacy of staffing, cohesiveness amongst management team
Management Profile	Qualification and relevant experience of management team, market reputation and integrity
Stability	High or low staff turnover from the core team, key man risk – redundancy and succession plan
Operational Risk	Policies and procedures, risk management framework, technology – plant and machinery, MIS reporting

**Quantitative Factors:**

Quantitative factors are more focused towards analysing economic conditions, industry dynamics, regulatory framework, entities own performance - through financial statements, projections, financial strategy and cash flow analysis. This is very much numbers driven:

**Business Risk**

Key assessment areas

Industry	Macroeconomic analysis, classification of business cycle, demand and supply dynamics of products, cost structure relative to other players, competitive positioning in the industry, regulatory framework
Performance	Margins and profitability, Sources of profitability –volume vs price, Diversification from each dimension – product , customers , geographical
Strategy	Future plans of the company, expected developments in industry and view on economic indicators

**Financial Risk**

Key assessment areas

Financial Strategy	Working capital management – Inventory, trade receivables, trade payables, financing of working capital , leverage philosophy of management, asset liability mismatch
Cash flow analysis	Sources of cash flows – core business, dividends, gain on sale of assets. Stability is also critical. Trend of cash flow growth and sustainability
Adequacy	Adequacy of working capital management and cash flows to cover ongoing business operations and ensure effective implementation of strategy Cushion against net trade assets, Interest and debt coverage, debt payback etc

All these factors are assessed thoroughly to form an opinion on credit risk of the issuer. Proposed Sukuk is analysed to assess the objective of raising funds, the tenor, pricing, and availability of cash flows from issuer’s overall business to cover the committed repayments.

**Rating Methodology | Asset backed Sukuk**

In Asset backed Sukuks the most critical aspect to assess is the security or asset that dominates the structure of the issue. This is due to the reason that Sukuk holders would have the “underlying asset” as the only recourse available in case of non-payment. Structured finance methodology is utilized to assess or rate such type of Sukuks. In case of deficiency in cash flows, Sukuk holders retain complete recourse to underlying assets. However, they have no recourse beyond those assets to underlying issuer. Establishing the quality of expected cash flows and their sufficiency to meet commitments is



critical. Quality primarily focuses on likely changes in cash flow pattern in response to entity specific, industry wide, or economic changes. The level of rating would be dependent on quantum and sustainability of coverages against the commitments during Sukuk life. We also consider potential of recovery from underlying assets in case of default

**Asset backed Sukuk - Rating Factors**

Key assessment areas	
Quality of Expected Cash flows - Asset risk	<ul style="list-style-type: none"> <li>▪ Underlying Assets are unique and so are the cash flow ; this requires analysis of ability of assets to generate cash flows</li> <li>▪ Likely changes in cash flow pattern in response to economic, industry, and entity specific factors</li> <li>▪ Data heavy analytical approach; analysis of past trends and future projections of cash flows from securitized assets</li> </ul>
Sufficiency of Expected Cash flows - Payment risk	<ul style="list-style-type: none"> <li>▪ Adequacy or timing of cashflows vis-à-vis payment terms</li> <li>▪ Quantum of cash flows to meet commitments – full cash flows or carved out cash flows</li> <li>▪ Evaluation of payment structure – right and priority of investors to receive cashflow</li> <li>▪ Availability of credit enhancements</li> </ul>
Potential of Recovery	<ul style="list-style-type: none"> <li>▪ Legal structure for sale and realization of Sukuk assets</li> <li>▪ Loss in case of default</li> </ul>

Globally, Asset based structures are most preferred owing to ease in structuring of such instruments and expertise available to structure and market these Sukuks. Around 90% of Sukuks issued globally are asset based. Generally high rated issuers can easily raise finances by issuing Asset based Sukuk. Asset backed Structures are more preferred by those issuers where intention is to isolate issuer’s own financial strength from new financing. This facilitates attracting investors particularly for relatively weak issuers, but having some established asset (with respective cash flows) that can be carved out.

**Case Studies | Sukuk Issued by Pakistani Corporates**

Case Study I	
<b>Issuer Name</b>	Engro Corporation Limited
<b>Business</b>	Holding Company
<b>Sukuk Size</b>	PKR 4,000mln
<b>Listed</b>	Listed at Pakistan Stock Exchange (Retail brand –Engro Islamic Rupiya)
<b>Purpose of Issuing Sukuk</b>	Engro Corporation is holding company for its subsidiaries. The purpose of this Sukuk was to : <ol style="list-style-type: none"> <li>i. pay-off some of the conventional liabilities</li> <li>ii. meet funding requirements of the subsidiaries of the Company in a Shariah compliant manner and,</li> <li>iii. finance new projects in a Shariah compliant manner</li> </ol>
<b>Investor Mix</b>	Retail, corporate, and financial institutions
<b>Issuance</b>	July 2014



<b>Brief Structure</b>	Sukuk holders have assumed proportionate ownership in Pool of assets which consists of assets leased (Identified plant & machinery of Engro Eximp) to Engro Corporation and Murabaha sale transactions (Milk, Rice or any other raw material to be purchased). The profit accruing from the lease and Murabaha transactions will be distributed to the Sukuk holders on profit payment dates.
<b>Rating of Sukuk</b>	AA+
<b>Profile of issuer</b>	Engro is Pakistan's leading conglomerate. It has significant interest in Pakistan's fertilizer, food, and energy segments. It has evolved an efficient holding structure. Engro Corporation is the parent with separate subsidiaries for each line of business.
<b>Ownership</b>	Engro Corp is majority owned (above 40%) by Hussain Dawood group, an established business family of Pakistan.
<b>Governance</b>	The group puts emphasis on nurturing good governance practices. Boards of its different companies are characterized by diversity and depth of experience profile of its members
<b>Management</b>	Engro follows well laid structures. It has seasoned management teams with robust profiles for their respective assignments.
<b>Business Risk</b>	The group's fertilizer business is having stellar performance. This emanates from consistent availability of key raw material (natural gas) in recent periods. Its carries aggressive market penetration stance in its food business. Hence, though profitable, volume focus keeps bottom line contribution low. Energy generation business provides stable income. It has few struggling segments. With enhanced profitability and diverse asset slate the group looks out for growth.
<b>Financial Risk</b>	The group faced financial stress few years back owing to debt driven significant expansion in its fertilizer business. Here cash flows took more than expected time to yield decent coverages. Now it enjoys decreasing leverage and robust financial cushion

<b>Case Study II</b>	
<b>Issuer Name</b>	Pakistan Mobile Communication Limited (Mobilink)
<b>Business</b>	Telecommunication
<b>Sukuk Size</b>	PKR 6,900mln
<b>Listed</b>	Not currently listed. However, issuer has option of listing the Sukuk over the counter
<b>Purpose of Issuing Sukuk</b>	To finance on-going rural capex requirement of the company
<b>Investor Mix</b>	Mainly financial institutions – both conventional and Islamic
<b>Issuance</b>	December 2014



<b>Brief Structure</b>	Pakistan Mobile Communication Limited (PMCL) Sukuk is Pakistan's first airtime based Sukuk. This airtime Sukuk is backed by underlying ownership in airtime - prepaid cards. The repayment of the Sukuk will be through sale of prepaid cards of PMCL. Where the Investment Agent, on behalf of the financiers has agreed to purchase airtime from PMCL against payment of the purchase consideration. PMCL will continue to sell these prepaid cards on behalf of the Investment Agent according to the due payments.
<b>Rating</b>	AA-
<b>Profile of issuer</b>	Pakistan Mobile Communications Limited (Mobilink) is the largest cellular telecommunication service provider in Pakistan. It enjoys ~30% market share.
<b>Ownership</b>	The ultimate sponsors of the company are Vimpelcom (a Russian origin group) with 51% holding.
<b>Governance</b>	The seven-member Board of Directors (BoD) is majorly composed of representatives from Vimpelcom. The board comprises highly qualified and experienced professionals holding senior positions in group companies.
<b>Management</b>	Mobilink has an experienced management team with requisite background and qualification. It has witnessed changes at the positions of CFO, CCO and CTO in CY15. However, the parent now retains the ability to draw talent from a global pool.
<b>Business Risk</b>	During CY15, PMCL's top-line largely remained the same, with slight improvement in ARPUs. Going forward, the company would continue its efforts to strengthen its margins. Merger with Warid (the smallest of Pakistan's five operators telco industry) is in process. This should bring cost efficiencies, increase market share, and add 4G services to PMCL's product portfolio.
<b>Financial Risk</b>	The company maintains reasonably good cash conversion ratio; though it has declined considerably YoY (FCFO adjusted for WC/sales Sep15: 24%; Sep14: 46%) due to increase in working capital requirements. Free cash flows of the company witnessed decent improvement; resultantly improvement in coverages. The company continues to enjoy negative net cash cycle (Sep15: -73days) mainly benefiting from stretched creditors' days as agreed with the suppliers. PMCL's capital structure, though improved, remains leveraged and is expected to increase further post-merger (Debt/Debt+Equity Dec16(E): 74%; Sep15: 56%)

## Conclusion

**Islamic Finance** | Significant growth potential. World Islamic financial market assets are approximately US\$1.81trn and as per some estimated these are expected to almost double by 2020 to US\$ 3.25 trn.

**Sukuk** | Instrument of choice to broaden investor base. Investors with restriction or cap on conventional instruments are encouraged by availability of Sukuk issues – both in primary and secondary markets.

**Sukuk Issuance** | Concentrated in few regions [Malaysia and GCC]. This is due to relatively higher Islamic to conventional debt ratio of these countries.





**Risk Disclosure** | gradually increasing rating penetration. Increasing regulatory requirements for risk and rating disclosure.

**Rating Asset backed Sukuk** | Analysis of cash flows emanating from underlying assets

**Rating Asset based Sukuk** | Analysis of issuer – ownership, governance, management, business and financial risk

**Recovery** | Questions remain regarding sukuk’s treatment in bankruptcy ; the interaction between religious and secular laws make any means of redress more uncertain and less straightforward

**Loss given default** | With recourse to assets in Asset backed Sukuk, recovery should be high; Sukuk holders loss (being at par with unsecured creditors in case of Asset based Sukuk) will be high

### Annexure: Islamic Modes of Financing

Each asset backed or asset based Sukuk can follow different modes of Islamic financing. Since 2001 Murabaha based Sukuk dominate the total Sukuk issued around the globe. Brief explanation of each mode of financing follows as:

Mode	Objective	Details
Musharaka	Partnership in business	A relationship for sharing of profits and losses in the business. Islamic bank provides funds, which are mixed with the funds of the business enterprise. All providers of capital are entitled to participate in management, but not necessarily required to do so. The profit is distributed among the partners in pre-agreed ratios, while the loss is borne by each partner strictly in proportion to respective capital contributions.
Mudarabah	Partnership in business	One party provides the funds while the other provides expertise and management. The latter is referred to as the Mudarib. Any profits accrued are shared between the two parties on a pre-agreed basis, while loss is borne only by the provider of the capital.
Murabaha	Working Capital Financing Inventory	The client (obligor) requests the bank (financer) to purchase certain goods for it. The bank then sells goods to the client on credit. The bank does that for a definite profit over the cost, which is stipulated in advance.
Waqala	Working Capital Financing Receivable	An arrangement whereby one party entrusts another party to act on its behalf. Its akin to an agency arrangement. A principal (the financer) appoints an agent/wakeel (the obligor) to invest funds provided by the principal into a pool of investments or assets and the wakeel lends it expertise and manages those investments on behalf of the principal for a particular duration, in order to generate an agreed upon profit return.





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Salam	Short term financing	On spot buying of underlying assets and sale of asset to finance at a later date  Obligor purchases the asset at a later date.
Istisna	Project financing	Advance payment of capital cost of the project by financier. Obligor reimburses the capital cost plus profit on project.
Ijarah	Lease financing	Purchase of tangible assets at a pre-agreed price with permission to use the asset against rentals. Obligor pays fixed periodic rentals



<p>Key References</p>	<ol style="list-style-type: none"> <li>1. State Bank of Pakistan</li> <li>2. Zawya.com</li> <li>3. Sukuk.com</li> <li>4. Islamic Financial Services Board</li> <li>5. Al-Monitor.com</li> <li>6. Islamic banker.com</li> <li>7. iifm.net</li> <li>8. financierworldwide.com</li> <li>9. engroislamicrupiya.com</li> <li>10. worldbank.org</li> <li>11. giesummit.com</li> <li>12. PACRA database</li> <li>13. ICM Lectures</li> </ol>
<p>About Authors</p>	<p><b>Shahzad Saleem</b>, Chartered Accountant and CFA Charter Holder, is a seasoned professional with 20+ years of experience. His forte is risk – identification, evaluation, management, monitoring. Being part of PACRA since 2000, he has a leading role in the development of credit rating industry in the country. Mr. Saleem has participated in rating opinions involving a large universe of Financial Institutions and Corporations. This has given depth and breadth to his knowledge. With a belief in thought leadership, he has strong insight into dynamics of rating business of over a decade. Shahzad is an apex member of PACRA’s Rating Committee. In this capacity he regularly meets leadership of a diverse set of entities in PACRA’s universe.</p> <p><b>Samiya Mukhtar</b> is CFA Charter holder and has around 10 years of analytical experience. She has led more than a hundred rating assignments. She has a strong urge to keep herself abreast of key national and international developments impacting ratings is her passion. While heading a key department at PACRA, her core responsibility to create rating awareness in domestic market</p>
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