

Actuarial Services (EA) Ltd

**PENSION SCHEMES INVESTMENT
PERFORMANCE SURVEY
31st December 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 fourth quarter of 2018, a sample size of 422 schemes with a total fund value of about Kshs. 759 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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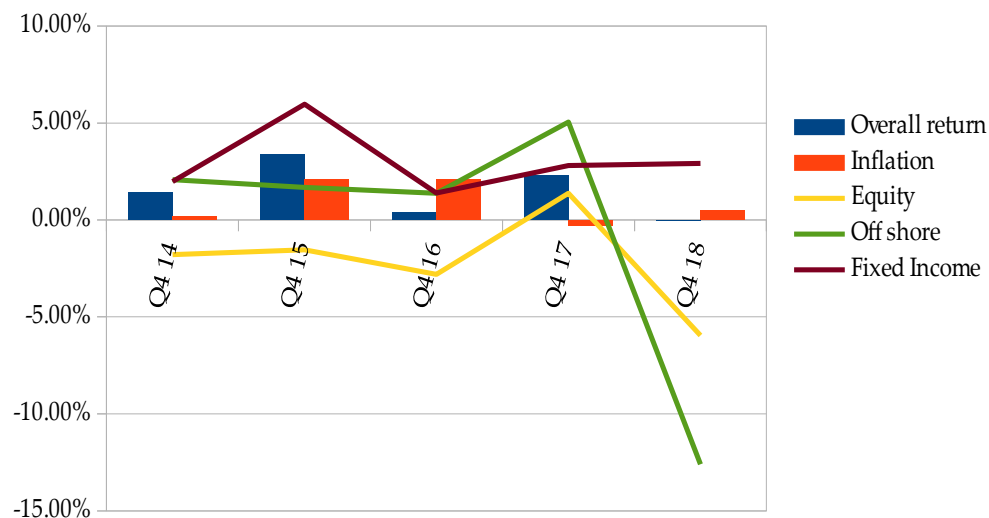
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QUARTER SUMMARY

	QUARTER (3 – MONTHS)				
	Q4 2014	Q4 2015	Q4 2016	Q4 2017	Q4 2018
Total Fund value (Kshs. Bn)	105	112	125	615	759
Sample size	88	75	84	352	422
Overall return	1.41%	3.35%	0.40%	2.31%	-0.04%
Fixed income	1.98%	5.97%	1.39%	2.80%	2.9%
Equity	-1.79%	-1.54%	-2.81%	1.38%	-6.0%
Off shore	2.07%	1.68%	1.37%	5.04%	-12.6%
Inflation	0.18%	2.10%	2.11%	-0.30%	0.5%

Quarterly Figures

All Schemes



Average returns computed for the quarter, 1-year and 3-year periods during the quarter ending 31st December 2018 were **-0.04%**, **5.0%** and **9.8%** respectively.

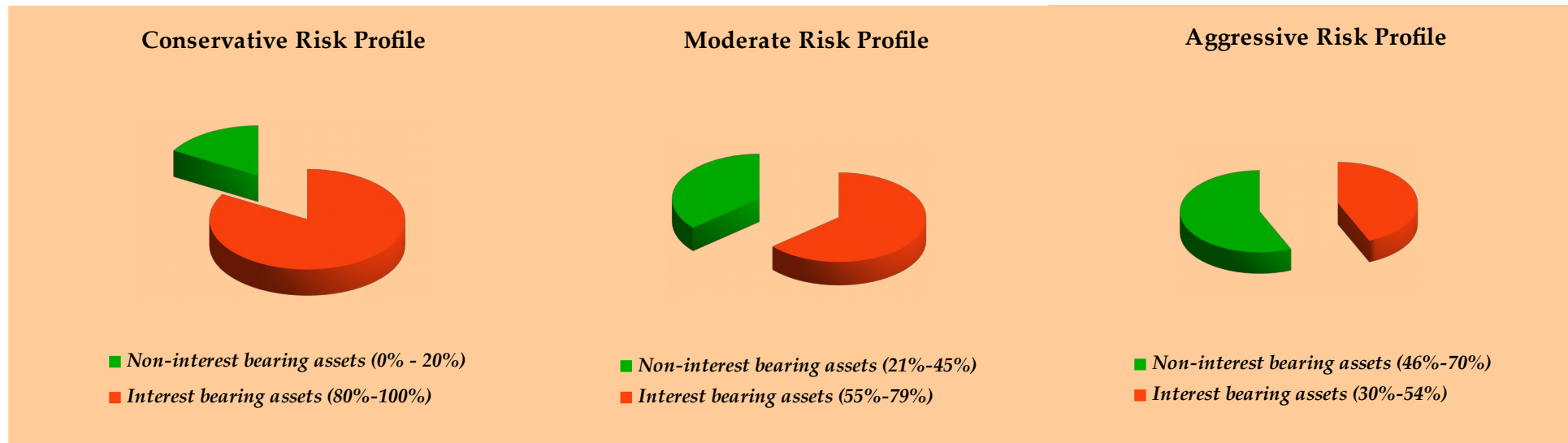
There was a slight improvement in the overall quarter return performance during this quarter compared to the previous quarter. This was mainly driven by improvement in the equity market from -12.5% last quarter to -6.0%.

The offshore performance had a drastically declined from 4.1% in quarter 3 2018 to -12.6% in quarter 4 2018.

Fixed income performance in the quarter slightly declined from 3.8% in quarter ending 30th September 2018 to 2.9% in quarter ending 31st December 2018.

RISK PROFILE

Suggested Asset Allocation Breakdown

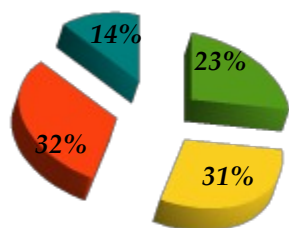


- The risk profile is divided into three categories namely conservative, moderate and aggressive.
- The suggested asset allocation breakdown per risk profile is divided into non-interest bearing assets and interest bearing assets.
- The non-interest bearing assets comprise of equities, offshore and property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

SAMPLE SIZE

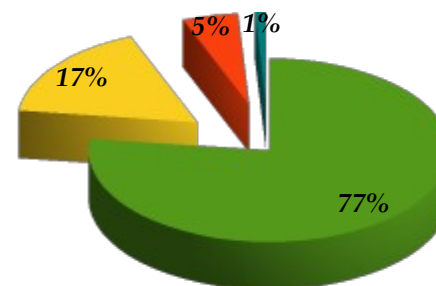
Size	Market Value (Kshs.)	Risk Profile	Number of Schemes	Number of Schemes (%)	Fund Value (Kshs.)	Fund Value (%)
Small Schemes	Less than 100 Million	Conservative	17	28%	575,293,716	17%
		Moderate	43	72%	2,748,241,871	83%
		Aggressive	0	0%	0	0%
		Total	60	14%	3,323,535,587	1%
Medium Schemes	100 – 500 Million	Conservative	31	23%	8,158,504,336	22%
		Moderate	102	76%	28,635,526,013	76%
		Aggressive	2	1%	808,155,490	2%
		Total	135	32%	37,602,185,838	5%
Large Schemes	500 Million – 2 Billion	Conservative	30	23%	28,205,028,013	21%
		Moderate	86	66%	88,883,868,604	67%
		Aggressive	14	11%	15,078,212,836	11%
		Total	130	31%	132,167,109,453	17%
Mega Schemes	Over 2 Billion	Conservative	9	9%	27,472,121,557	5%
		Moderate	55	57%	350,832,286,571	60%
		Aggressive	33	34%	207,620,620,740	35%
		Total	97	23%	585,925,028,868	77%
OVERALL			422	100%	759,017,859,746	100%

Number of Participating Schemes



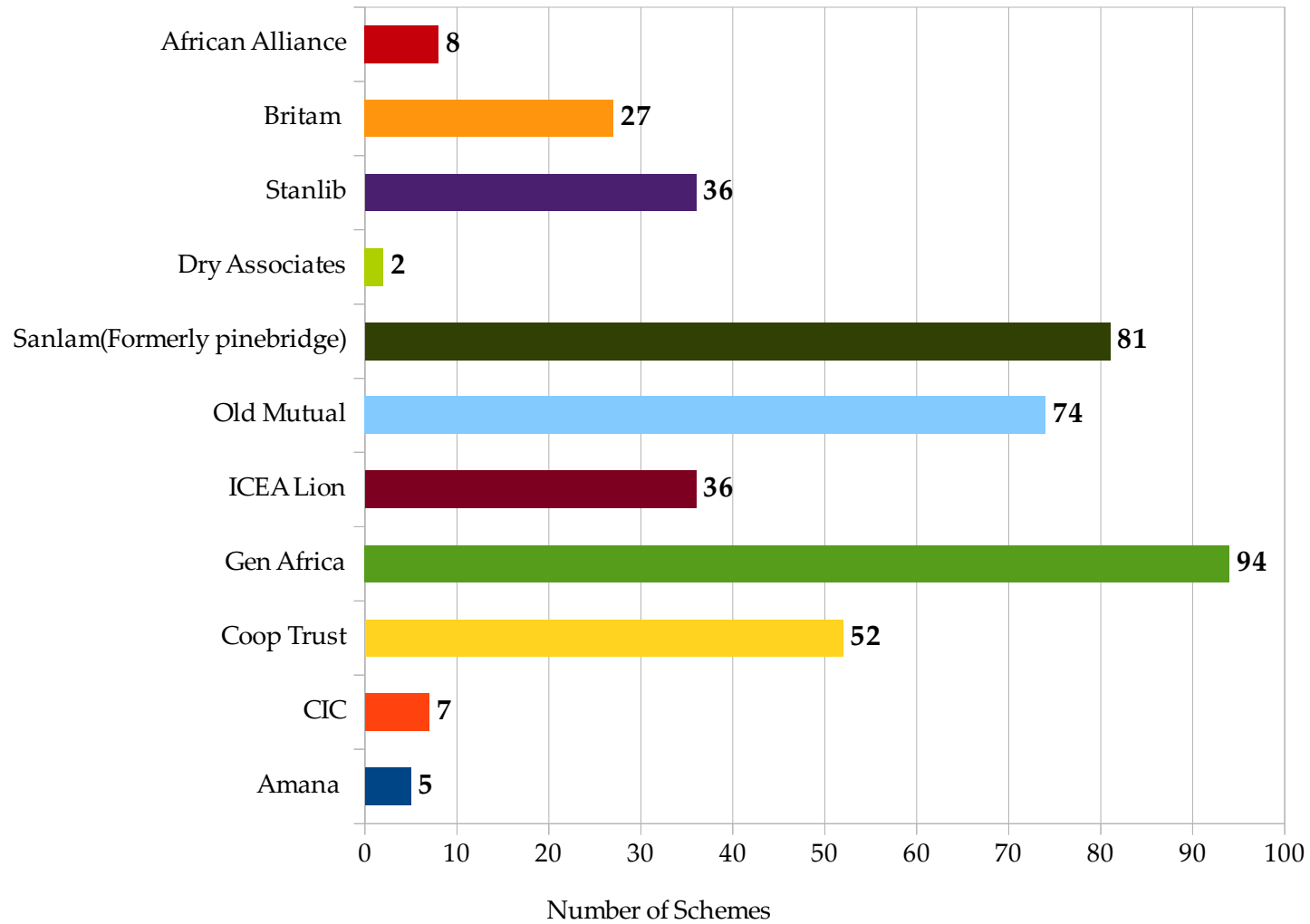
■ Small Schemes ■ Medium Schemes
 ■ Large Schemes ■ Mega Schemes

Total Fund Value of Participating Schemes



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

Schemes Participation Per Fund Manager



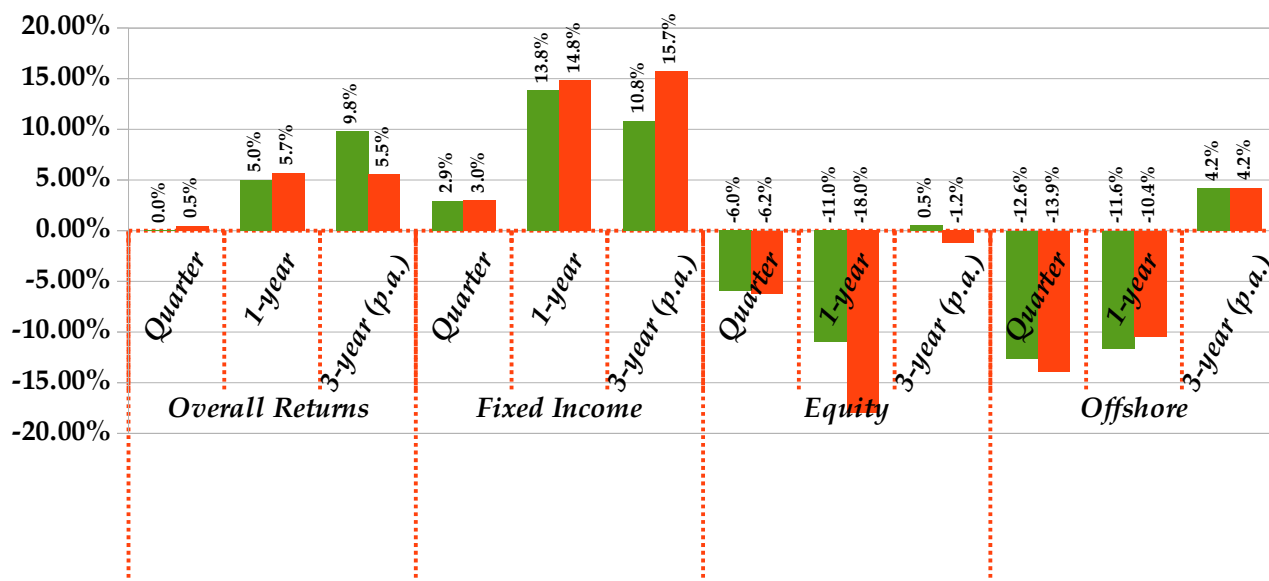
PERFORMANCE ANALYSIS

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	-0.04%	5.0%	9.8%	2.9%	13.8%	10.8%	-6.0%	-11.0%	0.5%	-12.6%	-11.6%	4.2%
Average	0.3%	5.7%	10.6%	2.9%	14.1%	12.6%	-5.5%	-10.6%	-1.1%	-13.3%	-11.4%	0.5%
Highest	3.1%	15.6%	22.6%	22.9%	20.8%	19.1%	0.5%	6.8%	17.2%	2.9%	1.6%	10.6%
Lowest	-3.6%	-1.9%	3.1%	0.6%	6.5%	-1.6%	-13.3%	-33.8%	-18.1%	-17.3%	-25.8%	-27.8%
50th Percentile	0.3%	5.4%	10.6%	2.9%	14.4%	14.5%	-6.1%	-12.6%	1.4%	-14.1%	-10.7%	4.5%
Benchmarks	0.5%	5.7%	5.5%	3.0%	14.8%	15.7%	-6.2%	-18.0%	-1.2%	-13.9%	-10.4%	4.2%

All Schemes Average Returns

■ Weighted Average ■ Benchmarks



Schemes posted a weighted average return of -0.04%, 5.0% and 9.8% for the quarter, year and 3-year annualized return respectively. This compared to the 1.1%, 7.6% and 10.7% returns witnessed in the third quarter indicates a decline in performance across all periods.

The fixed income performance posted a improvement recording 2.9%, 13.8% and 10.8% in the quarter, 1-year return and 3-year performance in comparison with the previous quarter's 3.8%, 14.6% and 15.5% for the quarter, 1-year and 3-year periods respectively.

Equities recorded an improvement in the quarter recording a return of -6.0% in comparison to -12.5% recorded in the previous quarter. The 1-year and 3-year annualized returns recorded a decline compared to quarter 3 2018.

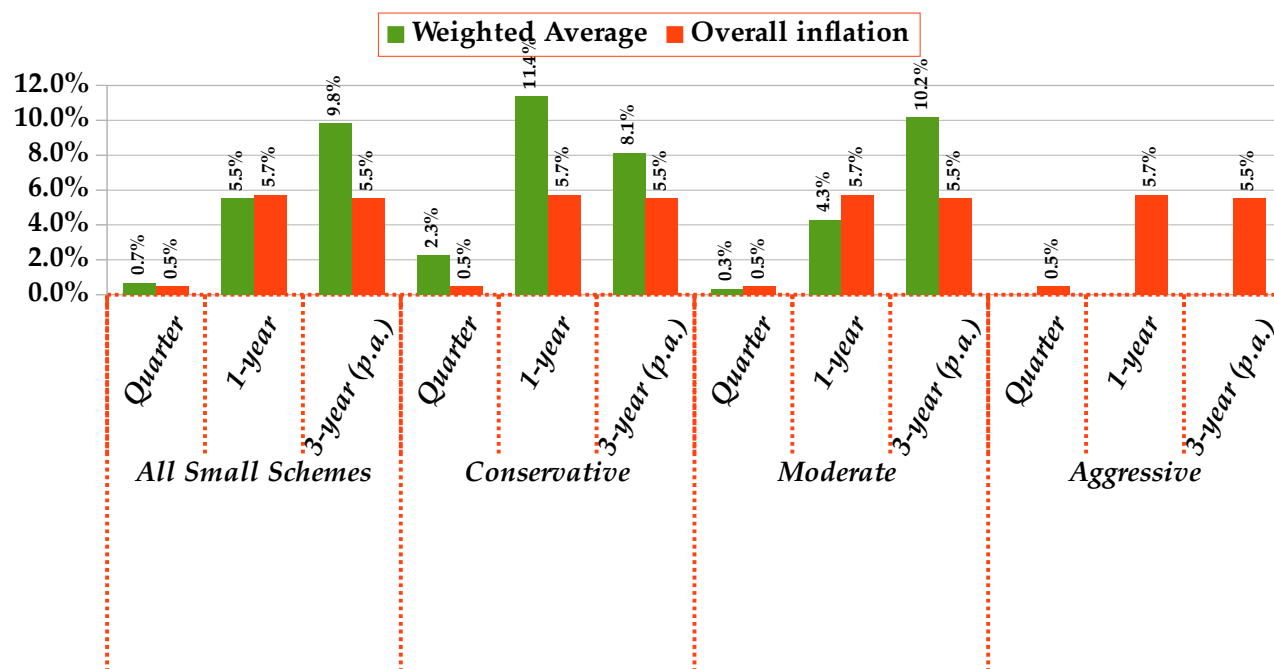
Offshore recorded drastic decline across all periods largely due to slowdown in global equity markets.

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	0.7%	5.5%	9.8%	2.3%	11.4%	8.1%	0.3%	4.3%	10.2%			
Average	0.9%	6.12%	11.22%	2.0%	10.4%	11.9%	0.41%	4.38%	11.01%			
Highest	3.0%	15.0%	22.6%	3.0%	15.0%	14.7%	2.4%	8.1%	22.6%			
Lowest	-1.3%	-1.9%	3.1%	-0.4%	0.4%	3.1%	-1.3%	-1.9%	7.2%			
50th Percentile	0.6%	5.2%	10.7%	0.6%	5.2%	10.7%	0.3%	4.7%	10.3%			
Overall inflation	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%

Small Schemes Overall Average Returns



Q4 2018 recorded a weighted average small schemes return of 0.7%, 5.5% and 9.8% for the quarter, year and 3-year annualized periods. This in comparison to the previous quarters -0.8%, 7.4% and 11.0% shows a slight decline in the 1-year and 3-year annualized performance and improvement in the quarter performance.

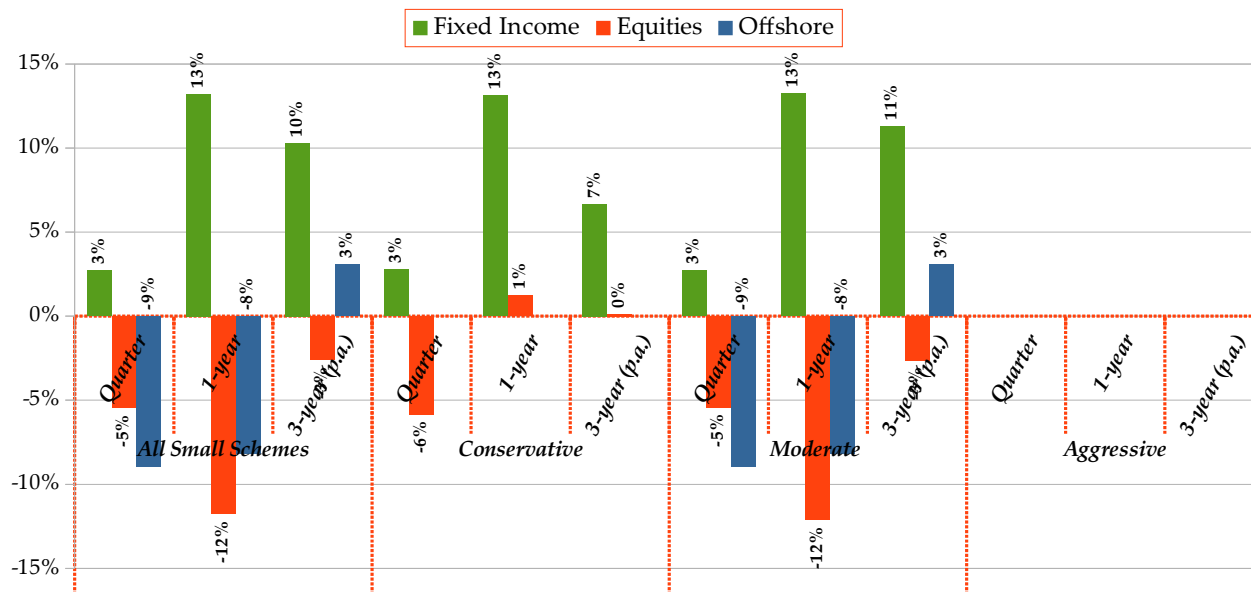
Small schemes with conservative risk profile performed better during the quarter and 1-year period achieving a return of 2.3% and 11.4% respectively compared to small schemes with moderate risk profile with 0.3% and 4.3% respectively. Small Schemes with moderate risk profile performed better in the 3 year annualized performance period compared to the conservative small schemes.

During the quarter, our sample did not include any aggressive small schemes.

Across all periods, the overall weighted average return outperformed the benchmark except for the 1-year period.

		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	2.7%	13.2%	10.3%	2.8%	13.1%	6.7%	2.7%	13.2%	11.3%			
	Average	3.0%	13.2%	13.2%	3.8%	12.8%	13.0%	2.7%	13.3%	13.2%			
	Highest	22.9%	20.8%	17.6%	22.9%	20.8%	14.7%	3.1%	15.7%	17.6%		-	
	Lowest	0.6%	6.7%	0.1%	1.8%	7.4%	7.6%	0.6%	6.7%	0.1%			
	50 th Percentile	2.8%	13.6%	14.5%	2.8%	13.8%	14.0%	2.7%	13.6%	14.6%			
	91 day – Tbill	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%
S&P Kenya Bond Index	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	
Equities	Weighted Average	-5.4%	-11.8%	-2.6%	-5.8%	1.2%	0.1%	-5.4%	-12.1%	-2.7%			
	Average	-5.5%	-11.4%	-3.7%	-6.5%	-6.2%	-8.8%	-5.3%	-12.7%	-3.2%			
	Highest	0.5%	3.2%	3.9%	-4.4%	3.2%	3.6%	0.5%	2.9%	3.9%		-	
	Lowest	-9.1%	-25.3%	-18.1%	-9.1%	-25.3%	-18.1%	-8.5%	-23.4%	-15.5%			
	50 th Percentile	-6.1%	-13.4%	-3.5%	-6.4%	2.5%	-10.3%	-5.9%	-15.7%	-3.2%			
	NASI	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%
Offshore	Weighted Average	-9.0%	-8.1%	3.1%				-9.0%	-8.1%	3.1%			
	Average	-9.9%	-8.7%	3.2%				-8.5%	-7.2%	2.6%			
	Highest	2.9%	0.7%	7.4%				2.9%	0.7%	7.4%		-	
	Lowest	-16.3%	-16.6%	-1.6%				-16.3%	-16.6%	-1.6%			
	50 th Percentile	-10.7%	-7.8%	5.0%				-10.7%	-5.5%	2.5%			
	MSCI	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%

Small Schemes Asset Weighted Average Returns



In the quarter, fixed income had the highest overall return across all the asset classes and across all periods.

Conservative small schemes had a higher fixed income return compared to moderate small schemes in quarter 4 2018.

The equity performance was higher than that of the previous quarter in the conservative and moderate risk profiles.

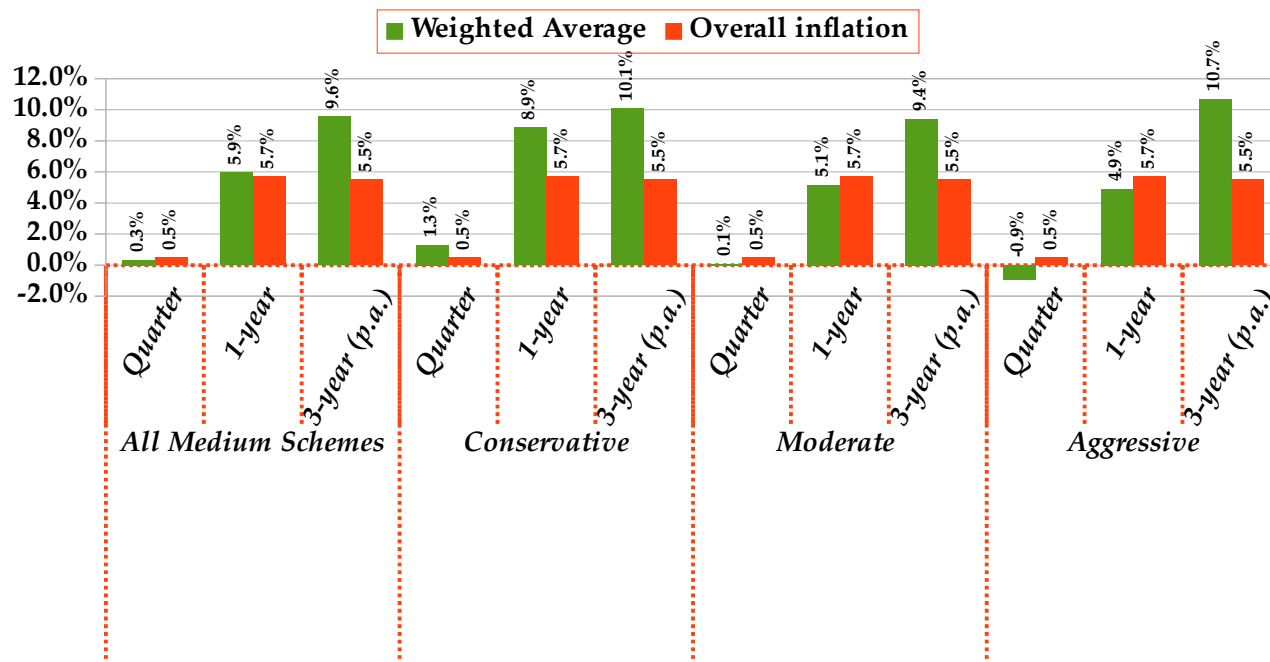
The offshore performance recorded a decline across all periods in the moderate risk profiles compared to the previous quarter.

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	0.3%	5.9%	9.6%	1.3%	8.9%	10.1%	0.1%	5.1%	9.4%	-0.9%	4.9%	10.7%
Average	0.3%	6.0%	10.9%	0.9%	8.9%	11.8%	0.1%	5.1%	10.7%	-1.3%	4.2%	10.7%
Highest	2.6%	12.8%	13.1%	2.6%	12.8%	13.1%	1.5%	8.6%	13.1%	0.5%	7.4%	10.7%
Lowest	-3.1%	-0.3%	7.2%	0.4%	6.2%	10.0%	-1.8%	-0.3%	7.2%	-3.1%	1.0%	10.7%
50th Percentile	0.5%	6.0%	10.9%	1.3%	8.6%	11.9%	0.2%	5.1%	10.8%	-1.3%	4.2%	10.7%
Overall inflation	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%

Medium Schemes Overall Average Returns



The weighted average return for all Medium schemes was 0.3%, 5.9% and 9.6% for the quarter, year and 3-year annualized periods. Compared to the previous quarter returns of -0.6%, 8.3% and 10.3%. This indicates an improvement in the overall quarter performance and a decline for the 1-year and 3-year annualized performance.

Medium schemes with conservative risk profiles performed highest during the quarter achieving a return of 1.3% compared to Medium schemes with moderate and aggressive risk profile at 0.1% and -0.9% respectively.

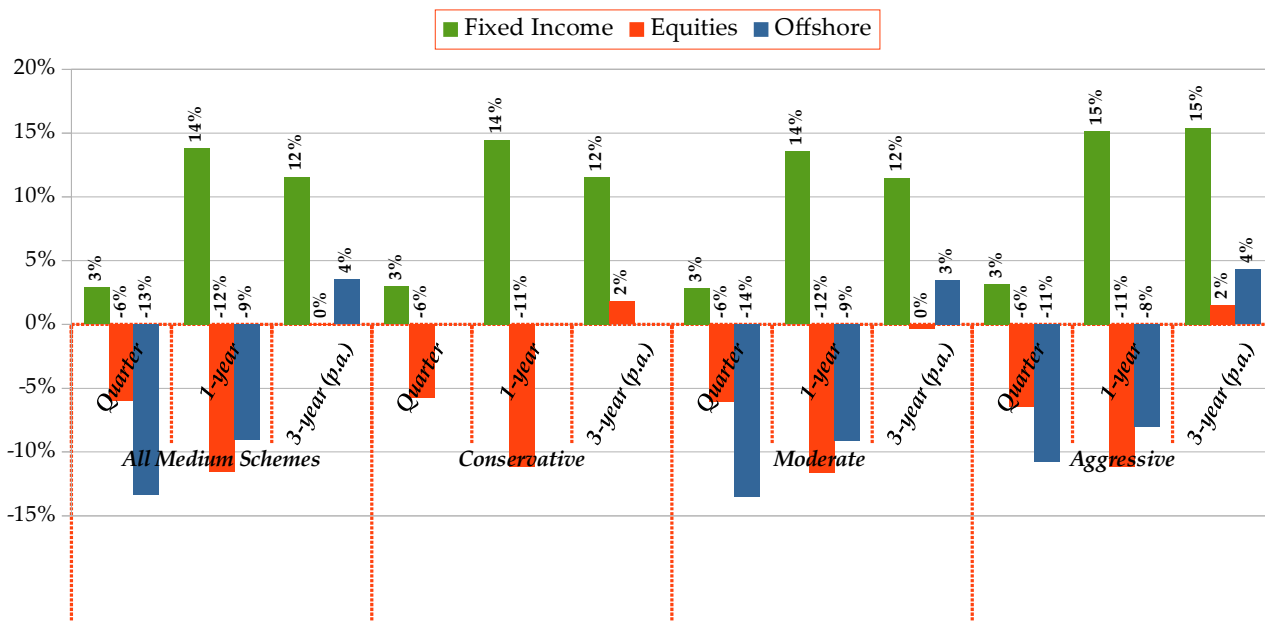
Based on the 1-year analysis, Medium schemes with conservative risk profiles performed better at a return of 8.9% compared to moderate and aggressive risk profile medium schemes at 5.1% and 4.9% respectively.

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

All medium schemes outperformed the benchmark in the 1-year and 3-year period but underperformed in the quarter period.

		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	2.9%	13.8%	11.6%	3.0%	14.5%	11.6%	2.8%	13.6%	11.5%	3.2%	15.2%	15.4%
	Average	2.9%	14.0%	13.4%	3.0%	14.4%	14.1%	2.8%	13.8%	13.1%	3.1%	15.0%	15.5%
	Highest	6.8%	17.6%	17.6%	6.4%	17.1%	15.8%	6.8%	17.6%	17.6%	3.2%	15.4%	15.6%
	Lowest	1.9%	6.5%	0.1%	2.7%	12.0%	1.9%	1.9%	6.5%	0.1%	3.0%	14.7%	15.3%
	50 th Percentile	2.9%	14.2%	14.6%	2.9%	14.7%	14.9%	2.8%	14.0%	14.5%	3.1%	15.0%	15.5%
	91 day – Tbill	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%
	S&P Kenya Bond Index	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%
Equities	Weighted Average	-6.0%	-11.5%	0.0%	-5.7%	-11.2%	1.8%	-6.0%	-11.6%	-0.3%	-6.5%	-11.2%	1.5%
	Average	-6.0%	-11.7%	0.5%	-5.8%	-10.9%	2.9%	-6.1%	-11.9%	-0.1%	-6.6%	-11.4%	1.7%
	Highest	-2.2%	6.8%	17.2%	-2.9%	2.8%	17.2%	-2.2%	6.8%	8.4%	-5.8%	-10.2%	2.5%
	Lowest	-8.8%	-33.8%	-16.9%	-8.4%	-18.0%	-0.6%	-8.8%	-33.8%	-16.9%	-7.5%	-12.7%	0.9%
	50 th Percentile	-6.0%	-12.8%	1.9%	-5.6%	-11.4%	2.5%	-6.2%	-13.1%	1.6%	-6.6%	-11.4%	1.7%
	NASI	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%
Offshore	Weighted Average	-13.4%	-9.1%	3.5%	-13.5%	-9.1%	3.5%	-13.5%	-9.1%	3.5%	-10.8%	-8.0%	4.3%
	Average	-13.1%	-10.4%	4.9%	-13.1%	-10.4%	4.9%	-13.1%	-10.4%	4.9%	-13.6%	-13.6%	-13.6%
	Highest	-8.9%	-3.1%	10.6%	-8.9%	-3.1%	10.6%	-8.9%	-3.1%	10.6%	-13.6%	-10.2%	5.5%
	Lowest	-16.9%	-23.1%	-1.6%	-16.9%	-23.1%	-1.6%	-16.9%	-23.1%	-1.6%	-13.6%	-10.2%	5.5%
	50 th Percentile	-13.7%	-10.1%	5.3%	-13.7%	-10.1%	5.3%	-13.7%	-10.1%	5.3%	-13.6%	-10.2%	5.5%
	MSCI	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%

Medium Schemes Asset Weighted Average Returns



In the quarter, fixed income assets recorded the highest returns at 2.9% compared to the equities and offshore asset classes.

In the quarter, all asset classes outperformed the benchmark for all medium schemes

Medium schemes with an aggressive risk profile performed highest in the quarter at 3.2% return compared to Medium Schemes with conservative and moderate risk profile at 3.0% and 2.8% respectively.

Medium schemes with a conservative risk profile performed highest across all periods in the equities category.

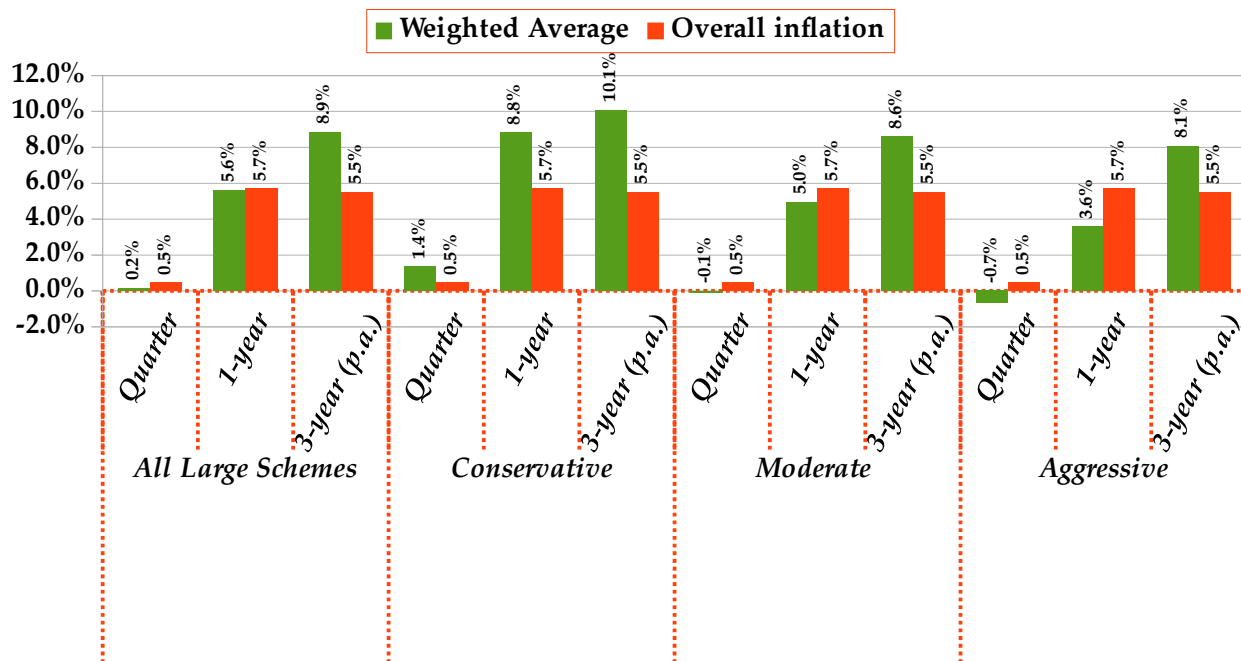
The medium schemes offshore performance for the quarter, across all periods, was lower compared to the previous quarter.

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	0.2%	5.6%	8.9%	1.4%	8.8%	10.1%	-0.1%	5.0%	8.6%	-0.7%	3.6%	8.1%
Average	0.3%	5.9%	10.6%	0.9%	8.9%	11.7%	-0.1%	5.1%	10.4%	-0.5%	3.8%	9.2%
Highest	2.8%	15.6%	14.0%	2.8%	15.6%	14.0%	1.7%	10.0%	12.3%	2.3%	8.2%	12.0%
Lowest	-2.6%	-0.8%	6.8%	-0.1%	4.1%	9.2%	-1.9%	0.0%	7.4%	-2.6%	-0.8%	6.8%
50th Percentile	0.3%	5.5%	10.6%	1.3%	8.6%	11.9%	-0.1%	4.9%	10.5%	-0.4%	4.0%	9.2%
Overall inflation	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%

Large Scheme Overall Average Returns



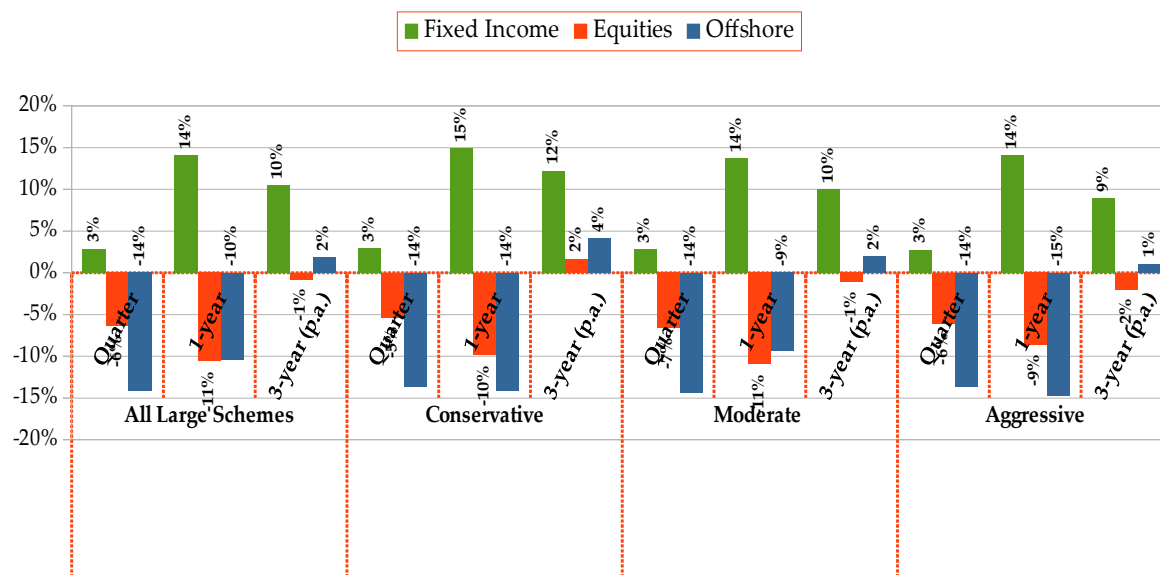
The quarter, 1-year and 3-year average weighted returns were 0.2%, 5.6% and 8.9% respectively compared to Q3 2018 average weighted return of -0.7%, 7.9% and 9.6% respectively.

Conservative Large schemes performed better in the quarter, 1-year and 3-year period than the moderate and aggressive schemes

The overall large schemes 3-month and 1-year performance was below the inflation rate as at 31st December 2018 but outperformed inflation in the 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	2.8%	14.0%	10.5%	2.9%	14.9%	12.2%	2.8%	13.7%	10.0%	2.7%	14.0%	8.9%
	Average	2.8%	14.3%	13.0%	2.8%	14.3%	13.0%	2.8%	14.2%	13.0%	2.7%	13.8%	10.7%
	Highest	7.5%	17.2%	19.1%	7.5%	17.2%	19.1%	7.5%	17.2%	19.1%	3.4%	15.8%	16.3%
	Lowest	1.3%	10.4%	-0.8%	1.3%	10.4%	2.5%	1.4%	11.1%	0.2%	1.3%	10.4%	-0.8%
	50 th Percentile	2.9%	14.6%	14.7%	2.9%	14.6%	14.7%	2.8%	14.4%	14.5%	2.9%	14.2%	13.7%
	91 day – Tbill	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%
S&P Kenya Bond Index	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	
Equities	Weighted Average	-6.4%	-10.5%	-0.8%	-5.3%	-9.8%	1.6%	-6.6%	-10.9%	-1.1%	-6.1%	-8.6%	-2.0%
	Average	-6.2%	-10.9%	-0.4%	-5.4%	-9.6%	2.3%	-6.5%	-11.5%	-0.9%	-6.1%	-9.4%	-2.3%
	Highest	-2.1%	3.1%	12.9%	-2.1%	3.1%	12.9%	-2.8%	3.1%	6.9%	-2.1%	3.1%	4.5%
	Lowest	-8.2%	-20.9%	-16.5%	-8.2%	-20.9%	-16.5%	-8.2%	-20.9%	-16.5%	-7.5%	-18.3%	-14.8%
	50 th Percentile	-6.4%	-12.5%	1.7%	-5.3%	-11.7%	2.1%	-6.9%	-13.0%	0.8%	-6.4%	-13.1%	-0.2%
	NASI	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%
Offshore	Weighted Average	-14.2%	-10.4%	1.9%	-13.6%	-14.1%	4.1%	-14.3%	-9.3%	2.0%	-13.6%	-14.7%	1.1%
	Average	-13.3%	-11.0%	2.2%	-13.3%	-11.0%	2.2%	-13.6%	-10.3%	3.2%	-11.8%	-13.9%	-3.1%
	Highest	-5.5%	1.6%	8.2%	-13.6%	-14.1%	4.1%	-8.9%	1.6%	8.2%	-5.5%	-0.9%	5.6%
	Lowest	-16.5%	-25.8%	-21.2%	-13.63%	-14.1%	4.1%	-16.5%	-19.0%	-2.4%	-14.8%	-25.8%	-21.2%
	50 th Percentile	-14.0%	-10.7%	4.1%	-13.6%	-14.1%	4.1%	-14.0%	-10.3%	4.2%	-13.2%	-12.5%	-0.6%
	MSCI	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%

Large Schemes Asset Weighted Average Returns



In the quarter, fixed income assets recorded the highest returns compared to all other asset classes.

The equity returns were highest for the conservative large schemes across all periods except for the 1-year period while fixed income returns were highest in the aggressive large schemes for the 1-year and 3-year periods. Fixed income return was highest for the quarter in the conservative large schemes

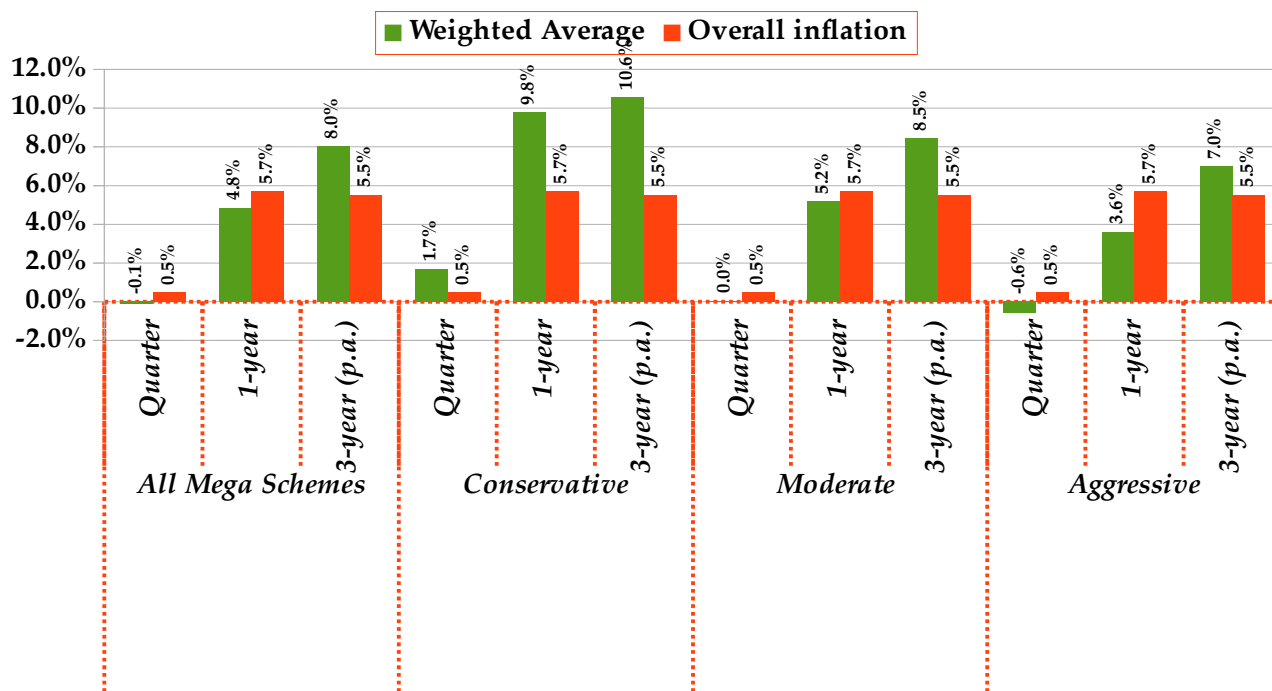
Offshore returns were highest for the conservative large schemes in the quarter and 3-year periods while moderate large schemes recorded the highest 1-year offshore return.

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	-0.1%	4.8%	8.0%	1.7%	9.8%	10.6%	0.0%	5.2%	8.5%	-0.6%	3.6%	7.0%
Average	-0.1%	5.0%	9.9%	1.7%	9.8%	13.0%	-0.2%	5.0%	9.8%	-0.5%	3.7%	9.1%
Highest	3.1%	15.3%	15.4%	3.1%	15.3%	15.4%	1.2%	8.5%	11.9%	1.4%	9.5%	12.2%
Lowest	-3.6%	-1.1%	6.1%	0.8%	5.5%	11.5%	-2.5%	-0.6%	6.8%	-3.6%	-1.1%	6.1%
50th Percentile	0.0%	4.5%	9.8%	1.5%	9.6%	12.2%	0.0%	5.0%	9.8%	-0.2%	4.1%	8.9%
Overall inflation	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%	0.5%	5.7%	5.5%

Mega Schemes Overall Average Returns



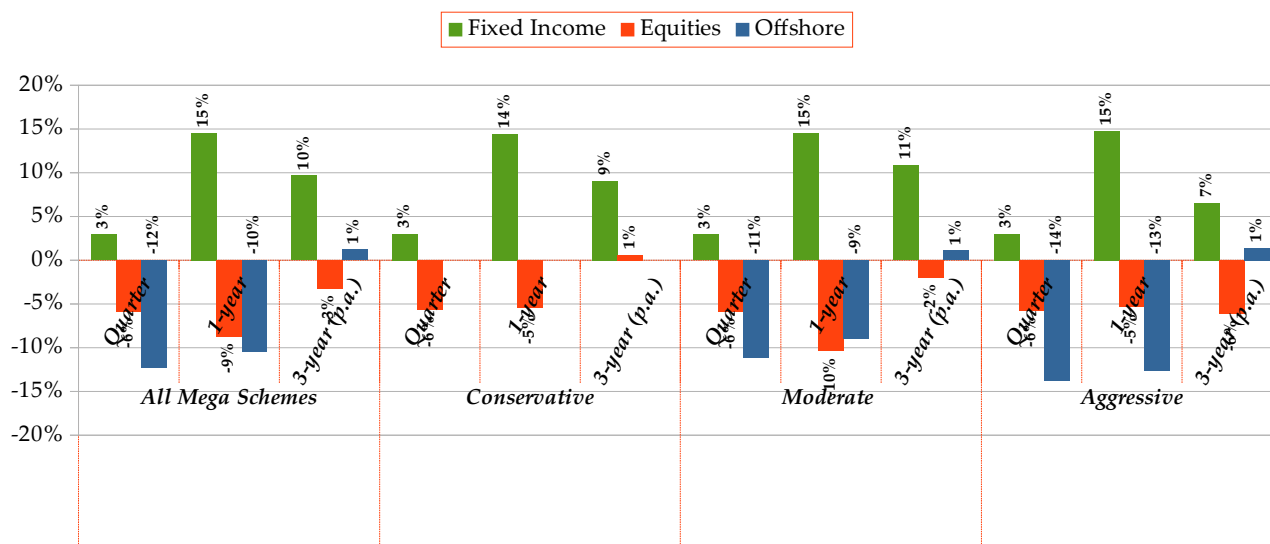
The weighted average return for all the Mega schemes at -0.1%, 4.8% and 8.0% for the quarter, year and 3-year annualized periods in comparison to the previous quarter's -1.2%, 7.3% and 8.9%, a decline in the 1-year and 3-year periods' performance.

Mega schemes with a conservative risk profiles achieved the highest returns in the quarter, 1-year and 3-year periods recording 1.7%,9.8% and 10.6% respectively.

The quarter performance for Mega schemes for all categories underperformed inflation except for the conservative schemes.

		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	Weighted Average	2.9%	14.6%	9.7%	3.0%	14.4%	9.1%	2.9%	14.5%	10.8%	3.0%	14.8%	6.5%
	Average	2.9%	14.6%	10.4%	3.0%	14.7%	13.3%	2.9%	14.6%	10.5%	2.9%	14.6%	9.3%
	Highest	5.9%	18.4%	17.9%	3.2%	16.4%	17.9%	5.9%	18.4%	16.1%	4.2%	17.7%	15.7%
	Lowest	1.3%	11.9%	-1.6%	2.9%	12.9%	0.6%	1.3%	11.9%	-1.6%	2.1%	12.7%	-0.5%
	50 th Percentile	2.9%	14.6%	14.3%	3.0%	15.1%	15.0%	2.9%	14.5%	14.3%	2.9%	14.5%	14.1%
	91 day – Tbill	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%	1.8%	7.8%	8.2%
	S&P Kenya Bond Index	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%	3.0%	14.8%	15.7%
Equities	Weighted Average	-5.9%	-8.7%	-3.2%	-5.7%	-5.4%	0.6%	-5.9%	-10.4%	-2.0%	-5.7%	-5.4%	-6.2%
	Average	-6.0%	-8.2%	-3.5%	-5.6%	-6.2%	0.9%	-6.2%	-8.9%	-3.3%	-5.7%	-7.4%	-4.6%
	Highest	-1.9%	4.2%	4.1%	-2.6%	3.1%	3.8%	-1.9%	3.2%	-16.4%	-3.0%	4.2%	3.5%
	Lowest	-13.3%	-21.0%	-16.4%	-7.2%	-20.6%	-3.9%	-13.3%	-21.0%	-16.4%	-8.3%	-20.9%	-16.1%
	50 th Percentile	-5.8%	-12.1%	0.7%	-6.1%	-10.1%	1.8%	-6.0%	-12.5%	0.6%	-5.5%	-11.9%	1.1%
	NASI	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%	-6.2%	-18.0%	-1.2%
Offshore	Weighted Average	-12.3%	-10.5%	1.2%				-11.2%	-9.0%	1.1%	-13.8%	-12.6%	1.4%
	Average	-14.0%	-12.8%	1.7%				-14.2%	-11.7%	4.4%	-13.8%	-14.5%	-1.4%
	Highest	-5.9%	1.6%	7.4%				-8.9%	1.6%	7.4%	-5.9%	-8.1%	5.6%
	Lowest	-17.3%	-22.8%	-27.8%				-17.3%	-20.2%	-0.9%	-16.1%	-22.8%	-27.8%
	50 th Percentile	-15.0%	-13.1%	3.6%				-15.0%	-11.5%	4.5%	-15.0%	-14.2%	3.3%
	MSCI	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%	-13.9%	-10.4%	4.2%

Mega Schemes Asset Weighted Average Returns



Fixed income recorded the highest returns of all the asset classes. The returns of all asset classes for the Mega Schemes were below the benchmarks for the quarter.

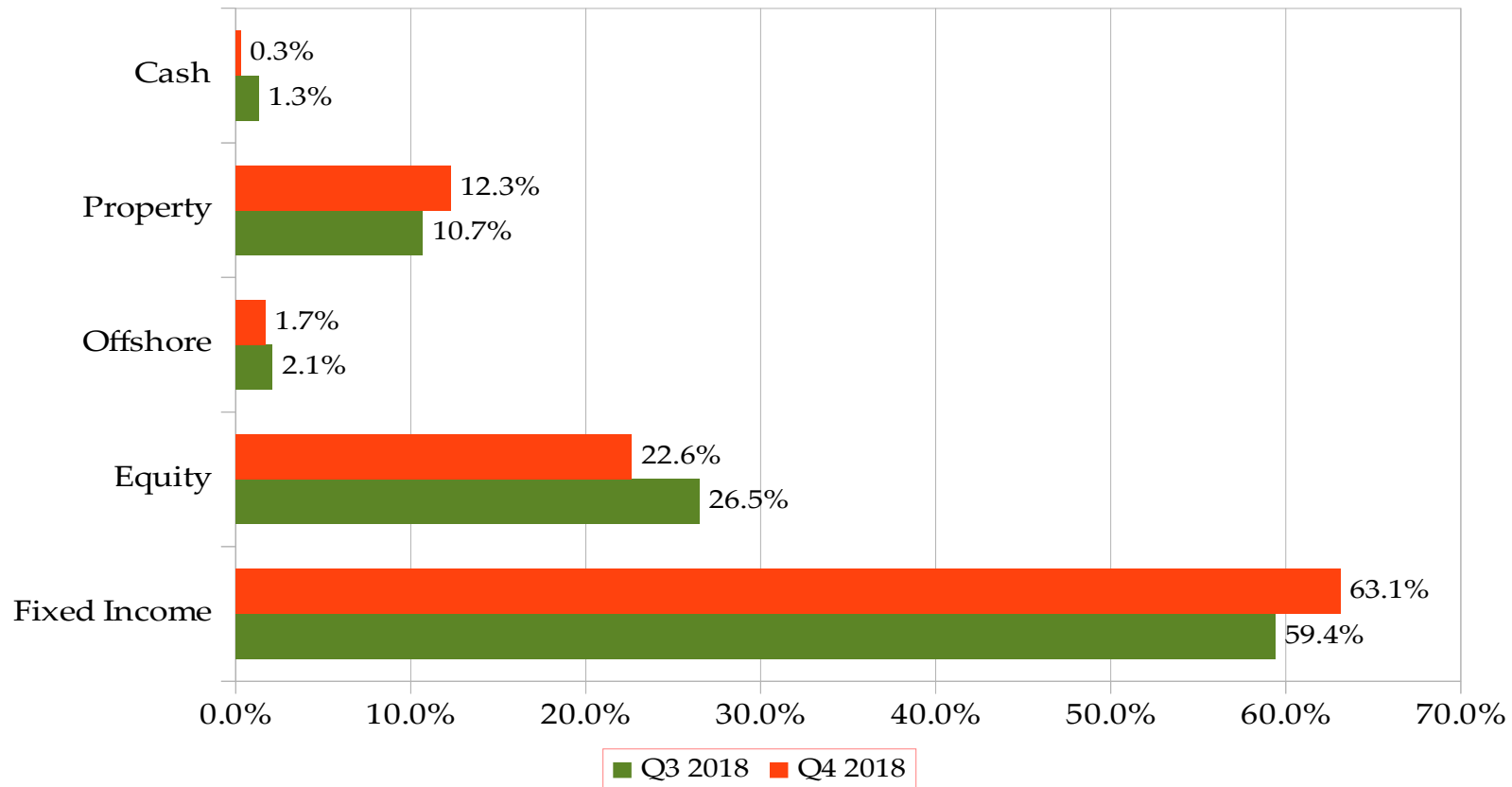
Returns for fixed income were highest for conservative and aggressive mega schemes in the 3-month period. Mega schemes with aggressive risk profile recorded the highest 1-year period while mega schemes with moderate risk profile recorded the highest 3-year annualized return.

Conservative mega schemes performed highest in across all periods.

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

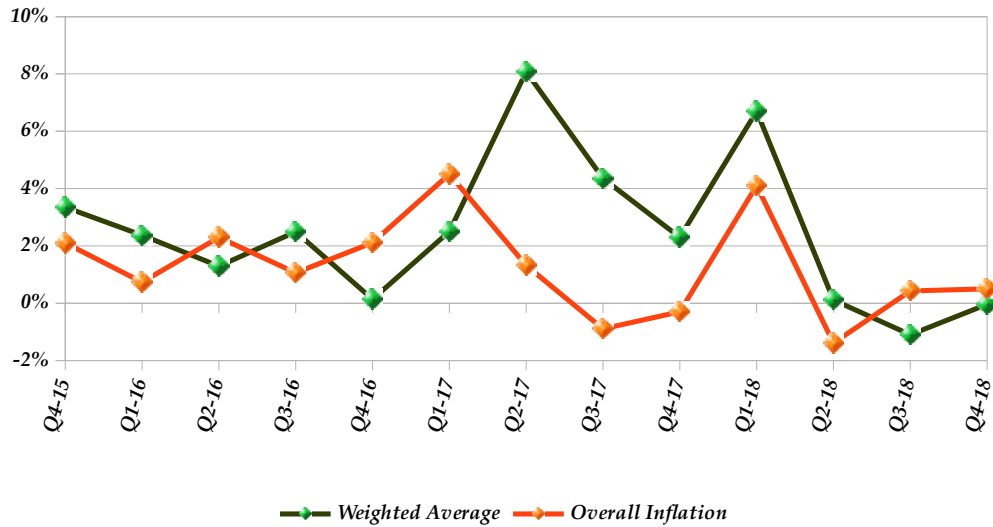
ASSET CATEGORY DISTRIBUTION

	Fixed Income	Equity	Offshore	Property	Cash
Weighted Average	63.11%	22.63%	1.70%	12.29%	0.27%
Average	70.65%	22.75%	4.20%	26.36%	1.05%
Highest	100.00%	42.71%	12.81%	80.44%	41.71%
Lowest	13.76%	0.10%	0.23%	1.05%	0.00%
Median	73.00%	23.55%	4.15%	24.91%	0.19%

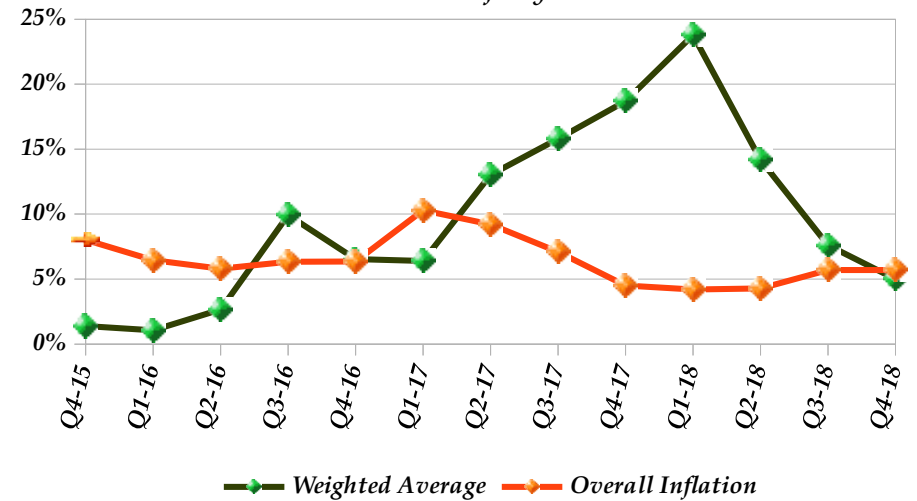


TRENDS

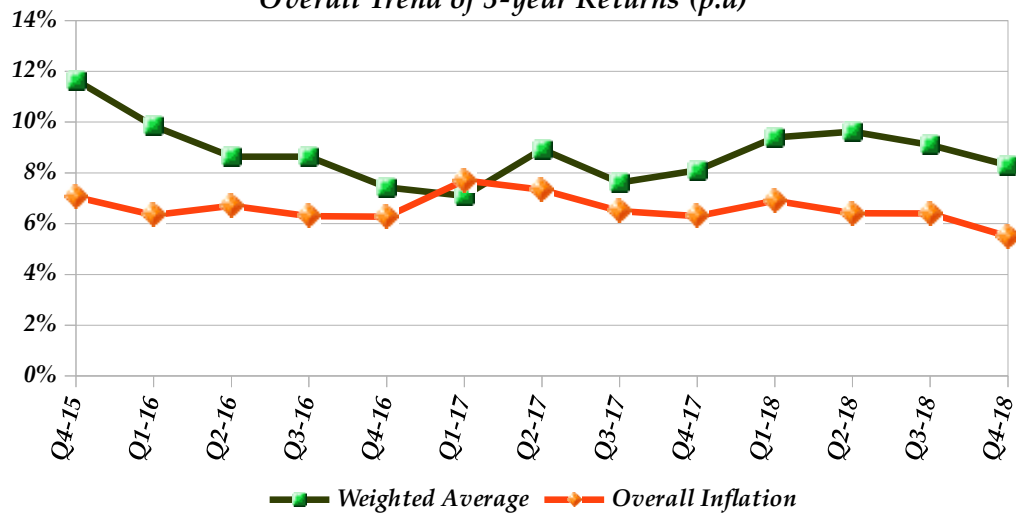
Overall Trend of Quarterly Returns



Overall Trend of 1-year Returns



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

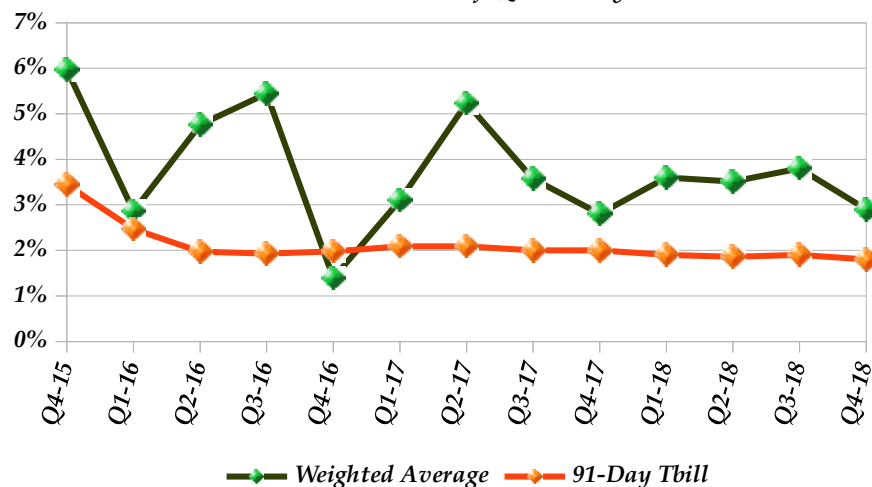


The variance between the quarterly returns and inflation rates has been marginal since Q4 2015 except Q2 2017 where the variance was higher between the two rates.

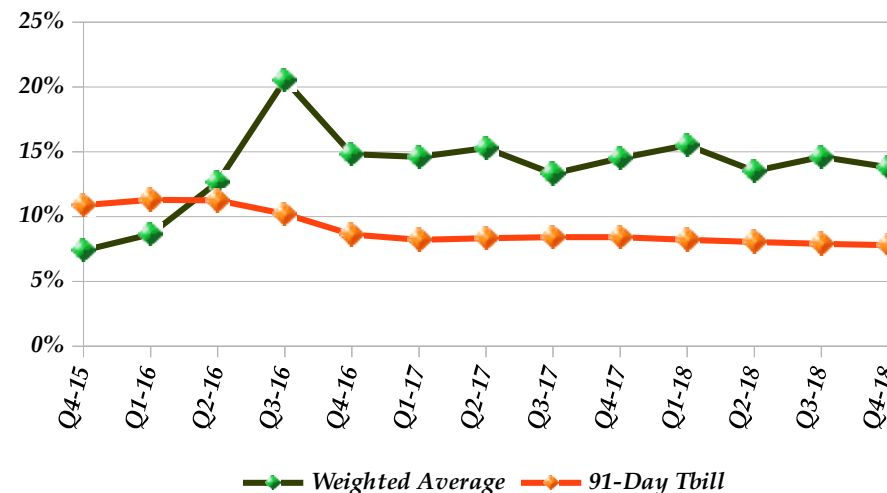
Since the fourth quarter 2015 the overall trend of 1-year return has under-performed the inflation benchmark except Q3 & Q4 2016. There has been a downward trend in the performance from Q1 2018 upto the current Q4 2018.

The lowest overall 3-year return (p.a.) since Q4 2015 on average for all schemes was in Q1 2017 at 7.1% while the highest was in Q4 2015 at 11.66% p.a. The overall 3-year return has been outperforming the benchmark since Q4 2015 except Q1 2017 where the returns underperformed the benchmark.

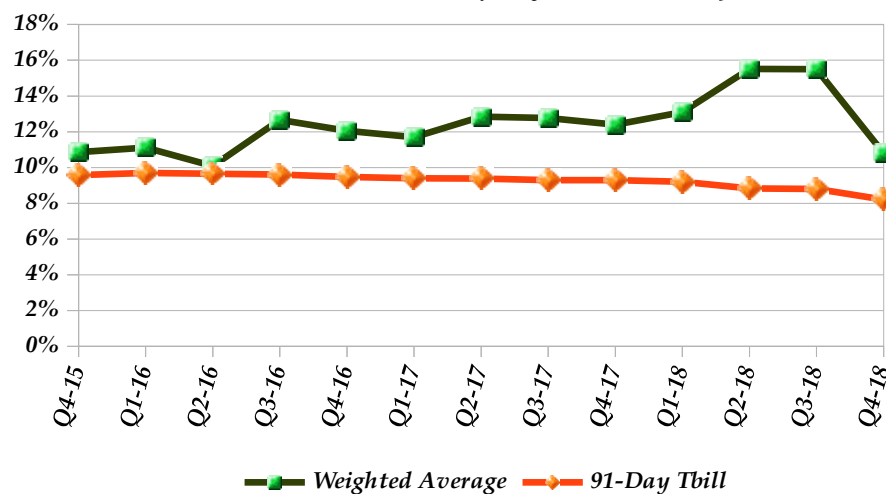
Fixed Income Trend of Quarterly Returns



Fixed Income Trend of 1-year Returns



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

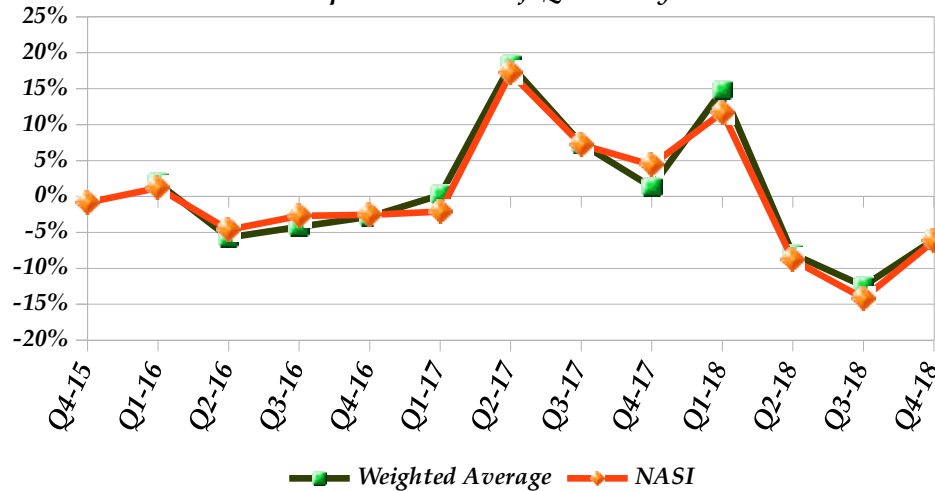


The quarterly fixed income returns have been volatile with the lowest quarterly return on average for all schemes since Q4 2015 being in Q4 2016 at (1.39)% while the highest was in Q4 2015 at 5.97%. The quarterly returns have generally outperformed the benchmark apart from Q1 2016.

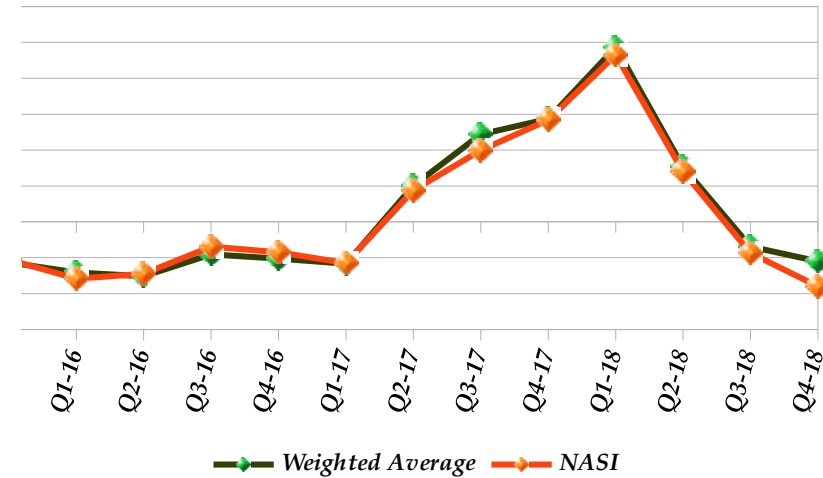
The fixed income 1-year return has been more stable than the quarterly returns with returns outperforming the benchmark since Q1 2016

The lowest fixed income 3-year return (p.a.) on average for all schemes since Q4 2015 was in Q2 2016 at 10.08% while the highest was in Q2 2018 at 15.51% p.a. Since Q2 2016 the 3-year return has outperformed the benchmark.

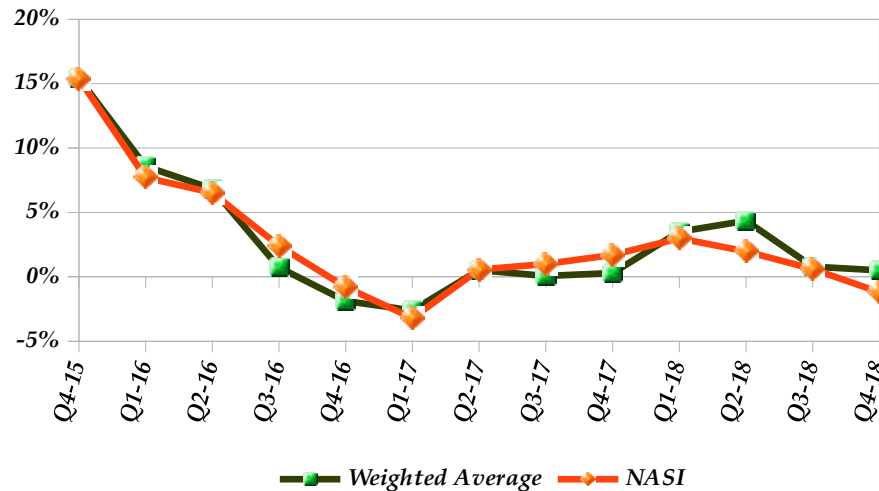
Equities Trend of Quarterly Returns



Equities Trend of 1-year Returns



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

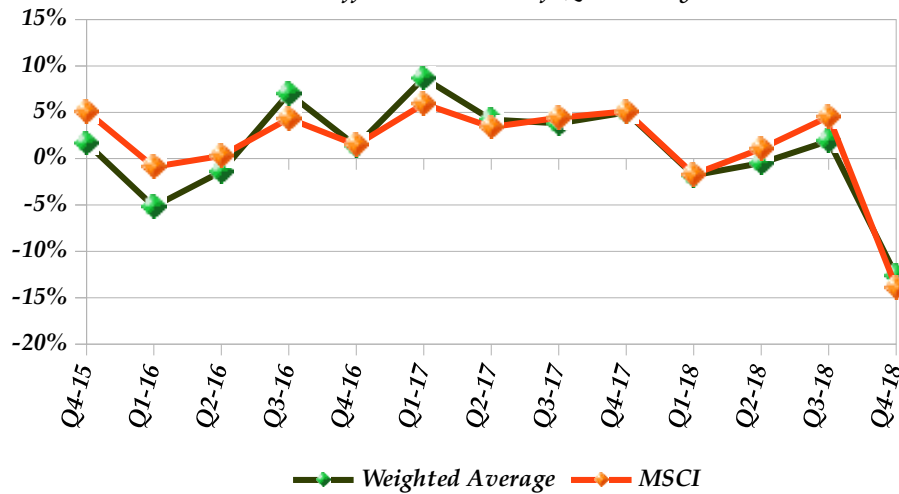


The equities returns have closely tracked the performance of the benchmark, supporting a passive investment strategy. The lowest equity quarterly return on average for all schemes since Q4 2015 was in Q3 2018 at (-12.5)% while the highest was in Q2 2017 at 18.32%.

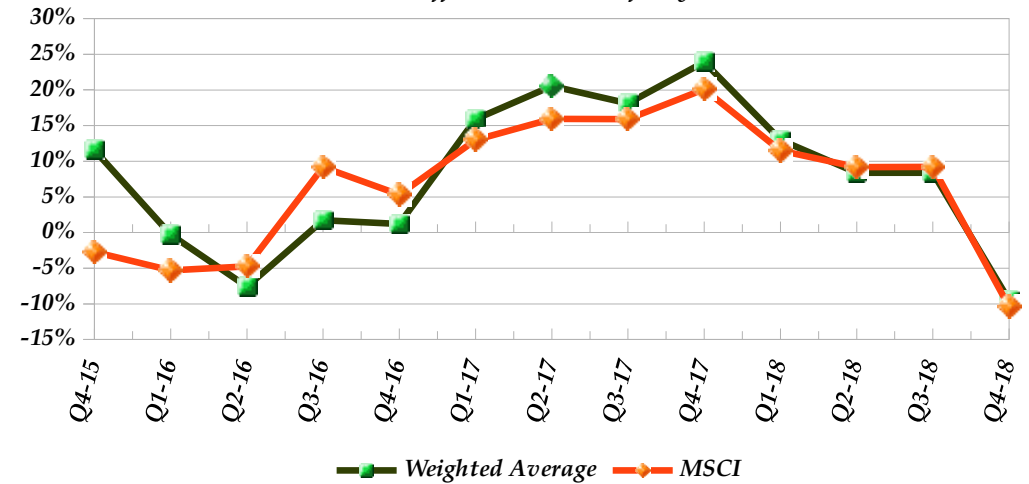
Similar to the quarterly returns, the 1-year equity returns have been almost at par with the benchmark returns. The trend has however shifted downwards drastically with this and last quarter registering a significant decline in the 1-year equity returns.

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.

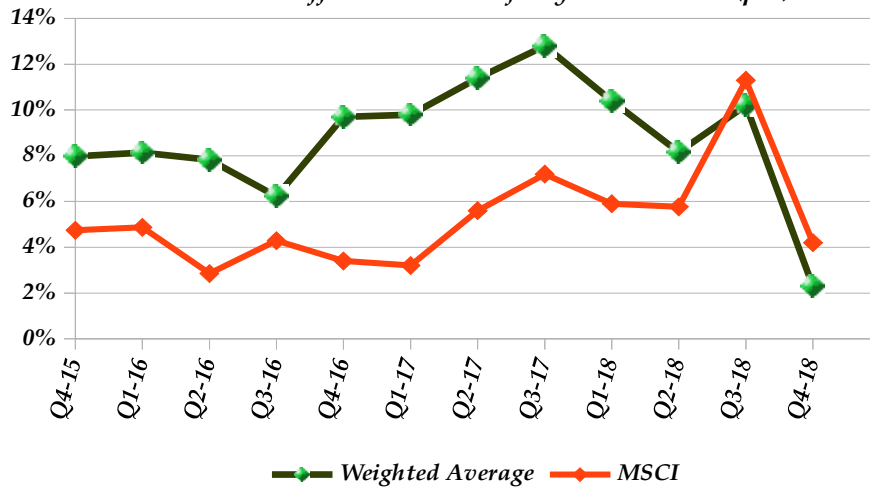
Offshore Trend of Quarterly Returns



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 Q4 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 Q4 2015 was in Q3 2016 at 6.23% while the highest was in Q3 2017 at 12.80%. Since Q4 2015 the actual offshore returns have consistently outperformed the benchmark except in the last two quarters.

RATIOS

	Quarter	1-Year	3-Years
Standard Deviation	1.03%	2.75%	1.80%
Tracking Error	0.02%	0.14%	0.28%
Information Ratio	-3.61	1.89	19.00
Sharpe Ratio	-79.98	-12.90	9.22

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.

Sharpe Ratio: Measures the ratio of average return earned in excess of the risk free rate per unit of volatility or total risk.

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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