



Liquidity and Risk Considerations for Islamic Financial Institutions

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Agenda

1. Credit overview of IFIs
2. Asset Considerations: Limitations lead to inefficiency and concentration
3. Funding imbalances: ALM is challenging

Introduction

Liquidity and ALM are a vital function and key in ratings

Why?

Banks, be they Islamic or conventional, are economic entities specialized in risk treatment and maturity transformation: banks tend to fail and disappear not so much because of credit risks, but **more because of operational and liquidity risks**

Such risks are more diverse, more complex, and more interdependent than ever before; **crises are more sudden, plus numerous, and more damaging**

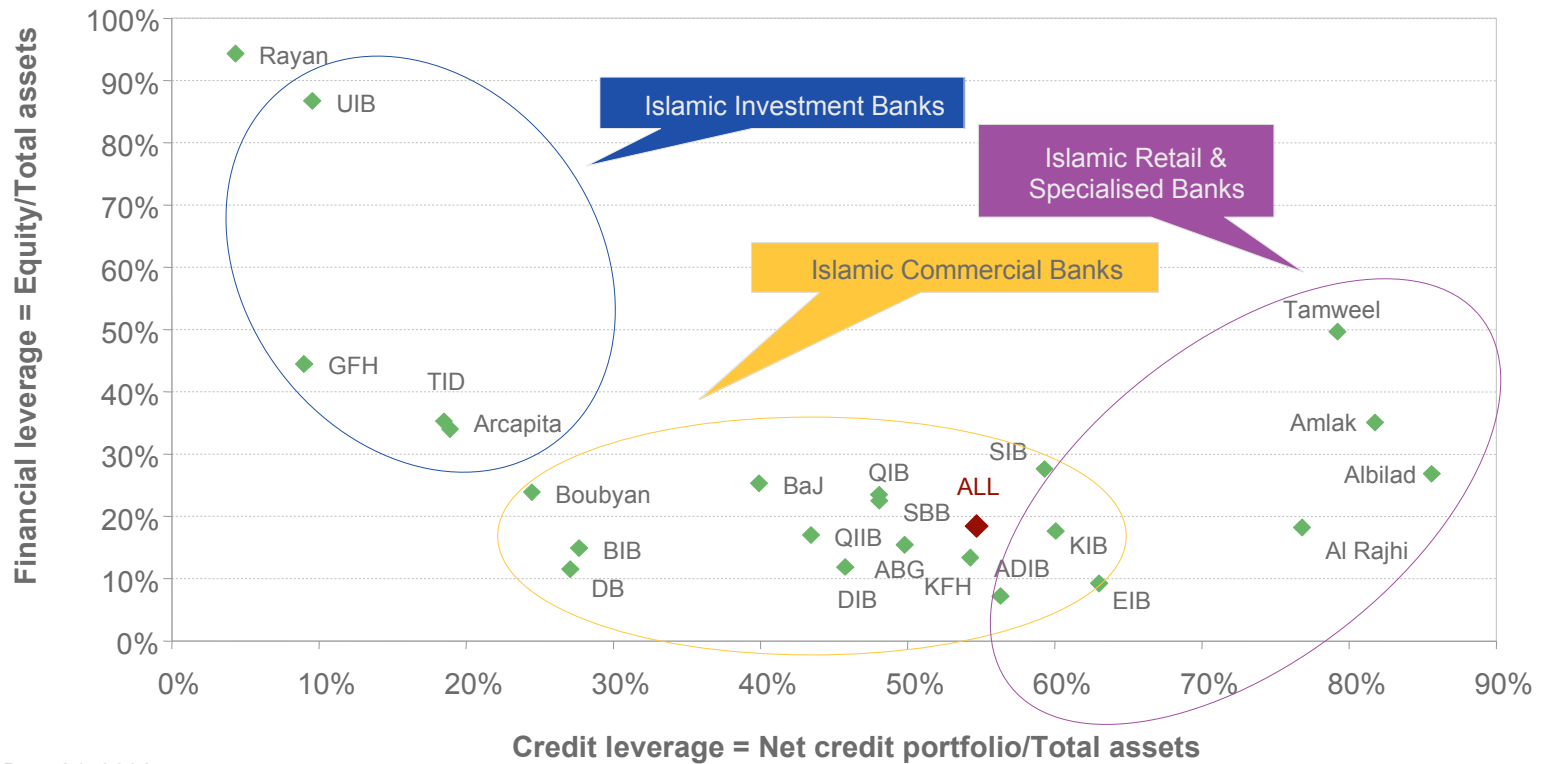
There is no capital charge for liquidity risks, even under Pillar 2 (left to the discretion of the regulator): no matter how much capital, when **liquidity** dries up, **confidence** also tends to fade away... although not necessarily in that order

Key Moody's Credit Factors

Fundamental Credit Conditions (Standalone Credit Strength)	Economic Environment	How sensitive are banks to continued economic headwinds (e.g., real inflation / deflation trends, fiscal / monetary policy)?
	Capital & Asset Quality (scenario analysis)	Is current capitalisation adequate to shelter against a severe scenario (stress test) and meet Basel III capital requirements?
	Funding & Liquidity	Do balance sheet liquidity and the depth of equity / debt markets allow banks to adapt quickly to prolonged market access interruptions?
	Profitability	Do core business lines and balance sheet characteristics allow for sustainable profitability?
	Government Assistance Already Provided	Is continued government support needed to sustain banking system, and are there implications related to any repayment of government assistance (or conditional restructuring)?
Support Assumptions (LT Deposit Ratings)	Government Capacity to Support	Does government have the fiscal capacity to provide support in times of stress?
	Willingness to Provide Support	Is political momentum in favour of or against support?
	Flexibility to Impose Losses on Creditors	What impact do reforms of resolution powers and bail-in concepts have on banks' supported debt ratings? Can similarly situated creditors be treated differently?

Leverage of Islamic Financial Institutions in the GCC

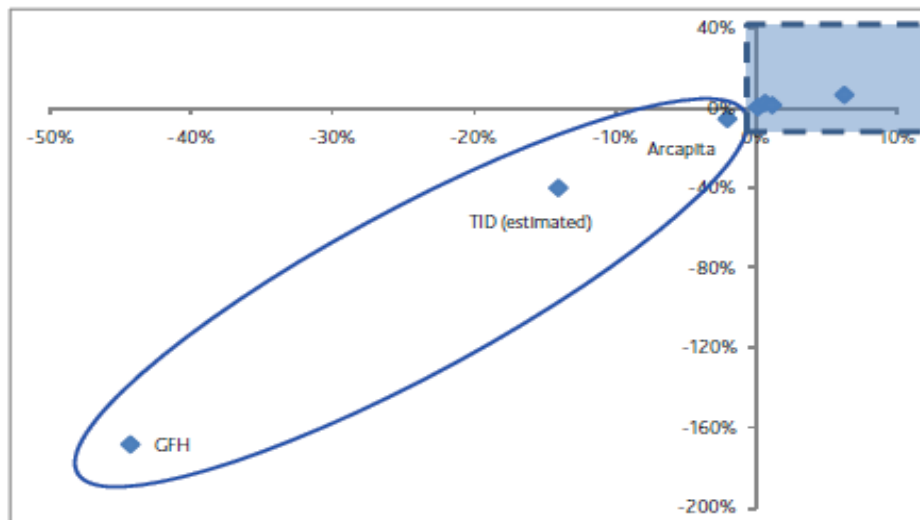
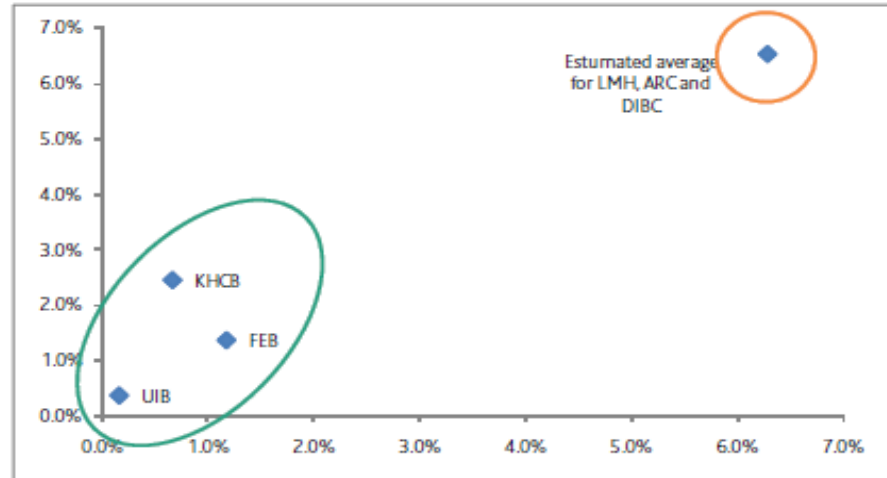
Credit vs. Financial Leverage Ratios for Islamic Banks Under Review (2006)



At Dec. 31, 2006

Asset/Liability Driven Distress of 2009

Post-crisis profitability of SCIBs (2009)





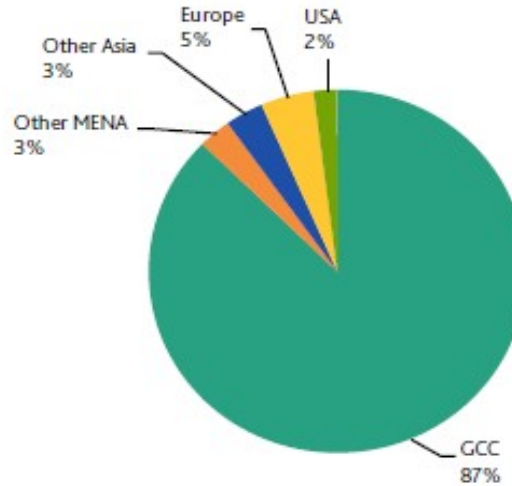
**Asset Considerations:
Limitations lead to
inefficiency and
concentration**



Concentration Risks make IFIs More Vulnerable

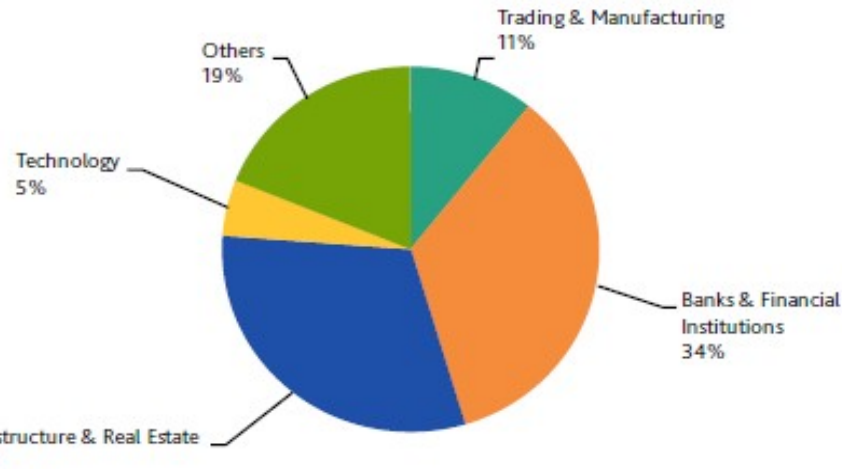
Geographic and sector concentration risks

Geographic concentration in 2007



Pool : GFH, TID, UIB, KHCB

Sector concentration in 2007



Pool : GFH, Arcapita, TID, UIB, KHCB

Asset Concentration

The limited scope of eligible asset classes creates sector and borrower **concentration** risks. Equity, real estate, sukuk (shortage of asset backed)

Full **maturity range** of high quality sukuk, short (3mths) to long term (30 yrs) needed both for investment and repo facilities. Without such instruments dynamic asset allocation and balance sheet management is very difficult

	A	B	C	D	E
Credit Risk Concentration*					
Borrower Concentration**	Top 20 group exposures are the worse of < 50% of Tier 1 OR < 100% of pre-tax pre-provision income (PPI)	Top 20 group exposures are the worse of 50%-80% of Tier 1 OR 100%-200 of PPI	Top 20 group exposures are the worse of 80%-100% of Tier 1 OR 200%-350% of PPI	Top 20 group exposures are the worse of 100%-200% of Tier 1 OR 350%-750% of PPI	Top 20 group exposures are the worse of > 200% of Tier 1 OR > 750% of PPI
Industry Concentration	Largest single sector exposure is < 50% of Tier 1	Largest single sector exposure is 50%-200% of Tier 1	Largest single sector exposure is 200%-350% of Tier 1	Largest single sector exposure is 350%-500% of Tier 1	Largest single sector exposure is > 500% of Tier 1

Islamic Securitisation can both increase sukuk supply and remove excess asset concentrations from balance sheets but under-utilised due to cost and complexity

Asset liquidity

Despite key efforts of CBB and Bank Negara, still a **shortage of liquid instruments for IFIs** to place excess cash – more illiquid than conventional peers. Conventional FIs have many instruments available with varying liquidity and risk profiles

Many **assets are illiquid** (real estate, mudarabah, etc) leading to losses when sold in depressed markets (Shari'ah compliant investment banks suffered most)

Short-term **interbank Murabaha relatively costly** (commodity brokers, transaction overhead, etc). Options limited hence trade off between profitability and liquidity. Shortage of highly rated sovereign sukuk

However borrowers often pay a '**Shari'ah premium**' for Islamic banking this can cover the additional cost



**Funding Imbalances:
ALM is a challenge**



Moody's Investors Service

Imbalanced Funding Continuums at IFIs

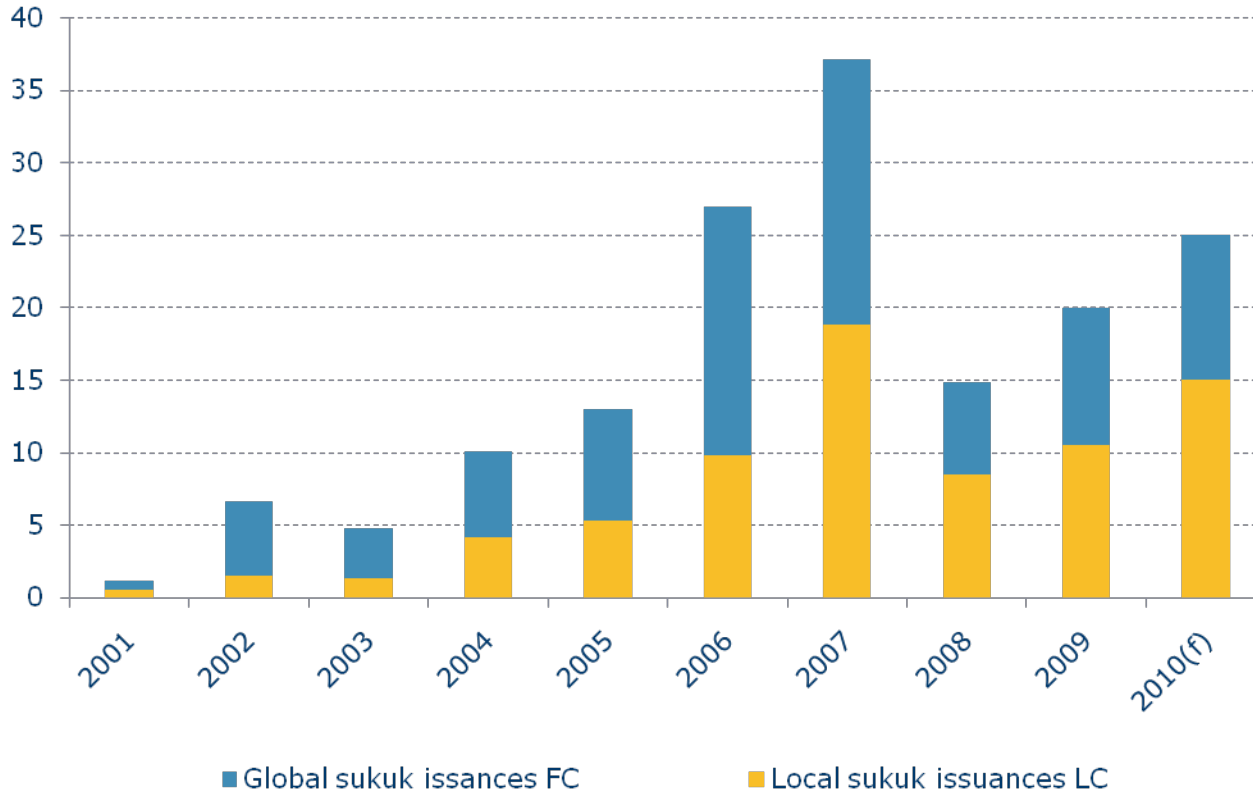
Generally, Islamic banks are well entrenched into the retail market: **deposits collected on this market are granular (diversified) but with short maturities**, which creates **risks of maturity mismatches when asset tenors lengthen**

Remaining resources (liabilities), mainly made of **interbank and corporate deposits, are often highly concentrated**, because Islamic banks remain small

That's why **sukuk** constitute an increasingly popular alternative funding source for Islamic banks: **longer maturities + embedded granularity**

Overall, **IFIs funding continuums remain imbalanced**: limited supply of Shari'ah-compliant ST paper (CDs, CPs), limited access to subordinated debt, almost no Islamic hybrids issued so far. Need for risk free (Aaa) sukuk for liquidity and repo

Sukuk: Not Enough Supply to Support IFI Liquidity

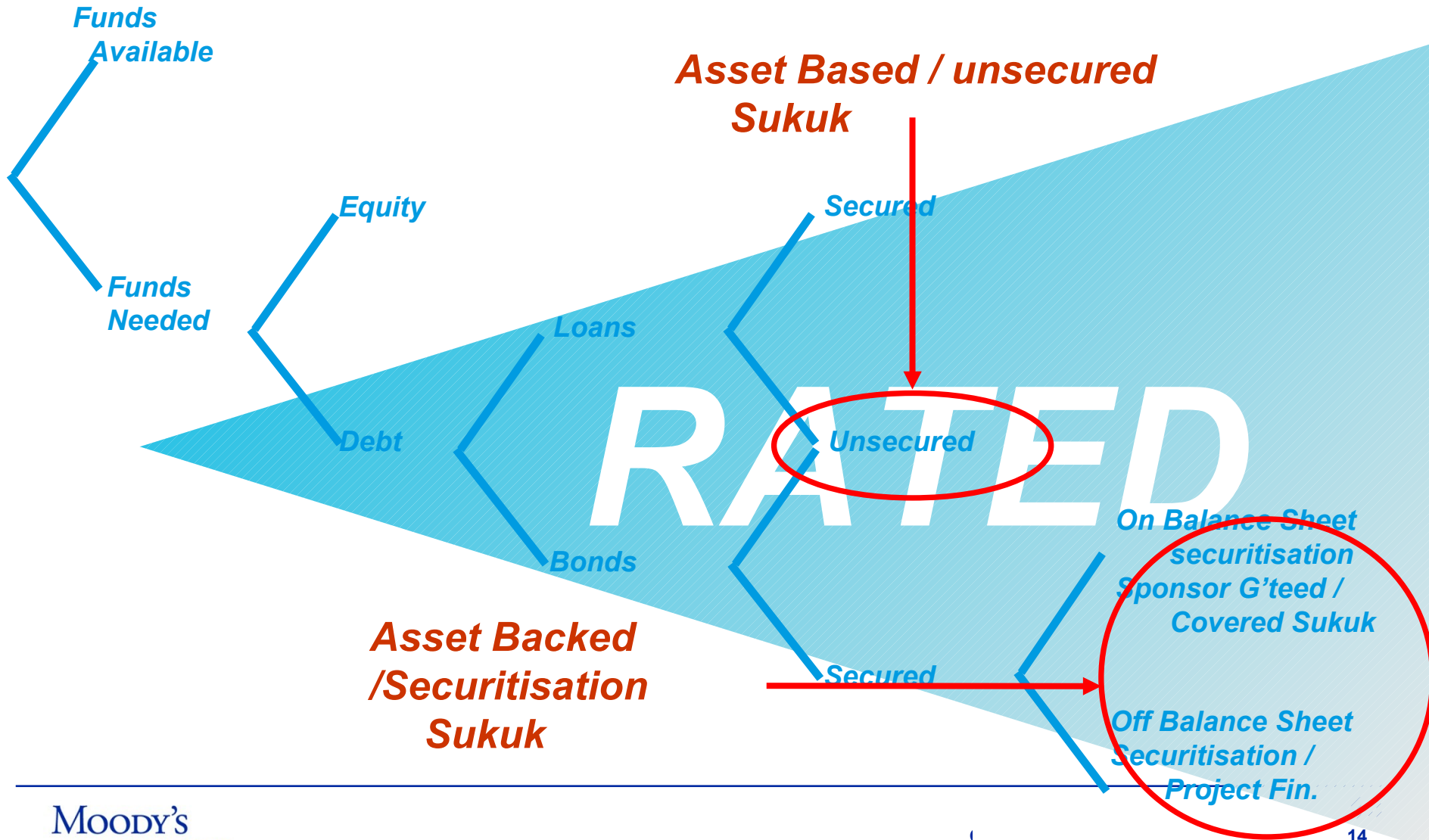


Volumes estimate of \$150 bn by 2012 – not enough

Buy-and-hold - limited trading

Asset-Backed/Based Shariáh compliance issues

Where are Sukuk Bonds?



Liquidity Management - Ability to finance under stress

Moody's believes that **banks fail first and foremost because of illiquidity.**

When the FI runs out of money, it can no longer function. Strong liquidity can help an otherwise weak institution to remain funded during difficult times

We regard liquidity risk as a function of the unique structure of a bank's assets and liabilities. Moody's analysis of bank liquidity risk management starts with an assessment of the **degree to which a bank's illiquid assets are funded by core liabilities that are stable (primarily deposits, long-term sukuk and equity)**

Banks with stable **core funding in excess of their illiquid assets generally face low liquidity risk.** Liquidity risk increases to the extent that illiquid assets are being funded by more confidence-sensitive funding sources such as short-term capital markets funding or interbank funding

Liquidity Management - Ability to finance under stress

Access to market funding (including interbank mudarabah, bank notes, bonds, and derivatives) is not typically based on long-term relationships but rather on perceptions of creditworthiness/confidence which make access vulnerable

We assess the rigor of a bank's liquidity monitoring system, the diversification of its funding, as well as its contingency planning and liquidity stress testing.

And we take into account its funding profile and overall risk management – in particular with regard to liquidity risk arising from new and complex instruments.

<i>Liquidity</i>	<	>=	<	>=	<	>=	<	>=
(Market funds - Liquid Assets) % Total Assets	-10%	-10%	0%	0%	10%	10%	20%	20%
Liquidity Management score from Risk Positioning	A	B		C		D		E

BFSR Emerging Market Scorecard

			Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	
DEVELOPING MARKETS	Qualitative Factors	70%	Franchise Value	10%	7%	Market share and sustainability	25%	1.8%
						Geographical diversification	25%	1.8%
						Earnings stability	25%	1.8%
						Earnings diversification	25%	1.8%
		Risk Positioning	30%	21%	Corporate Governance	16.7%	3.5%	
					Controls & Risk Management	16.7%	3.5%	
					Financial Reporting Transparency	16.7%	3.5%	
	Regulatory Environment	30%	21%	Credit Risk Concentration	16.7%	3.5%		
				Liquidity Management	16.7%	3.5%		
	Operating Environment	30%	21%	Market Risk Appetite	16.7%	3.5%		
				Regulatory Environment	100%	21.0%		
	Financial Factors	30%	Profitability	15.75%	5%	Economic Stability	33.3%	7.0%
						Integrity and Corruption	33.3%	7.0%
Liquidity			15.75%	5%	Legal System	33.3%	7.0%	
					(Market funds - Liquid Assets) % Total Assets	44%	2.1%	
Capital Adequacy			15.75%	5%	Liquidity Management	56%	2.7%	
					Tier 1 ratio (%)	50%	2.4%	
Efficiency			7%	2%	Tangible Common Equity % RWA	50%	2.4%	
	Cost/income ratio	100%			2.1%			
Asset Quality	15.75%	5%	Problem Loans % Gross Loans	50%	2.4%			
			Problem Loans % (Equity + LLR)	50%	2.4%			
Lowest Score	30%	9%	Assigned to lowest combined financial factor score	100%	9.0%			

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