



Actuarial Services (EA) Ltd

PENSION SCHEMES INVESTMENT
PERFORMANCE SURVEY
30th September 2018

Introduction

The ACTSERV Pension Schemes Investment Performance Survey, prepared by Actuarial Services East Africa Limited (ACTSERV), this is a survey on the investment performance of pension schemes in Kenya under segregated funds. In the third quarter of 2018, a sample size of 418 schemes with a total fund value of about Kshs. 740 Billion were analysed.

Purpose of the Survey

1. The Trustees and Fund Managers will be able to compare the returns/performances of their respective schemes with others that are similar in terms of size and risk appetite.
2. The Trustees and Fund Managers will be able to identify which asset categories performed better and compare the results of their scheme's asset categories with those of schemes that are similar in size and risk profile.
3. The survey compares the overall returns and the returns in different asset classes within respective risk profile categories.

About ACTSERV

Actuarial Services East Africa Limited (ACTSERV) has been providing services to the East African Market since 2001. Among the services we offer are: Retirement Fund Consulting, Life Insurance Consulting, General and Health Care Insurance Consulting, Investment Consulting, Management Consulting, IT Services and Enterprise Risk Management.

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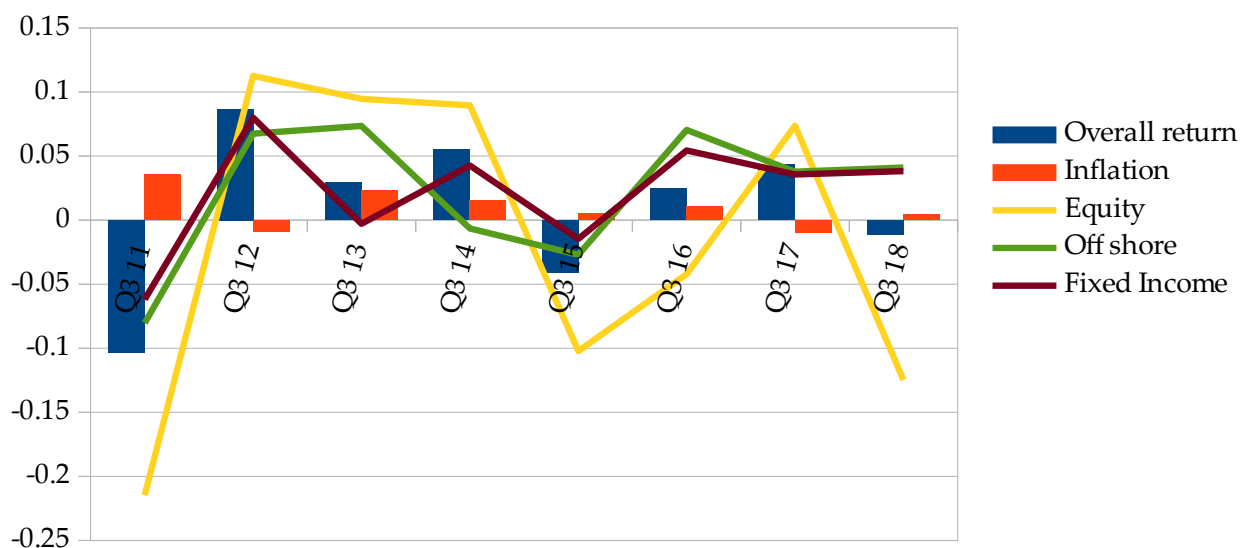
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QUARTER SUMMARY

	QUARTER (3-MONTHS)							
	Q3 2011	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016	Q3 2017	Q3 2018
Total Fund value (Kshs. Bn)	30	50	97	85	93	126	571	740
Sample size	45	100	110	68	76	84	343	418
Overall return	-10.37%	8.68%	2.93%	5.53%	-4.12%	2.49%	4.35%	-1.1%
Fixed income	-6.19%	8.00%	-0.29%	4.26%	-1.46%	5.44%	3.57%	3.8%
Equity	-21.47%	11.26%	9.47%	8.96%	-10.22%	-4.21%	7.37%	-12.5%
Off shore	-8.04%	6.75%	7.36%	-0.65%	-2.70%	7.04%	3.79%	4.1%
Inflation	3.57%	-0.88%	2.31%	1.55%	0.54%	1.06%	-0.93%	0.4%

Quarterly Figures

All Schemes



Average returns computed for the quarter, 1-year and 3-year periods during the quarter ending 30th September 2018 were **-1.1%**, **7.6%** and **10.7%** respectively.

There was a slight decline in the overall quarter return performance during this quarter compared to the previous quarter. This was majorly driven by the decline in equities at **-12.5%** compared to **-8.0%** for quarter 2 2018.

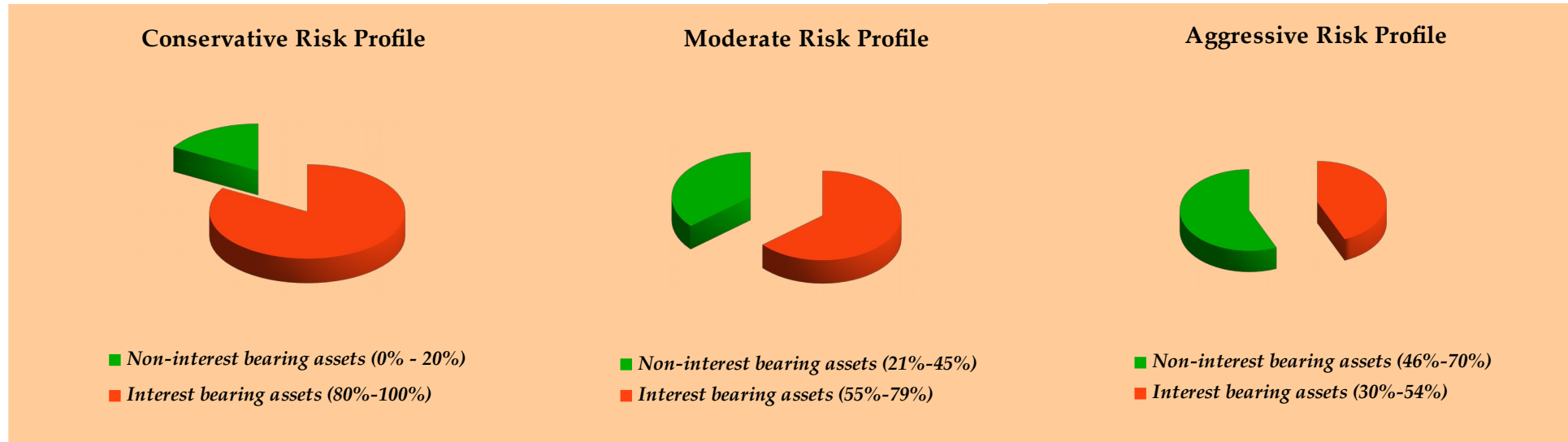
The offshore performance drastically improved from **-0.5%** in quarter 2 2018 to **4.1%** in quarter 3 2018.

Fixed income performance in the quarter improved slightly from **3.5%** in quarter ending 31st June 2018 to **3.8%** in quarter ending 30th September 2018.

Offshore was the best performance asset class during the quarter.

RISK PROFILE

Suggested Asset Allocation Breakdown

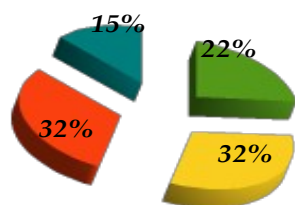


- The risk profile is divided into three categories namely conservative, moderate and aggressive.
- The suggested asset allocation breakdown per risk profile is divided into non-interest bearing assets and interest bearing assets.
- The non-interest bearing assets comprise of equities, offshore and property whereas the interest bearing assets comprise of government securities, fixed and time deposits, commercial paper, corporate bonds and call deposits.

SAMPLE SIZE

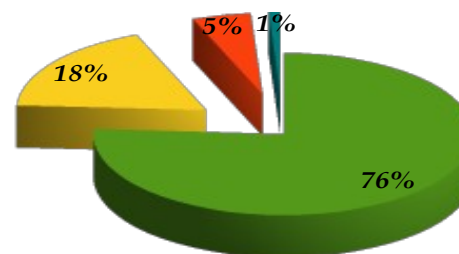
Size	Market Value (Kshs.)	Risk Profile	Number of Schemes	Number of Schemes (%)	Fund Value (Kshs.)	Fund Value (%)
Small Schemes	Less than 100 Million	Conservative	15	25%	379,297,441	12%
		Moderate	36	60%	2,364,791,130	73%
		Aggressive	9	15%	500,461,397	15%
		Total	60	14%	3,244,549,968	1%
Medium Schemes	100 – 500 Million	Conservative	26	19%	6,857,854,703	19%
		Moderate	89	66%	23,511,309,860	66%
		Aggressive	19	14%	5,426,833,427	15%
		Total	134	32%	35,795,997,990	5%
Large Schemes	500 Million – 2 Billion	Conservative	16	12%	14,531,931,419	11%
		Moderate	96	73%	96,542,901,222	72%
		Aggressive	20	15%	22,373,783,647	17%
		Total	132	32%	133,448,616,289	18%
Mega Schemes	Over 2 Billion	Conservative	6	7%	24,821,889,812	4%
		Moderate	49	53%	316,392,772,552	56%
		Aggressive	37	40%	226,354,247,888	40%
		Total	92	22%	567,568,910,253	76%
OVERALL			418	100%	740,058,074,499	100%

Number of Participating Schemes



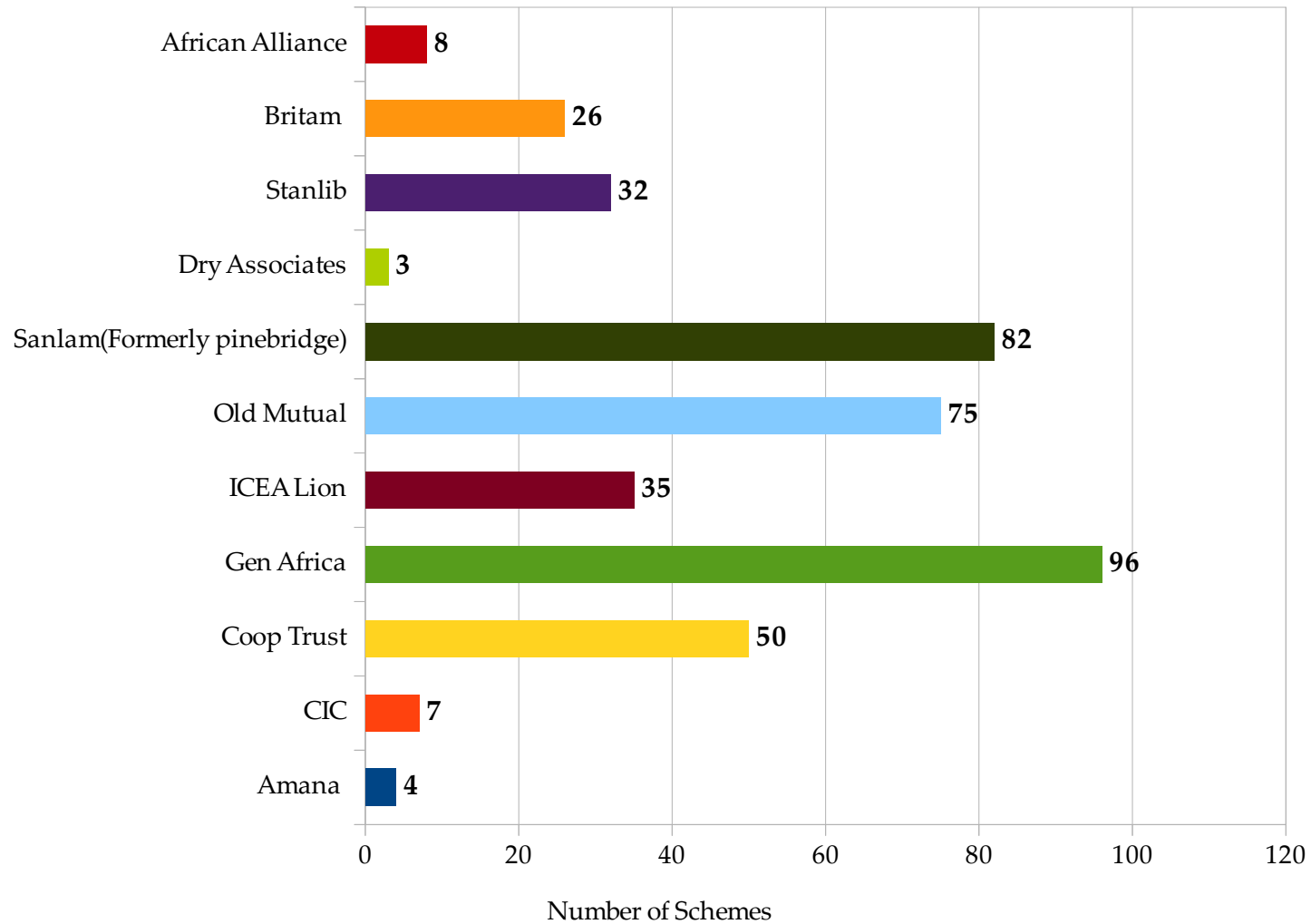
■ Small Schemes ■ Medium Schemes
 ■ Large Schemes ■ Mega Schemes

Total Fund Value of Participating Schemes



■ Small Schemes ■ Medium Schemes
 ■ Large Schemes ■ Mega Schemes

Schemes Participation Per Fund Manager

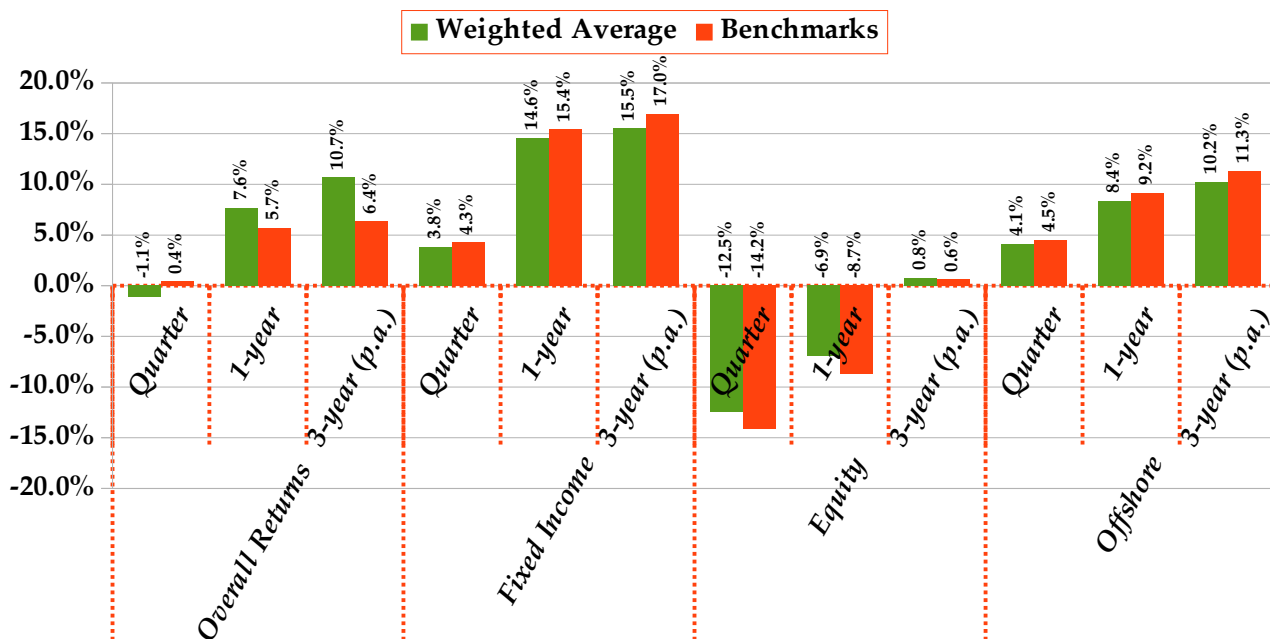


PERFORMANCE ANALYSIS

All Schemes Analysis

	OVERALL RETURN BY ASSET CATEGORY											
	Overall Returns			Fixed Income			Equity			Offshore		
	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Weighted Average	-1.1%	7.6%	10.7%	3.8%	14.6%	15.5%	-12.5%	-6.9%	0.8%	4.1%	8.4%	10.2%
Average	-0.7%	8.2%	11.7%	3.8%	14.4%	15.4%	-12.8%	-6.6%	2.2%	2.7%	7.7%	9.5%
Highest	5.7%	18.5%	22.1%	9.6%	26.2%	18.5%	4.4%	5.4%	19.5%	7.3%	21.7%	14.5%
Lowest	-5.3%	0.8%	3.5%	-7.0%	7.2%	0.3%	-21.6%	-23.2%	-11.9%	-12.4%	-14.4%	-12.1%
50th Percentile	-1.0%	8.0%	11.9%	3.9%	14.5%	15.8%	-12.9%	-6.0%	3.1%	4.1%	8.7%	11.1%
Benchmarks	0.4%	5.7%	6.4%	4.3%	15.4%	17.0%	-14.2%	-8.7%	0.6%	4.5%	9.2%	11.3%

All Schemes Average Returns



Schemes posted a weighted average return of 1.1%, 7.6% and 10.7% for the quarter, year and 3-year annualized return respectively. This compared to the 0.1%, 14.2% and 9.6% returns witnessed in the second quarter indicates a decline in performance in the quarter and 3-year periods.

The fixed income performance posted a improvement recording 3.8%, 14.6% and 15.5% in the quarter, 1-year return and 3-year performance in comparison with the previous quarter's 3.5%, 13.5% and 15.5% for the quarter, and 1-year and 3-year periods respectively.

Equities recorded a drastic decline in all the periods recording a return of -12.5%, -6.9% and 0.8% in comparison with -8.0%, 15.3% and 4.4% recorded in the previous quarter and 1-year and 3-year respectively.

Offshore recorded drastic improvement as well in the quarter with a return of 4.1% compared to -0.5% in the previous quarter 2 2018.

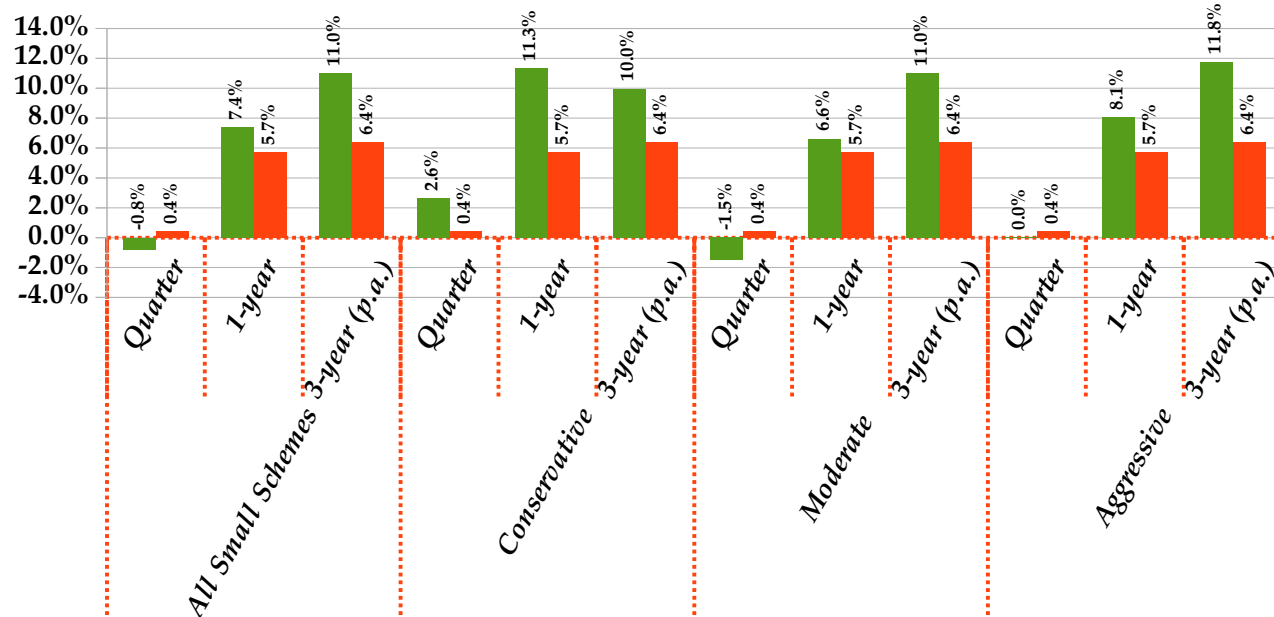
Small Schemes Analysis

Overall Returns

	All Small Schemes			Conservative			Moderate			Aggressive		
	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Weighted Average	-0.8%	7.4%	11.0%	2.6%	11.3%	10.0%	-1.5%	6.6%	11.0%	0.0%	8.1%	11.8%
Average	-0.4%	8.12%	11.93%	2.3%	11.4%	12.3%	-1.62%	6.81%	11.89%	0.0%	7.9%	11.6%
Highest	4.5%	17.4%	22.1%	4.5%	17.4%	16.3%	2.6%	10.5%	22.1%	3.9%	14.1%	16.2%
Lowest	-5.3%	0.8%	3.5%	-0.9%	1.1%	3.5%	-5.3%	0.8%	8.7%	-3.0%	3.8%	8.9%
50th Percentile	-1.1%	7.7%	11.9%	-1.1%	7.7%	11.9%	-1.6%	6.9%	11.3%	-0.9%	7.4%	11.2%
Overall inflation	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%

Small Schemes Overall Average Returns

■ Weighted Average ■ Overall inflation



Q3 2018 recorded a weighted average small schemes return of -0.8%, 7.4% and 11.0% for the quarter, year and 3-year annualized periods. This in comparison to the previous quarters 0.1%, 12.5% and 9.1% shows a decline in the quarter, 1-year and 3-year annualized performance..

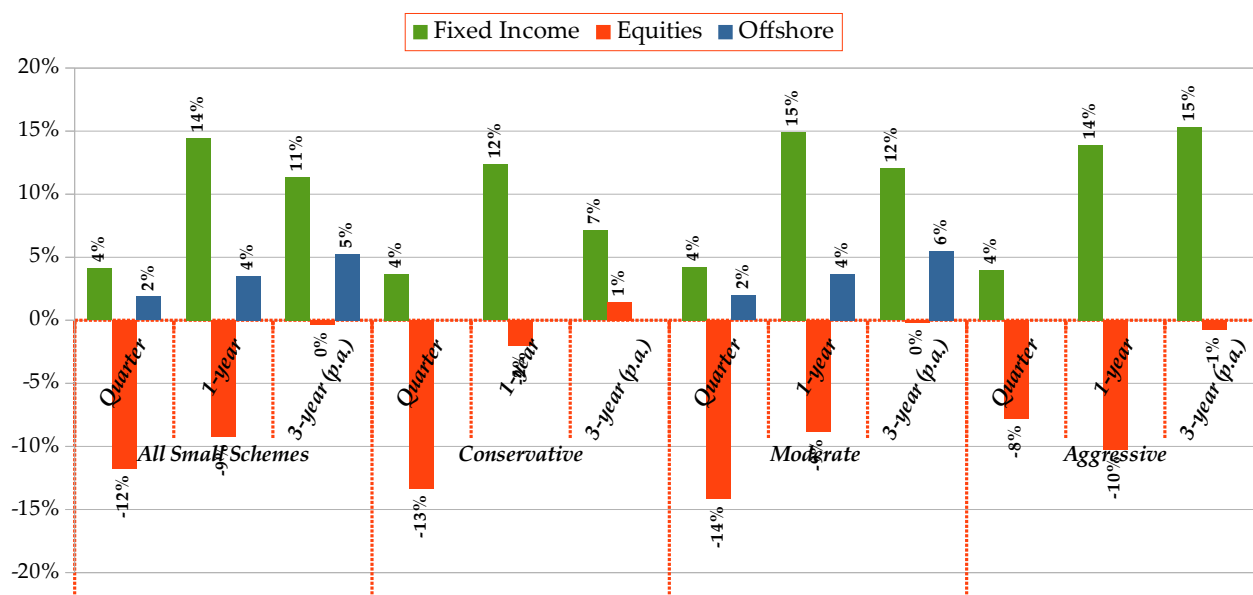
Small schemes with conservative risk profile performed better during the quarter and 1-year annualized return achieving a return of 2.6% and 11.3% respectively compared to small schemes with moderate and aggressive risk profiles with -1.5% and 0.03% respectively for the quarter and 6.6% and 8.1% respectively for the 1-year returns.

Small schemes with aggressive risk profile recorded the highest 3-year annualized return of 11.8% compared to the small schemes with conservative and moderate risk profiles which had a return of 10.0% and 11.8% respectively.

The overall small schemes 3-month performance was below the inflation rate as at 30th September 2018

		All Small Schemes			Conservative			Moderate			Aggressive		
		Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Fixed Income	Weighted Average	4.1%	14.5%	11.4%	3.7%	12.3%	7.1%	4.2%	14.9%	12.0%	3.9%	13.9%	15.3%
	Average	4.0%	14.5%	15.4%	3.6%	13.6%	14.0%	4.2%	15.2%	16.0%	3.7%	13.4%	15.1%
	Highest	9.6%	26.2%	17.8%	5.4%	20.9%	17.2%	9.6%	26.2%	17.8%	4.2%	15.3%	16.1%
	Lowest	1.8%	7.2%	8.3%	1.8%	7.2%	8.3%	3.2%	10.3%	12.5%	2.2%	9.3%	14.0%
	50 th Percentile	3.8%	14.1%	15.7%	3.7%	13.6%	14.9%	3.8%	14.7%	16.4%	4.0%	13.8%	15.0%
	91 day – Tbill	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%
S&P Kenya Bond Index	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	
Equities	Weighted Average	-11.7%	-9.3%	-0.4%	-13.3%	-2.0%	1.4%	-14.2%	-8.8%	-0.2%	-7.8%	-10.3%	-0.7%
	Average	-13.3%	-9.4%	-0.7%	-10.9%	-7.9%	-1.8%	-14.3%	-9.3%	-0.7%	-11.0%	-11.6%	-0.4%
	Highest	4.4%	5.1%	18.4%	1.5%	5.1%	18.4%	1.0%	3.3%	8.8%	4.4%	-6.8%	5.7%
	Lowest	-21.6%	-23.2%	-11.9%	-16.6%	-23.2%	-11.9%	-21.6%	-15.2%	-7.6%	-16.1%	-17.8%	-8.0%
	50 th Percentile	-13.8%	-10.7%	-1.4%	-13.2%	-3.7%	-11.8%	-14.6%	-10.7%	-1.4%	-12.2%	-11.1%	0.4%
	NASI	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%
Offshore	Weighted Average	1.9%	3.5%	5.3%				2.0%	3.7%	5.5%			
	Average	2.0%	6.0%	7.0%				2.4%	6.0%	7.0%			
	Highest	5.8%	21.7%	14.0%				5.8%	21.7%	14.0%			
	Lowest	-0.5%	-6.3%	1.5%				-0.5%	-6.3%	1.5%			
	50 th Percentile	1.1%	6.6%	6.4%				2.5%	6.6%	6.4%			
	MSCI	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%

Small Schemes Asset Average Returns



In the quarter, moderate schemes had the highest fixed income return compared to conservative and aggressive schemes.

The equity performance was lower than that of the previous quarter in the conservative and moderate risk profiles, however, the schemes with aggressive risk profile recorded an improvement from the previous quarter with a return of -7.8% compared to -10.8% in quarter 2.

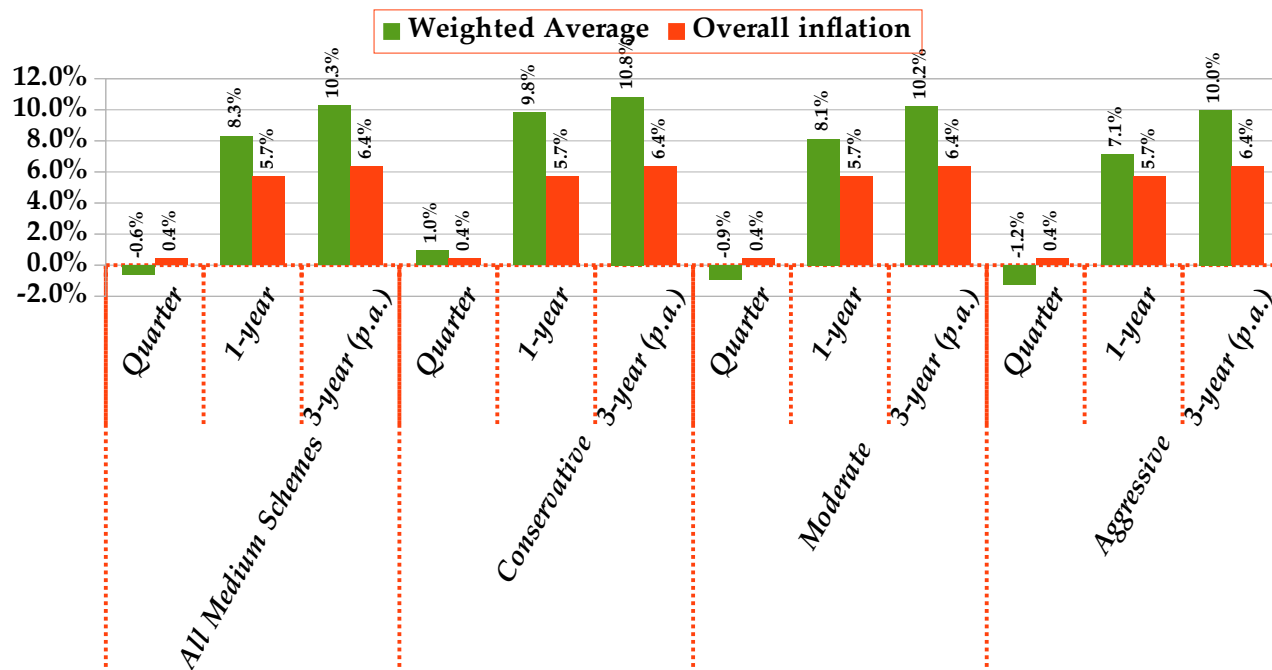
The offshore performance recorded an improvement across all periods and risk profiles compared to the previous quarter.

Medium Schemes Analysis

Overall Returns

	All Medium Schemes			Conservative			Moderate			Aggressive		
	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Weighted Average	-0.6%	8.3%	10.3%	1.0%	9.8%	10.8%	-0.9%	8.1%	10.2%	-1.2%	7.1%	10.0%
Average	-0.6%	8.4%	12.1%	-0.4%	10.3%	12.7%	-0.9%	8.0%	11.9%	-1.2%	7.3%	11.8%
Highest	3.5%	12.7%	14.8%	3.5%	12.7%	14.1%	2.0%	11.3%	14.8%	-0.3%	9.5%	14.1%
Lowest	-3.1%	3.3%	8.3%	-0.4%	5.9%	9.9%	-3.1%	3.3%	8.3%	-2.7%	4.6%	9.6%
50th Percentile	-0.8%	8.5%	12.3%	0.5%	10.3%	12.9%	-1.0%	8.3%	12.1%	-1.1%	7.6%	11.9%
Overall inflation	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%

Medium Schemes Overall Average Returns



The weighted average return for all Medium schemes was -0.6%, 8.3% and 10.3% for the quarter, year and 3-year annualized periods. Compared to the previous quarter returns of 0.2%, 13.6% and 9.3% , this shows a decline in the overall quarter and 1-year performance and a slight improvement in the 3-year annualized performance.

Medium schemes with conservative risk profiles performed highest during the quarter achieving a return of 1.0% compared to Medium schemes with moderate and aggressive risk profile at -0.9% and -1.2% respectively for the quarter.

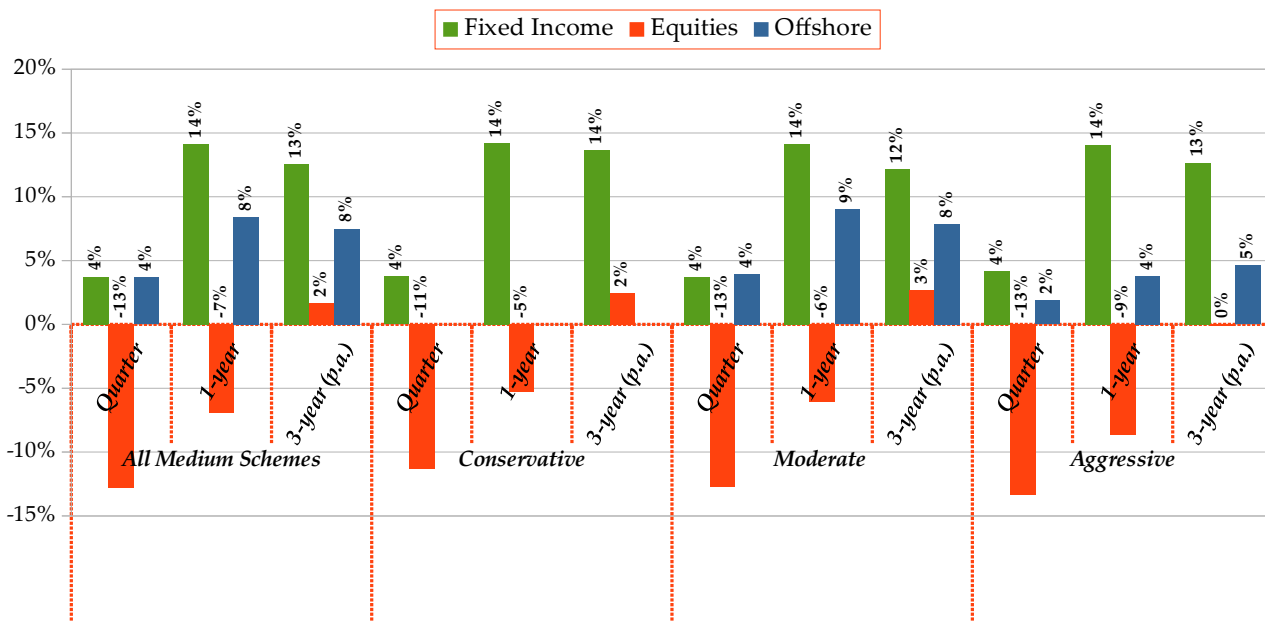
Based on the 1-year analysis, Medium schemes with conservative risk profiles performed better at a return of 9.8% compared to moderate and aggressive risk profile medium schemes at 8.1% and 7.1% respectively.

As per the 3-year analysis, Medium schemes with conservative risk profiles performed better than those with moderate and moderate risk profile.

The overall medium schemes 3-month performance was below the inflation rate as at 30th September 2018

		All Medium Schemes			Conservative			Moderate			Aggressive		
		Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Fixed Income	Weighted Average	3.7%	14.1%	12.5%	3.8%	14.2%	13.6%	3.7%	14.1%	12.2%	4.2%	14.1%	12.7%
	Average	3.8%	14.2%	15.4%	3.7%	14.0%	15.3%	3.7%	14.1%	15.4%	4.2%	14.7%	15.9%
	Highest	7.3%	17.6%	18.5%	4.4%	15.9%	17.0%	7.3%	17.6%	18.5%	5.8%	15.9%	16.9%
	Lowest	-7.0%	7.2%	6.8%	2.6%	7.2%	9.1%	-7.0%	9.0%	6.8%	3.6%	13.1%	14.5%
	50 th Percentile	3.9%	14.5%	15.8%	3.9%	14.6%	15.5%	3.7%	14.3%	15.8%	4.1%	15.0%	16.1%
	91 day – Tbill	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%
	S&P Kenya Bond Index	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%
Equities	Weighted Average	-12.8%	-6.9%	1.7%	-11.3%	-5.3%	2.5%	-12.8%	-6.1%	2.7%	-13.3%	-8.6%	-0.1%
	Average	-12.7%	-6.3%	2.9%	-11.2%	-5.2%	2.7%	-13.0%	-6.2%	3.3%	-13.1%	-8.5%	1.1%
	Highest	-3.9%	5.4%	10.1%	-3.9%	4.0%	6.4%	-6.8%	5.4%	10.1%	-10.3%	-4.4%	5.6%
	Lowest	-19.0%	-19.6%	-7.2%	-19.0%	-14.7%	-2.8%	-17.0%	-19.6%	-6.4%	-15.8%	-14.0%	-7.2%
	50 th Percentile	-12.8%	-6.1%	3.7%	-12.6%	-6.0%	3.6%	-12.9%	-5.6%	3.9%	-12.9%	-8.4%	3.6%
	NASI	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%
Offshore	Weighted Average	3.7%	8.4%	7.5%	3.9%	9.0%	7.9%	3.9%	9.0%	7.9%	1.9%	3.8%	4.6%
	Average	3.0%	9.4%	10.1%	3.9%	9.4%	10.1%	6.6%	21.7%	14.5%	4.8%	9.7%	11.8%
	Highest	6.6%	21.7%	14.5%	6.6%	21.7%	14.5%	4.8%	9.7%	11.8%	0.0%	9.7%	11.8%
	Lowest	-4.2%	-8.0%	1.5%	-4.2%	-8.0%	1.5%	4.7%	9.4%	11.3%	0.0%	9.7%	11.8%
	50 th Percentile	4.3%	9.5%	11.4%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%
	MSCI	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%

Medium Schemes Asset Average Returns



In the quarter, all Medium Schemes underperformed the fixed income benchmark across all periods.

Aggressive medium schemes performed highest in the fixed income quarter performance while conservative medium schemes performed highest in the 1-year and 3-year periods.

The equity performance was above the NASI benchmark for all Medium schemes.

Only Medium schemes with an aggressive risk profile underperformed the benchmark in the 3-year period.

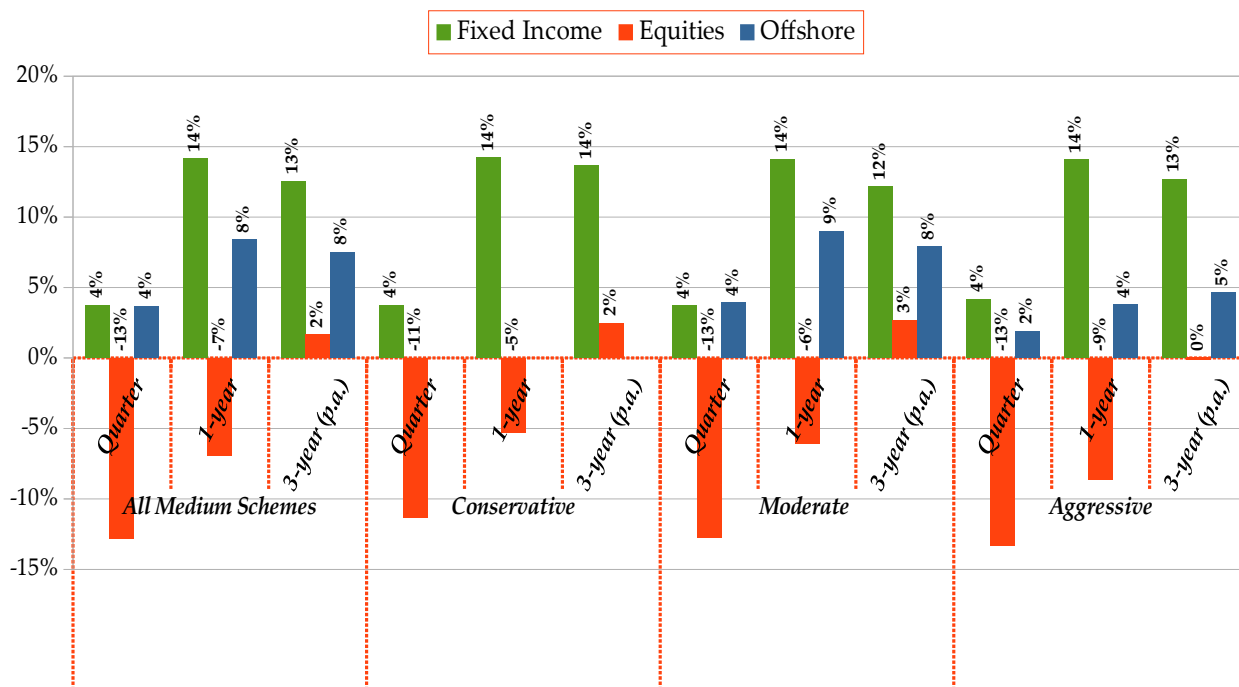
The medium schemes offshore quarter performance was higher compared to the previous quarter.

Large Schemes Analysis

Overall Returns

	All Large Schemes			Conservative			Moderate			Aggressive		
	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Weighted Average	-0.7%	7.9%	9.6%	1.0%	10.6%	11.1%	-0.9%	7.7%	9.3%	-0.9%	7.1%	9.8%
Average	-0.7%	8.2%	11.6%	-0.4%	10.3%	12.5%	-1.0%	8.1%	11.6%	-0.8%	7.2%	11.0%
Highest	5.7%	15.7%	14.4%	4.1%	15.7%	14.4%	5.7%	14.4%	13.8%	1.9%	11.8%	14.0%
Lowest	-3.7%	2.0%	8.2%	0.0%	7.3%	10.7%	-3.7%	2.0%	9.2%	-2.8%	2.6%	8.2%
50th Percentile	-0.9%	8.1%	11.9%	0.6%	10.1%	12.7%	-1.0%	8.0%	11.9%	-0.9%	7.6%	11.4%
Overall inflation	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%

Medium Schemes Asset Average Returns



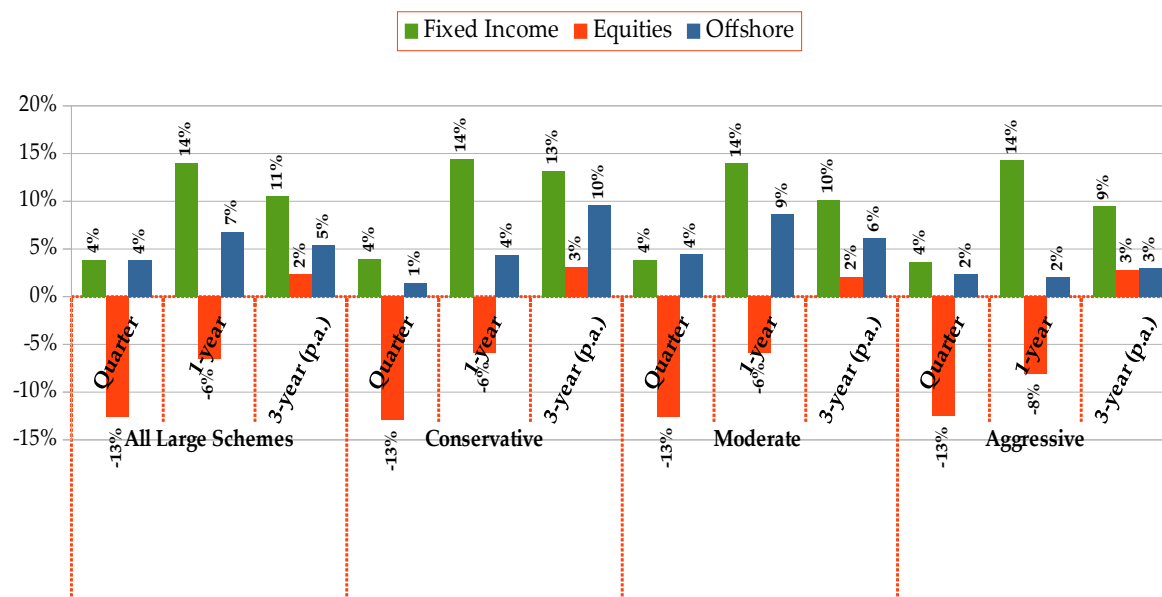
The quarter, 1-year and 3-year average weighted returns were -0.7%, 7.9% and 9.6% respectively compared to Q2 2018 average weighted return of 0.1%, 12.7% and 8.8% respectively.

Conservative Large schemes performed better in the quarter, 1-year and 3-year period.

The overall large schemes 3-month performance was below the inflation rate as at 30th September 2018 but outperformed inflation in the 1-year and 3-year annualized period.

		All Large Schemes			Conservative			Moderate			Aggressive		
		Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Fixed Income	Weighted Average	3.9%	14.0%	10.5%	4.0%	14.4%	13.2%	3.9%	13.9%	10.2%	3.7%	14.3%	9.5%
	Average	3.9%	14.4%	15.2%	3.9%	14.4%	15.2%	3.9%	14.6%	15.1%	3.8%	14.2%	14.7%
	Highest	5.2%	23.9%	17.3%	5.2%	23.9%	17.3%	5.2%	23.9%	17.3%	4.7%	17.4%	16.4%
	Lowest	2.2%	8.9%	0.3%	2.2%	8.9%	14.1%	2.2%	10.9%	0.3%	2.2%	8.9%	10.0%
	50 th Percentile	3.9%	14.4%	15.8%	3.9%	14.4%	15.8%	3.9%	14.5%	15.8%	3.8%	14.6%	15.4%
	91 day - Tbill	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%
Equities	S&P Kenya Bond Index	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%
	Weighted Average	-12.6%	-6.5%	2.3%	-12.9%	-5.8%	3.1%	-12.6%	-5.9%	2.1%	-12.5%	-8.1%	2.8%
	Average	-12.9%	-6.3%	2.9%	-12.9%	-5.6%	4.1%	-13.0%	-6.1%	2.6%	-12.6%	-7.6%	3.1%
	Highest	-6.4%	3.2%	19.5%	-6.4%	3.2%	19.5%	-6.4%	-0.6%	9.5%	-7.8%	3.2%	6.9%
	Lowest	-18.8%	-16.6%	-5.6%	-18.77%	-16.6%	-5.6%	-18.8%	-16.6%	-5.6%	-16.1%	-13.8%	-1.0%
	50 th Percentile	-12.9%	-5.8%	0.0%	-12.9%	-6.2%	3.0%	-13.0%	-5.4%	3.1%	-12.6%	-8.8%	4.3%
Offshore	NASI	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%
	Weighted Average	3.8%	6.8%	5.4%	1.5%	4.4%	9.6%	4.4%	8.6%	6.1%	2.3%	2.0%	2.9%
	Average	2.9%	7.6%	9.9%	2.9%	7.6%	9.9%	3.7%	8.3%	10.3%	0.7%	4.1%	7.3%
	Highest	7.3%	21.7%	14.1%	1.5%	4.4%	9.6%	7.3%	21.7%	14.1%	6.3%	9.3%	11.2%
	Lowest	-10.7%	-6.3%	1.9%	1.46%	4.4%	9.6%	-2.1%	-6.3%	1.9%	-10.7%	-2.2%	2.7%
	50 th Percentile	4.2%	8.0%	11.0%	1.5%	4.4%	9.6%	4.4%	8.7%	11.1%	0.0%	3.0%	7.8%
MSCI	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	

Large Schemes Asset Average Returns



Conservative large schemes had highest quarter fixed income returns of 4.0%.

The equities quarter performance experienced a decline from -7.9% in the previous quarter to -12.6% in this quarter. Despite the negative performance the return outperformed the NASI benchmark.

The Moderate large scheme performed highest in the quarter and 1-year period, while the conservative large schemes performed highest in the 3 year offshore return.

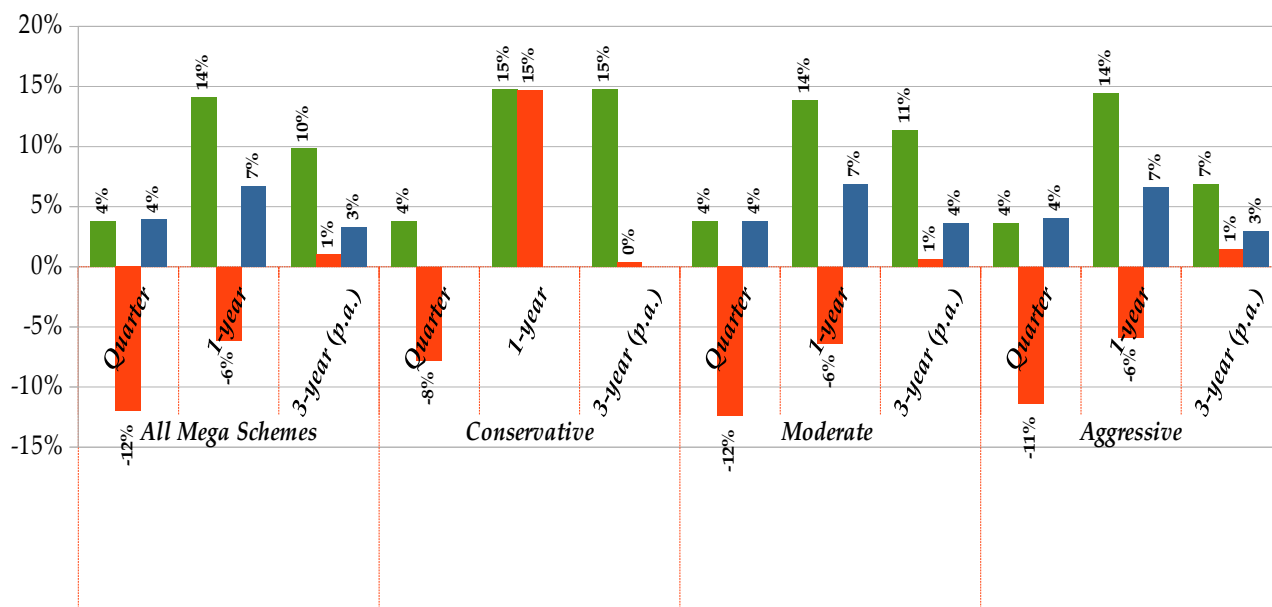
Mega Schemes Analysis

Overall Returns

	All Mega Schemes			Conservative			Moderate			Aggressive		
	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Weighted Average	-1.2%	7.3%	8.9%	0.2%	8.7%	7.6%	-1.2%	7.2%	9.2%	-1.5%	7.2%	8.6%
Average	-1.1%	7.8%	10.9%	0.8%	10.8%	13.6%	-1.2%	7.6%	10.9%	-1.2%	7.6%	10.6%
Highest	4.0%	18.5%	16.4%	3.9%	15.1%	15.7%	0.2%	10.5%	12.6%	4.0%	18.5%	16.4%
Lowest	-4.9%	3.5%	6.1%	-1.8%	7.0%	12.4%	-4.9%	3.5%	8.1%	-3.9%	4.4%	6.1%
50th Percentile	-1.3%	7.4%	10.9%	0.3%	10.6%	13.1%	-1.3%	7.6%	11.3%	-1.4%	6.8%	10.2%
Overall inflation	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%	0.4%	5.7%	6.4%
25th Percentile	-1.82%	6.59%	9.90%	0.1%	9.8%	12.8%	-1.6%	7.1%	10.1%	-2.1%	5.9%	9.4%
75th Percentile	-0.74%	8.41%	12.08%	1.4%	11.3%	9.9%	-0.7%	8.3%	12.0%	-0.7%	8.1%	11.8%

Mega Schemes Asset Average Returns

■ Fixed Income ■ Equities ■ Offshore



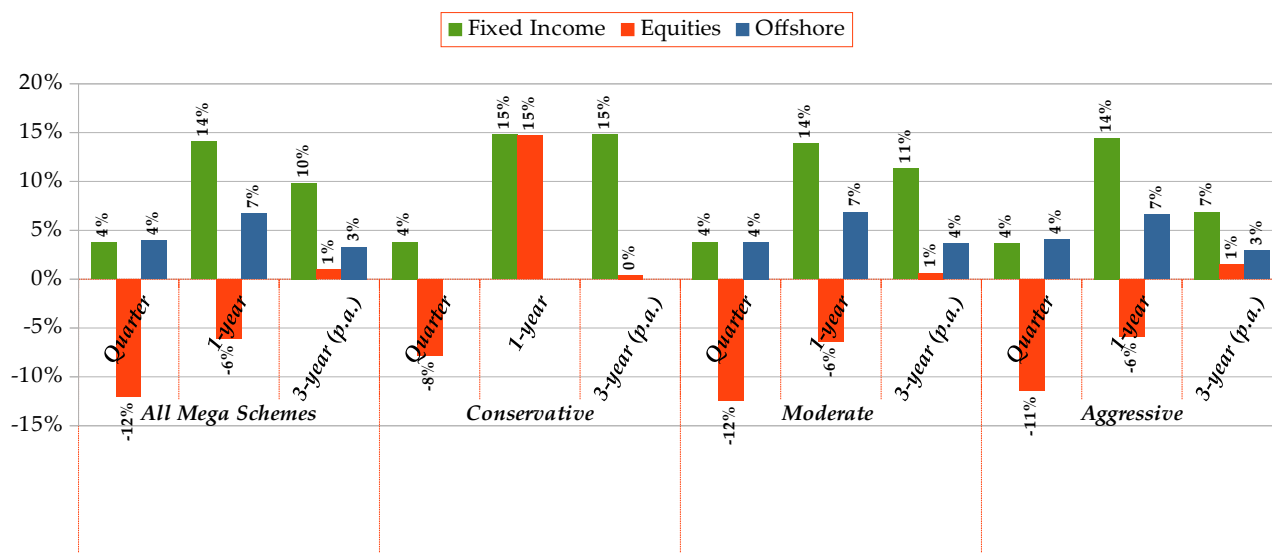
The weighted average return for all the Mega schemes at -1.2%, 7.3% and 8.9% for the quarter, year and 3-year annualized periods in comparison to the previous quarter's 0.1%, 14.1% and 7.7% was a marked decline in all the periods' performance.

Mega schemes with a conservative risk profiles achieved the highest returns in the quarter and 1-year periods recording 0.2% and 8.7% respectively. Moderate Mega Schemes had the highest 1-year performance return of 9.2% .

The quarter performance for Mega schemes for all categories underperformed inflation.

		All Mega Schemes			Conservative			Moderate			Aggressive		
		Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)	Quarter	1-year	3-year (p.a.)
Fixed Income	Fixed Income	3.8%	14.1%	9.8%				3.8%	13.9%	11.3%	3.6%	14.5%	6.9%
	Average	3.9%	14.4%	15.6%				3.8%	14.4%	15.7%	3.9%	14.5%	15.2%
	Highest	4.9%	17.8%	17.1%	3.8%	14.8%	14.8%	4.9%	17.8%	17.1%	4.6%	16.5%	16.7%
	Lowest	2.9%	10.6%	6.2%				2.9%	10.6%	14.1%	3.0%	11.8%	6.2%
	50 th Percentile	3.9%	14.6%	15.8%				3.9%	14.5%	15.7%	3.9%	14.7%	15.9%
	91 day – Tbill	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%	1.9%	7.9%	8.8%
S&P Kenya Bond Index		4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%	4.3%	15.4%	17.0%
Equities	Equities	-12.0%	-6.1%	1.0%				-12.4%	-6.4%	0.6%	-11.4%	-5.9%	1.5%
	Average	-12.5%	-5.9%	2.0%				-12.8%	-5.8%	2.1%	-12.2%	-6.2%	1.8%
	Highest	-6.4%	3.9%	6.9%	-7.8%	14.7%	0.4%	-6.4%	3.9%	-6.9%	-6.7%	-2.8%	5.7%
	Lowest	-15.3%	-13.2%	-11.4%				-15.3%	-13.2%	-6.9%	-15.0%	-12.7%	-11.4%
	50 th Percentile	-12.8%	-5.4%	2.2%				-12.9%	-5.4%	2.8%	-12.8%	-5.6%	1.9%
	NASI	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%	-14.2%	-8.7%	0.6%
Offshore	Offshore	3.9%	6.7%	3.3%				3.8%	6.9%	3.6%	4.1%	6.6%	3.0%
	Average	3.5%	6.5%	9.7%				4.0%	7.9%	12.0%	3.1%	4.9%	6.8%
	Highest	6.9%	21.7%	14.1%	-	-	-	6.9%	21.7%	14.1%	5.6%	13.3%	11.9%
	Lowest	-1.2%	-14.4%	-12.1%				0.0%	-13.5%	9.5%	-1.2%	-14.4%	-12.1%
	50 th Percentile	4.4%	6.9%	11.0%				4.5%	9.0%	12.0%	4.1%	6.6%	10.0%
	MSCI	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%	4.5%	9.2%	11.3%

Mega Schemes Asset Average Returns



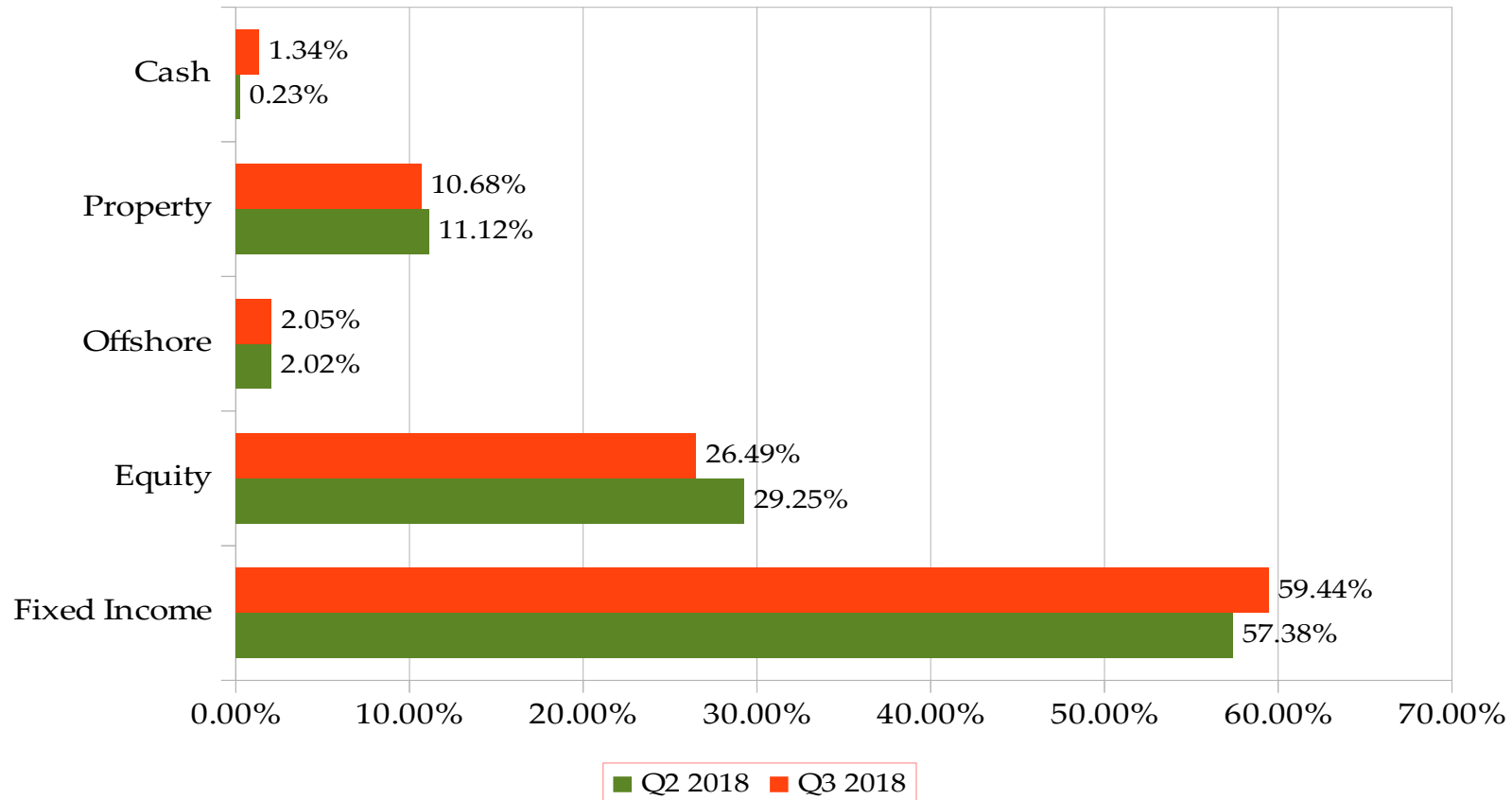
All Mega Schemes Fixed Income performance in quarter 3 2018 increased slightly in the quarter and 1-year period but decreased in the 3-year period compared to the previous quarter.

Conservative mega schemes performed highest in the quarter and 1-year equity returns whereas aggressive mega schemes performed highest in the 3-year equity returns.

Generally, the mega schemes performance increased in the offshore returns in the quarter, 1-year periods and 3-year periods compared to the previous quarter.

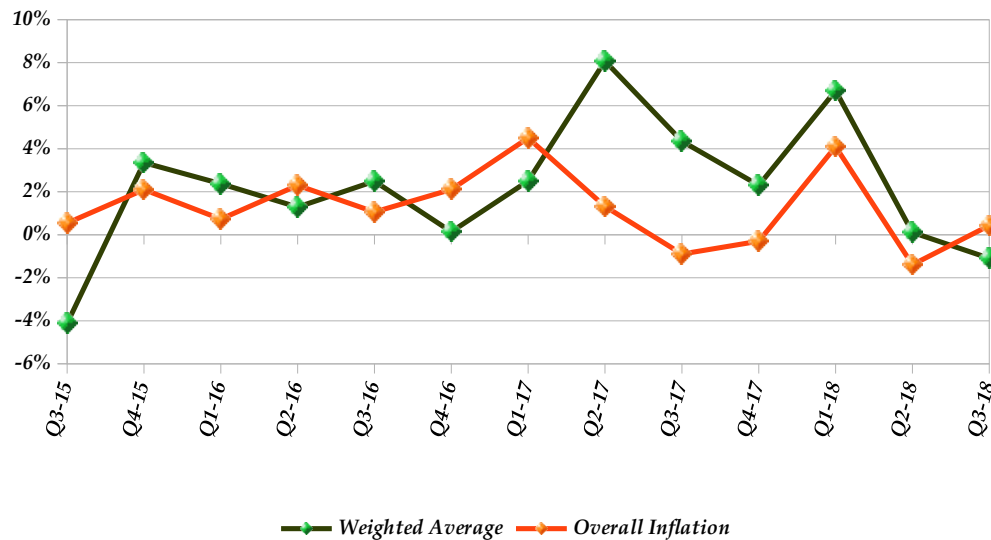
ASSET CATEGORY DISTRIBUTION

	Fixed Income	Equity	Offshore	Property	Cash
Weighted Average	59.44%	26.49%	2.05%	10.68%	1.34%
Average	65.38%	28.91%	4.88%	24.96%	2.00%
Highest	100.00%	100.00%	14.56%	82.67%	78.21%
Lowest	1.20%	0.11%	0.06%	0.08%	0.02%
Median	70.97%	24.56%	5.00%	24.47%	0.67%

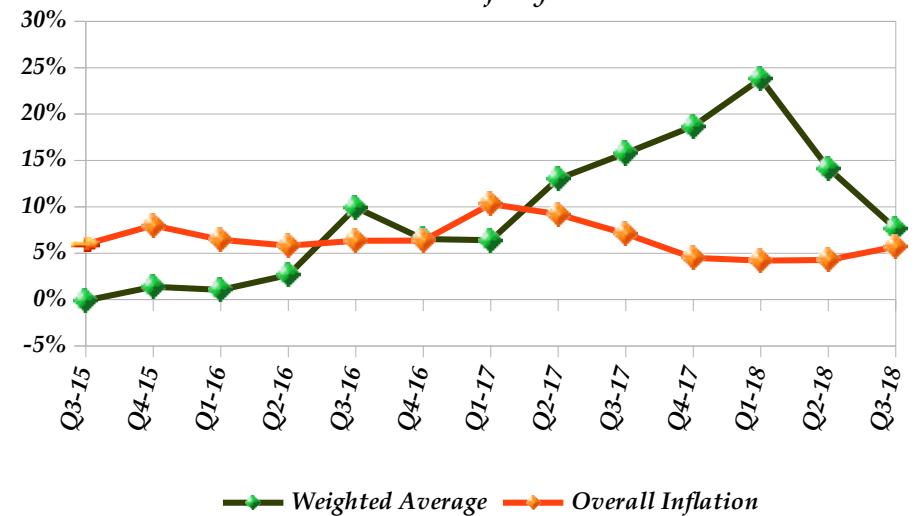


TRENDS

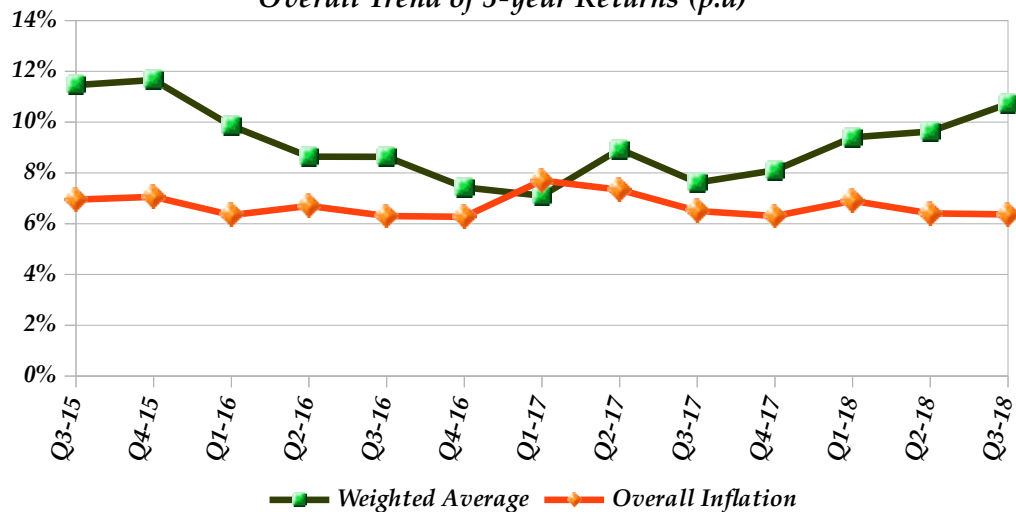
Overall Trend of Quarterly Returns



Overall Trend of 1-year Returns



Overall Trend of 3-year Returns (p.a)

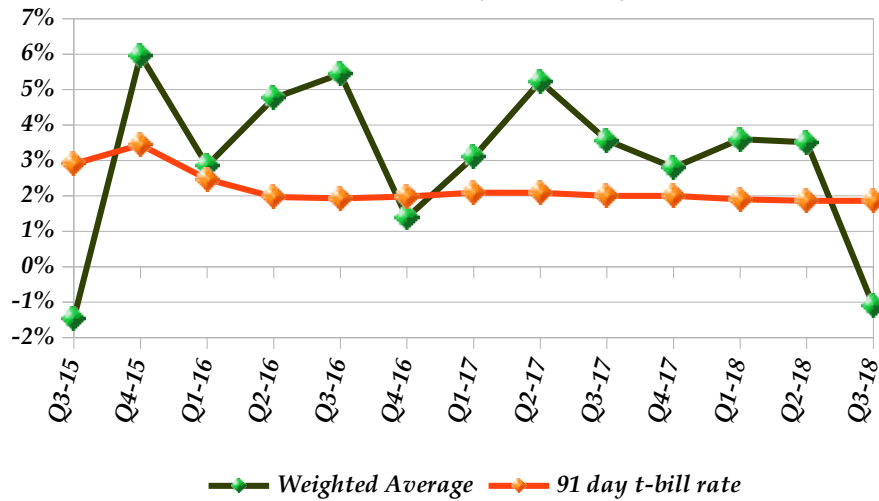


The variance between the quarterly returns and inflation rates has been marginal since Q3 2015 except for Q3 2015 and Q2 2017 where the variance was higher between the two rates.

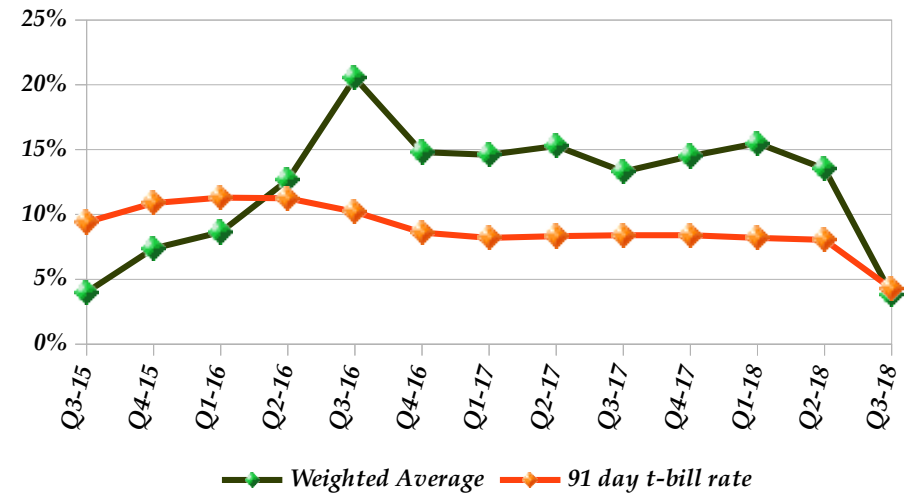
Since the third quarter 2015 the overall trend of 1-year return has under-performed the inflation benchmark except Q3 & Q4 2016. There has been a downward trend in the performance from Q1 2018 upto the current Q3 2018.

The lowest overall 3-year return (p.a.) since Q2 2015 on average for all schemes was in Q1 2017 at 7.1% while the highest was in Q2 2015 at 16.27% p.a. The overall 3-year return has been outperforming the benchmark since Q3 2014 except Q1 2017 where the returns underperformed the benchmark.

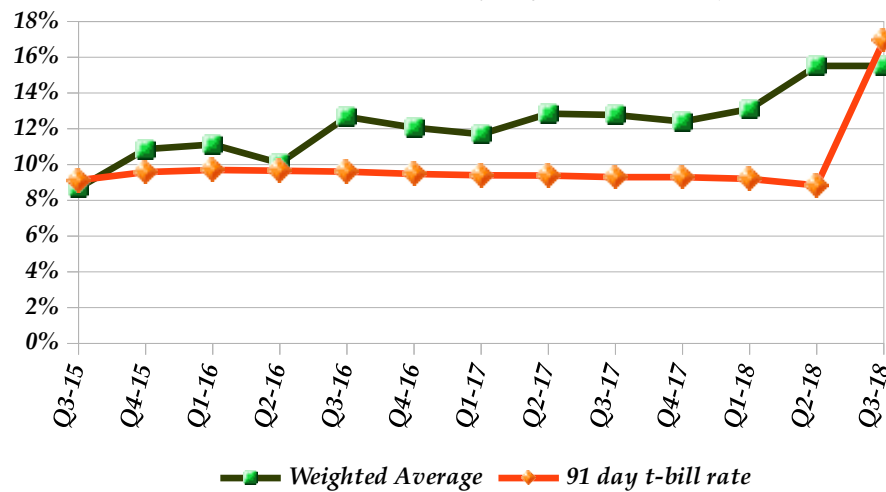
Fixed Income Trend of Quarterly Returns



Fixed Income Trend of 1-year Returns



Fixed Income Trend of 3-year Returns (p.a)

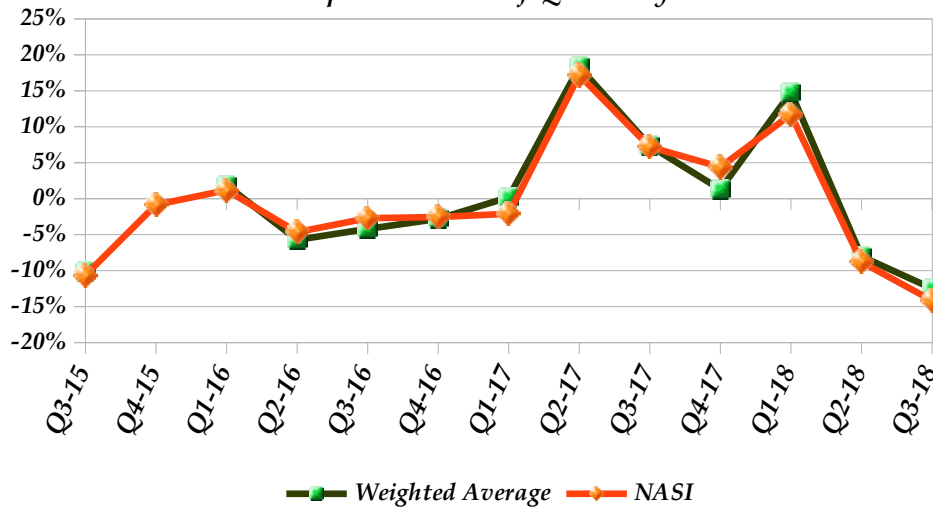


The quarterly fixed income returns have been volatile with the lowest quarterly return on average for all schemes since Q2 2015 being in Q3 2015 at (1.46)% while the highest was in Q4 2015 at 5.97%. The last quarter has seen the fixed income returns under perform the benchmark.

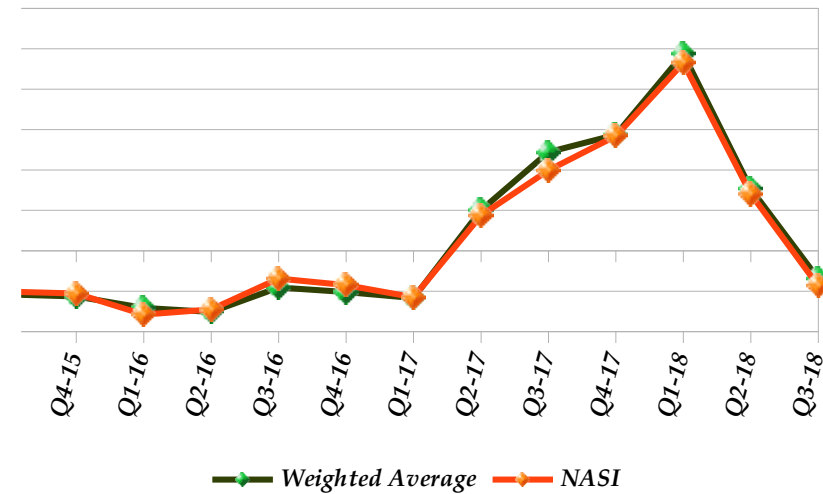
The fixed income 1-year return has been more stable than the quarterly returns, in the last quarter the return had slightly underperformed the benchmark.

The lowest fixed income 3-year return (p.a.) on average for all schemes since Q3 2015 was in Q3 2015 at 8.69% while the highest was in Q1 2018 at 13.10% p.a. Since Q3 2015 the 3-year return has outperformed the benchmark except for Q3-2015 and the current quarter.

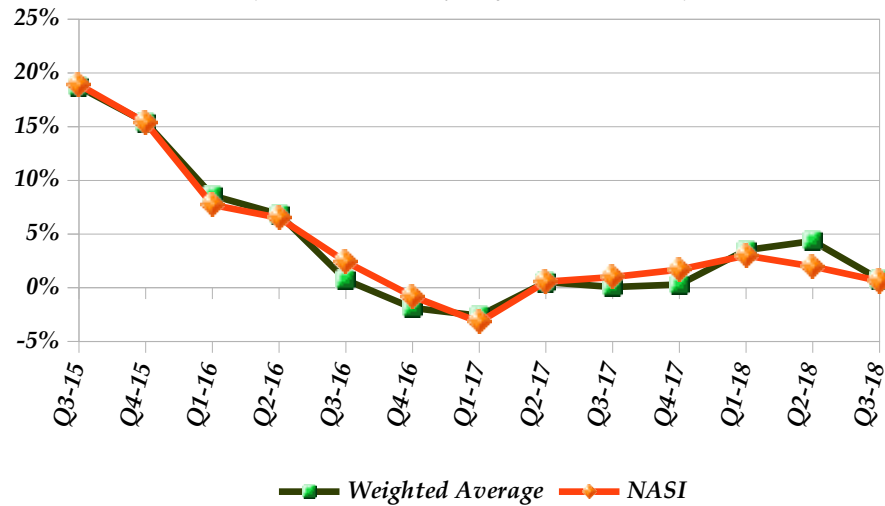
Equities Trend of Quarterly Returns



Equities Trend of 1-year Returns



Equities Trend of 3-year Returns (p.a)

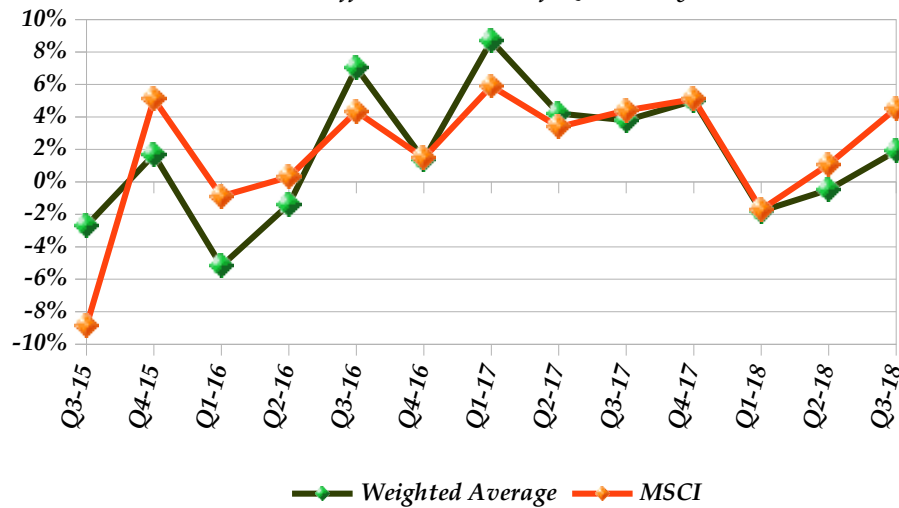


The equities returns have closely tracked the performance of the benchmark, supporting a passive investment strategy. The lowest equity quarterly return on average for all schemes since Q2 2015 was in Q3 2018 at (-12.5)% while the highest was in Q2 2017 at 18.32%.

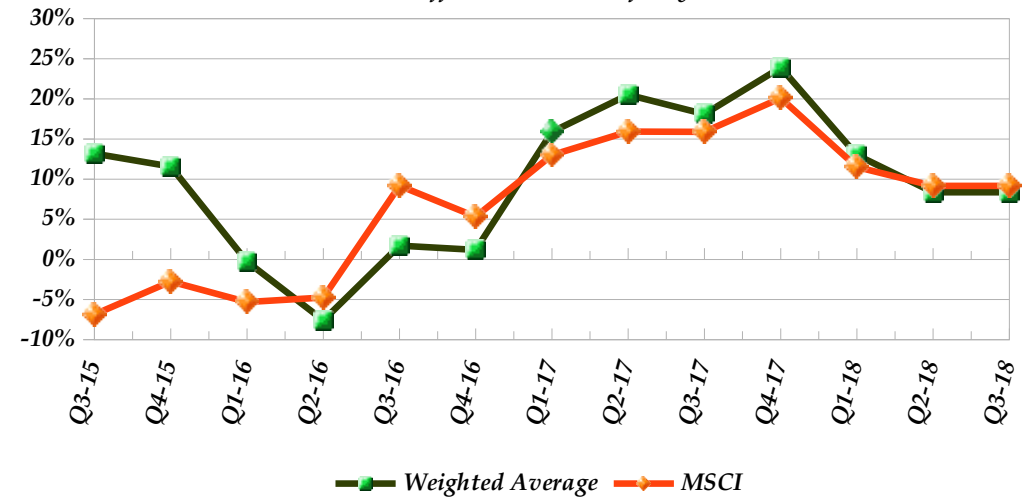
Similar to the quarterly returns, the 1-year equity returns have been almost at par with the benchmark returns. The trend has however shifted downwards drastically with this and last quarter registering a significant decline in the 1-year equity returns.

Q2 2017 has seen the 3-year equity trend change from the downward trend witnessed in the last 2 years. The trend has however been generally similar to the quarterly and yearly returns where the equity returns have been almost at par with the benchmark returns.

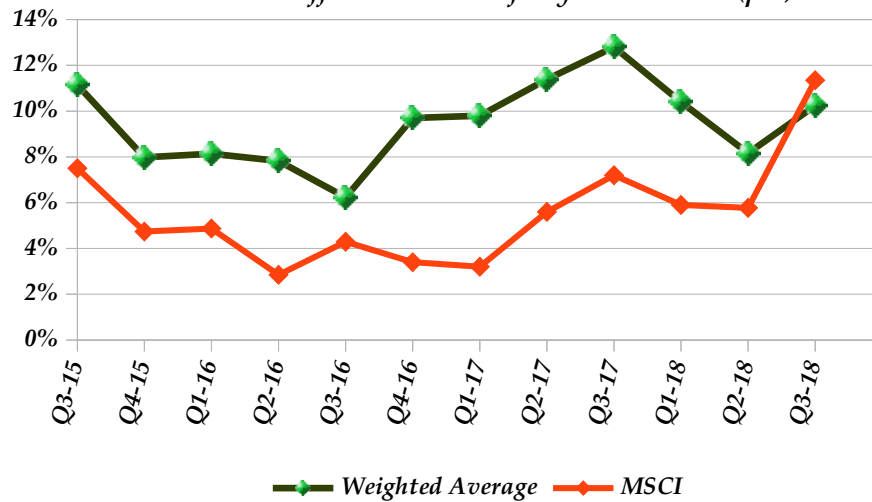
Offshore Trend of Quarterly Returns



Offshore Trend of 1-year Returns



Offshore Trend of 3-year Returns (p.a)



The quarterly offshore returns have been volatile. They however have closely matched but beaten the benchmark performance. The performance of Q3 2018 was however below the benchmark.

The lowest offshore 1-year return on average for all schemes since Q2 2015 was in Q2 2016 at (7.59)% while the highest was in Q4 2017 at 23.9%.

The lowest offshore 3-year return (p.a.) on average for all schemes since Q2 2015 was in Q3 2016 at 6.23% while the highest was in Q2 2015 at 15.18%. Since Q2 2015 the actual offshore returns have consistently outperformed the benchmark.

RATIOS

	Quarter	1-Year	3-Years
Standard Deviation	1.33%	2.14%	1.46%
Tracking Error	0.03%	0.16%	0.15%
Information Ratio	-33.99	16.04	34.63
Sharpe Ratio	-76.73	2.03	18.39

GLOSSARY

Conservative risk profile: An investing strategy that seeks to preserve an investment portfolio's value by investing a high proportion of assets in lower risk assets such as fixed-income and money market securities.

Moderate risk profile: An investing strategy that seeks to have a balanced proportion between low risk and high risk assets in the investment portfolio.

Aggressive risk profile: An investing strategy that seeks to maximize returns by investing a high proportion of the investment portfolio in high risk assets such as equities, offshore and property.

Non-Interest Bearing Assets: The total funds invested in equities, offshore and property. Also considered to be high risk assets.

Interest Bearing Assets: The total funds invested in government securities, fixed and time deposits, commercial paper, corporate bonds and call deposits. Also considered to be low risk assets.

Information Ratio (IR): Measures the ability of the schemes to generate excess returns relative to the benchmark (inflation). The higher the IR, the higher the probability of the schemes in beating the benchmark.

Standard Deviation: A measure of the dispersion of returns from the mean.

Tracking Error: The difference between the returns of the schemes and that of the benchmark (inflation) the schemes are trying to beat.

Weighted Average Returns: The average returns weighted by the fund value or respective asset categories where appropriate.

DISCLAIMER

This survey relies on the data provided by the fund managers of the participating schemes. The schemes whose data was deemed to be insufficient were not used.

ACTSERV makes no representation or warranties of any kind on completeness, accuracy or reliability with regards to this report and may not be held liable for any action taken by any party based on the information contained herein.

The survey does not cover all schemes in the country. However, the schemes covered are a representative sample of all the schemes in terms of both fund value and number.

ACTSERV would like to thank the participating schemes for the help they accorded in preparing this survey.

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