

JCR-VIS Portfolio Return Assessment Factor[©]

CONCEPT PRESENTATION

Do absolute returns of funds portray a true picture of Fund Managers performance?

No, we believe that:

- Volatility in returns; and
- Comparison against a yardstick

must also have a bearing on the overall performance.

With this objective, JCR-VIS has developed an analytical model to gauge performance record of all AMC's operating in the market.

Objective:

- Assess performance of Asset Management Companies' (AMCs) on the basis of consistency in maximization of returns with controlled risk on funds invested in all asset classes (categories) over a given period of time comparable against a benchmark.
- Calculate JCR-VIS Portfolio Return Assessment Factor© (PRAF)

Basis of inclusion:

- AMCs = All having performance history of 5 years and more
- Funds = that, on an aggregate basis, constitute 70% or more of total AMC AUMs

Benchmarks at Funds level:

- For all conventional funds = Annualized Pakistan Government Bond Revaluation Rates (PKRV)
- For all Islamic funds = Annualized GoP Ijarah Sukuk Rates
- *'Yield Periods' for both benchmarks are matched for comparability*

Benchmark at Category level:

- For all funds = 70th percentile of PRAF© of all the funds included in a category

Performance Parameters:

- Total Period = Last 5 calendar years
- Fund Returns = Annual, for each calendar year
- Benchmark Returns = Annual, for each calendar year
- Fund Risk = Dispersion in monthly returns (Standard deviation)
- Benchmark Risk = Dispersion in monthly returns (Standard deviation)¹

Performance Weights:

- For funds within the category = Fund's AUMs vs. Category AUMs
- For categories within the AMC = Category AUM's vs. AMC AUMs
- For AMCs over the years = As below

Most Recent Year	Year 2	Year 3	Year 4	Year 5
40%	30%	20%	7%	3%

¹ Included only if benchmark(s) are not based on returns of GoP guaranteed issues.

Calculation Methodology:

Calculation Level	Factor Names	Definition/ Formulae
For each fund each year	A	Annual return of the fund (%)
	B	Annual return of the benchmark (%)
	C	A / B
	D	Standard Deviation in monthly returns of the fund (%)
	E	Standard Deviation in monthly returns of the benchmark (%)
	F	D / E
	G	End-of-year Fund AUMs
	H	Total End-of-year AMC AUMs in the category
	I	$(C / F) * (G / H)$

Calculation Methodology:

Calculation Level	Factor Names	Definition/ Formulae
For each category each AMC each year	J	$\sum (I)$
For each category each year	K	70 th percentile of (I) of all funds in the category
For each AMC each category each year	L	J / K
For each AMC each year	M	Total End-of-year AMC AUMs
For each AMC each category each year	N	$L * (H / M)$
For each AMC each year	O	$\sum (N)$
For each AMC	PRAF[®]	Weighted Average of (O) for the last 5 years

PRAF[©] - A Component of JCR-VIS' AMC Management Quality Ratings (MQR)²:

- PRAF[©] carries a weight of up to 40% in the overall MQR of an AMC;
- Weight may vary based on the traceable history of the AMC and the fund management team;
- All AMCs being rated are ranked on the basis of PRAF[©];
- AMCs with consistently high level of PRAF[©] qualify for higher MQR.

¹ JCR-VIS' methodology on AMC Management Quality Ratings can be accessed at <http://jcrvis.com.pk/docs/AMC-Methodology-201603.pdf>

Relative Market Participation Ratio:

- Market position, brand and franchise strength are key factors that represent a Company's ability to develop and sustain competitive advantages in the market it operates in. A company's relative and absolute size within a given market is highly correlated with its market position and brand, although absolute size becomes less meaningful the more concentrated a marketplace is.
- JCR-VIS calculates a 'Relative Market Participation Ratio' (RMPR) in all financial sectors and generally applies it to determine a rating cap based on various levels of participation. Companies with higher relative participation tend to be rated higher, however, exceptions may occur under specific circumstances or due to existence of overriding factors.
- RMPR for Asset Management Companies is calculated on a given point in time as:
 - **(Total AMC AUMs / Average industry AUMs)**

Relative Market Participation Categories & MQ Rating Caps:

	Large	Medium	Small
RMPR	2.0x or more	1.0x to 1.99x	Up to 0.99x
Maximum MQ Rating Cap	AM1	AM2++	AM2

AMC-wise Relative Market Participation Ratio (OE AUMS):

Asset Management Company	End-of-Period RMPR			
	CY16	FY16	FY15	FY14
National Investment Trust Limited	3.80	4.22	4.78	3.95
Al Meezan Investment Management Limited	3.26	3.42	3.22	3.10
NBP Fullerton Asset Management Limited	2.96	2.47	2.00	2.35
UBL Fund Managers Limited	2.13	2.36	2.13	2.22
MCB-Arif Habib Savings and Investments Limited	1.58	2.13	2.48	2.19
HBL Asset Management Limited	1.14	1.36	1.33	1.65
ABL Asset Management Company Limited	1.12	1.30	1.44	1.57
Alfalah GHP Investment Management Limited	0.96	0.95	0.98	0.62
Atlas Asset Management Limited	0.94	0.94	0.87	0.73
Lakson Investments Limited	0.52	0.64	0.60	0.62
JS Investments Limited	0.43	0.42	0.46	0.78
Faysal Asset Management Limited	0.28	0.46	0.44	0.49
Primus Investment Management Limited	0.26	0.47	0.37	0.45
Askari Investment Management Limited	0.26	0.46	0.46	0.56
AKD Investment Management Limited	0.15	0.16	0.13	0.13
Habib Asset Management Limited	0.10	0.14	0.15	0.28
Pak Oman Asset Management Company Limited	0.06	0.06	0.03	0.02
BMA Asset Management Company Limited	0.01	0.02	0.03	0.04
First Capital Investments Limited	0.01	0.01	0.02	0.02