Zamara Consulting Actuaries Schemes Survey

June 2018

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Introduction

We are pleased to present our 50th Investment Performance Survey for the period ending 30 June 2018.

This Survey covers 417 schemes with a total of K Shs 732.1 billion of assets under management.

We acknowledge and thank each of the participating Fund Managers for providing the necessary asset and performance data in a timely manner.

Fund Manager	Number of Participating Schemes	Value of Assets Under Management (K Shs m)
African Alliance Kenya Investment Bank Limited	7	
Apollo Asset Managers	4	
British American Asset Managers	24	
CIC Insurance	7	
Co-op Trust Investments	50	
GenAfrica Asset Managers	94	
ICEA Lion Asset Management Limited	35	
Old Mutual Investment Group Limited	77	
Sanlam Investments East Africa Limited (previously PineBridge Investments)	79	
Stanlib Investments	40	
Subtotal	**417**	**732,093**

Some schemes did not qualify to be included in the survey. This was due to one or more of the following reasons:

- Incomplete data.
- Data received did not pass sense checks.
- Responses to queries were not received as at the date of issuing this report.

Key Highlights

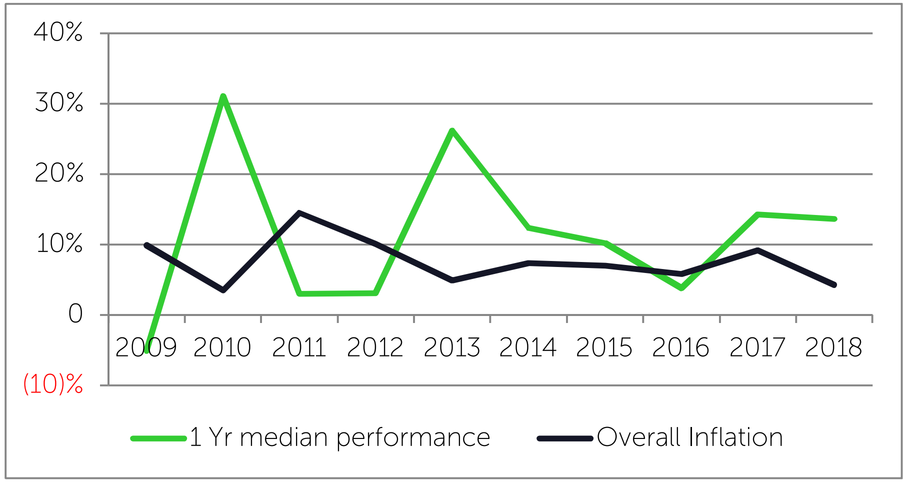
We set out in the table below, a summary of the median performance of Schemes for each of the years from 30 June 2009 to 30 June 2018.

Period Ending 30 June	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of Schemes Participating	132	124	128	134	131	381	372	388	379	417
Total Assets K Shs Bn	100.5	131.2	141.2	162.7	201.3	500.7	548.0	581.3	654.8	732.1
1 Yr Median performance	(5.1)%	31.1%	3.0%	3.1%	26.2%	12.4%	10.2%	3.8%	14.3%	13.6%
3 Yr Median performance	7.0%	12.4%	9.2%	11.7%	10.4%	13.5%	16.0%	9.0%	9.4%	10.7%
Overall 1 year Inflation[1]	9.9%	3.5%	14.5%	10.0%	4.9%	7.4%	7.0%	5.8%	9.2%	4.3%
Overall 3 year Inflation[2]	10.2%	9.9%	9.2%	9.2%	9.7%	7.4%	6.4%	6.7%	7.3%	6.4%

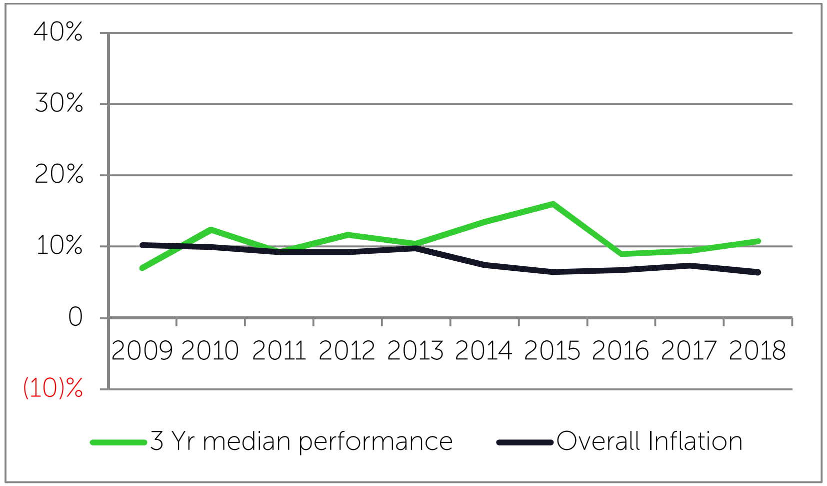
Notes:
1. Based on KNBS Statistics 2006 – 2018: www.knbs.or.ke/
2. Calculated geometric average over 3 years.

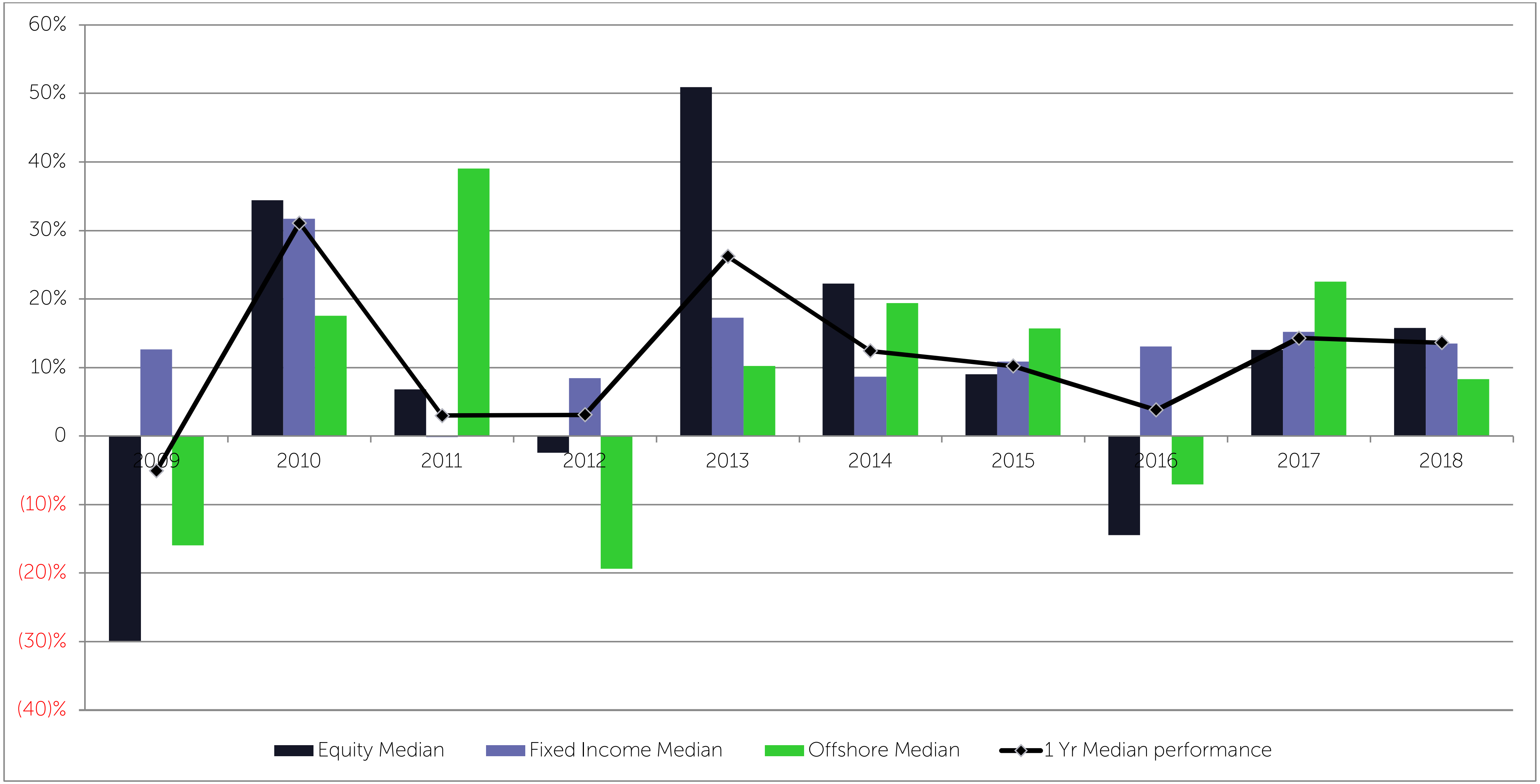
The Survey indicates that the median scheme did not always outperform overall inflation over the 1 year period. Over 1 year, median returns underperformed inflation in 2009, 2011, 2012 and 2016 as shown in the 1 year chart below. Over 3 years, median returns have outperformed inflation except for 2009.

1 Year



3 Years





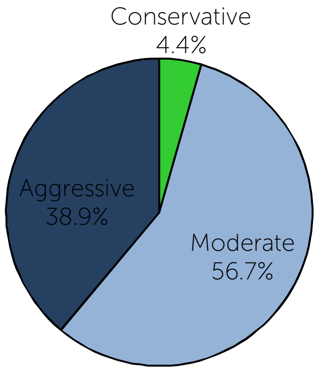
The chart above shows the median performance trend of the three asset classes (equity, fixed income and offshore) as at 30 June for each of the last 10 years.

Risk Profile of Participating Schemes

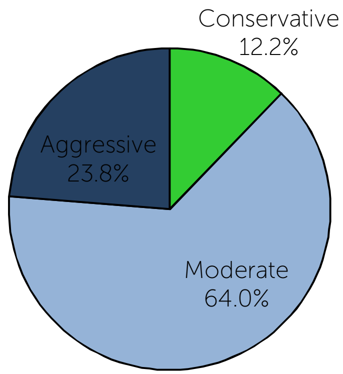
STATISTICS					
Risk Profile	Fixed Income Allocation*	Number of Schemes	Scheme Percentage %	Assets Under Management K Shs m	Asset Percentage %
Conservative	Over 80%	51	12.2%	32,270	4.4%
Moderate	65% to 80%	267	64.0%	415,133	56.7%
Aggressive	Less than 65%	99	23.8%	284,690	38.9%
Total		**417**	**100.0%**	**732,093**	**100.0%**

*Asset allocation used to determine the above profiles excludes property

DISTRIBUTION OF PARTICIPATING SCHEMES BY ASSET SIZE



DISTRIBUTION OF PARTICIPATING SCHEMES BY NUMBER



417 Schemes qualified for inclusion in the Survey on the basis of being segregated arrangements with at least 1 year and 3 year consecutive return periods.

The survey is dominated by moderate schemes; they comprise 64% of participating schemes and manage 56.7% of assets in this survey.

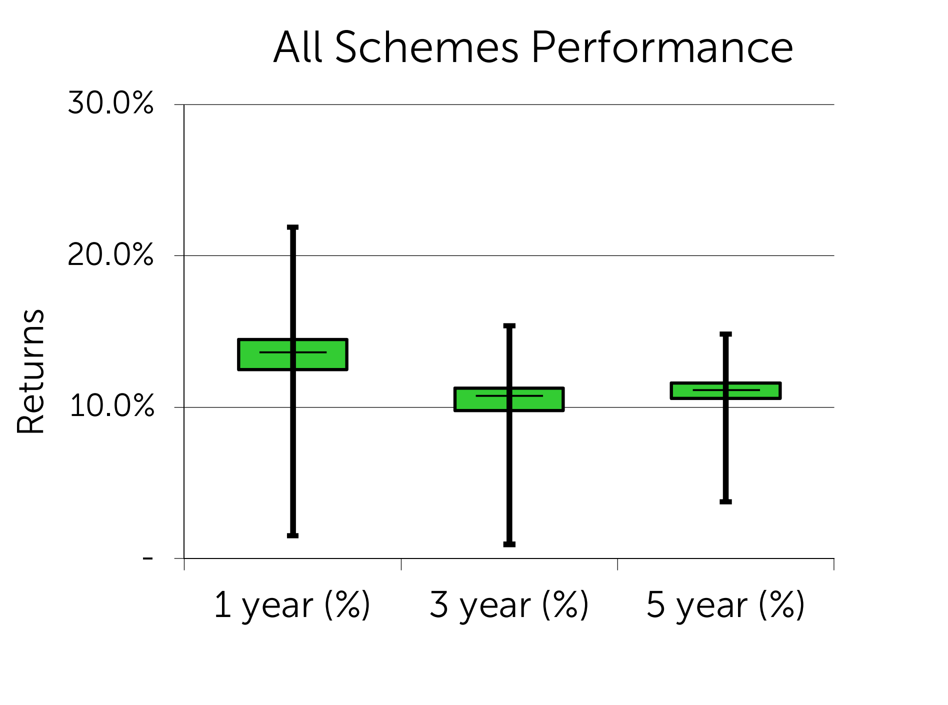
Conservative schemes make up 12.2% of number of participating schemes but only 4.4% of assets under management; this is because 55% of the conservative schemes are small schemes.

Aggressive schemes make up 23.8% of number of participating schemes with 38.9% of assets under management.

Analysis and Distribution of Returns for the Period Ending 30 June 2018

	1 year	3 year*	5 year*
25th Percentile	12.5%	9.8%	10.6%
Median	13.6%	10.7%	11.1%
75th Percentile	14.5%	11.3%	11.6%
Range of Returns	20.4%	14.4%	11.1%
Average	13.4%	10.5%	11.0%
Weighted Average	13.4%	8.7%	10.8%

*Annualised return



Over 1 year, the median return of the participating schemes was 13.6%. There was a significant range of returns of 20.4%. However, the range between the 25th and 75th percentile was only 2.0%.

Over 3 years, the median return of the participating schemes was an annualised 10.7% with a range of returns of 14.4%. However, the range between the 25th and 75th percentile was only 1.5%.

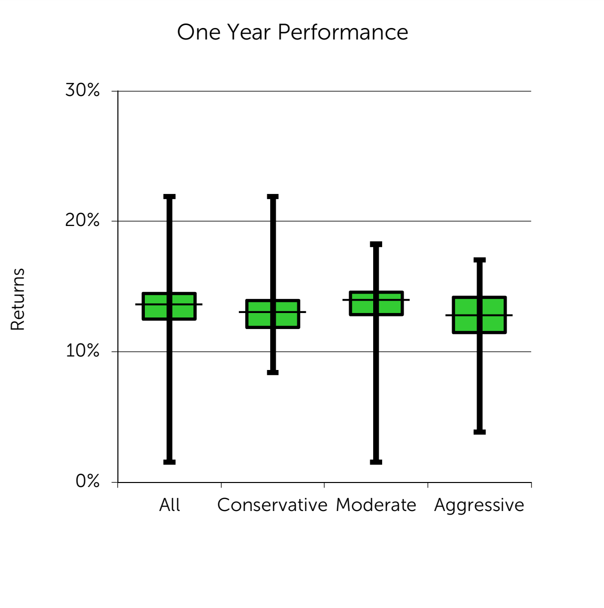
Over 5 years, the median return of the participating schemes was an annualised 11.1% with a range of returns of 11.1%. However, the range between the 25th and 75th percentile was only 1.0%.

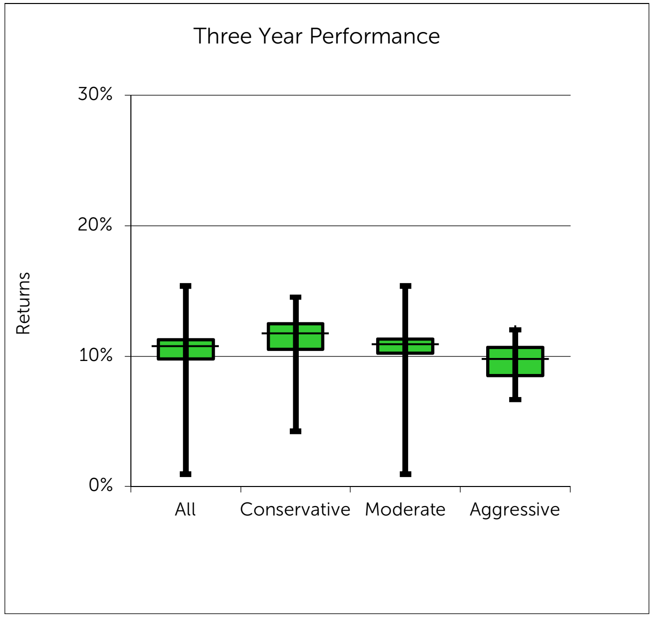
The box plots on the next page show our analysis of the median and range of returns of the participating schemes categorized by risk profile: conservative, moderate and aggressive schemes

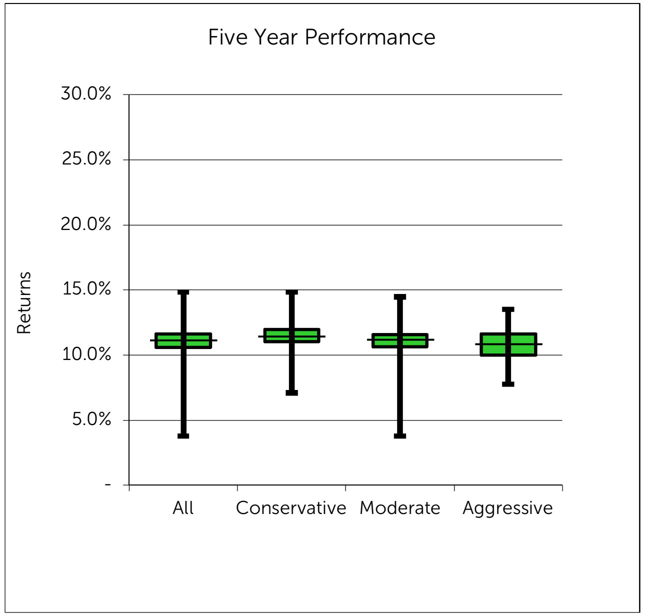
Analysis and Distribution of Returns for the Period Ending 30 June 2018

Return Distribution												
	All Schemes			Conservative Schemes			Moderate Schemes			Aggressive Schemes		
	1 year (%)	3 year (%)*	5 year (%)*	1 year (%)	3 year (%)*	5 year (%)*	1 year (%)	3 year (%)*	5 year (%)*	1 year (%)	3 year (%)*	5 year (%)*
25th Percentile	12.5%	9.8%	10.6%	11.7%	10.4%	11.0%	12.8%	10.2%	10.7%	11.5%	8.4%	10.0%
Median	13.6%	10.7%	11.1%	12.9%	11.7%	11.4%	13.9%	10.9%	11.1%	12.8%	9.7%	10.8%
75th Percentile	14.5%	11.3%	11.6%	14.0%	12.4%	12.0%	14.6%	11.3%	11.6%	14.3%	10.6%	11.5%
Range of Returns	20.4%	14.4%	11.1%	13.5%	10.3%	7.8%	16.7%	8.2%	10.7%	13.2%	5.4%	5.8%
Average	13.4%	10.5%	11.0%	12.8%	11.3	11.3%	13.7%	10.7%	11.1%	12.8%	9.6%	10.7%
Weighted Average	13.4%	8.7%	10.8%	12.8%	9.7%	12.0%	13.7%	8.5%	10.8%	13.0%	7.9%	10.6%

*Annualised return







Moderate schemes had the strongest performance over one year. The Moderate schemes median return was superior to conservative and aggressive schemes median return over the one year period.

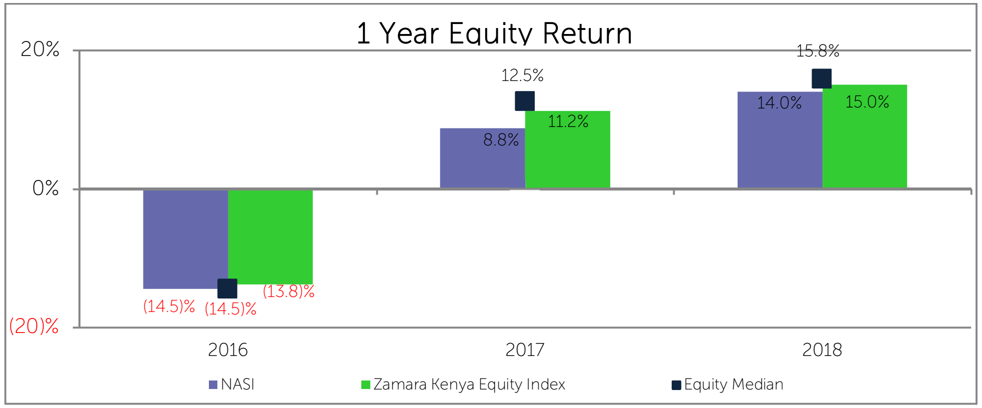
This is indicative of the moderate schemes benefitting from fairer exposure to both equities and fixed income which were the best performing asset classes over the period.

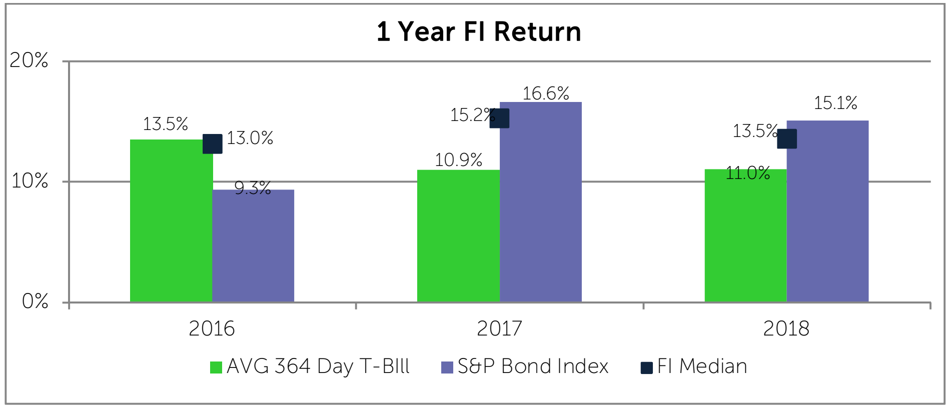
The narrative for the three year period changes, with conservative schemes generating the highest median return and aggressive schemes posting the lowest. The narrative is similar over the 5 year period.

Asset Class Returns for 1 Year Ending 30 June 2018

	All Schemes			Conservative Schemes			Moderate Schemes			Aggressive Schemes		
	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore
25th Percentile	13.2%	13.0%	5.5%	13.6%	11.5%	7.4%	13.3%	13.0%	6.8%	12.8%	13.0%	3.4%
Median	15.8%	13.5%	8.3%	17.0%	13.3%	7.4%	16.0%	13.5%	10.3%	14.7%	13.5%	7.6%
75th Percentile	18.8%	14.0%	11.8%	21.6%	13.8%	7.4%	18.7%	14.1%	15.1%	18.2%	13.9%	9.9%
Range of Returns	35.7%	13.7%	32.8%	19.4%	11.5%	0%	23.6%	12.8%	32.8%	30.5%	9.1%	21.6%
Average	16.0%	13.3%	8.1%	17.9%	12.7%	7.4%	16.1%	13.5%	10.2%	15.3%	13.2%	6.4%
Weighted Average	15.3%	13.6%	7.5%	16.7%	13.1%	7.4%	15.4%	13.7%	9.1%	15.1%	13.5%	6.9%

For comparison, the charts below indicate historical one year performance of select benchmarks and the Z - CASS asset class return median for the periods ending 30 June.





Equity: All schemes equity median return outperformed the NASI and Zamara Kenya Equity Index.

Fixed Income: All schemes fixed income median return outperformed the average 364 Day Treasury Bill but underperformed the S&P Bond Index.

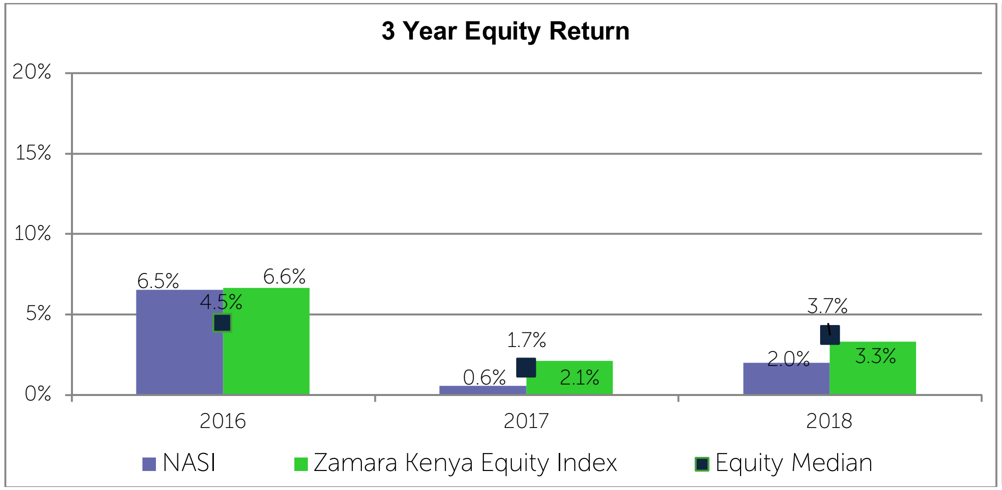
Offshore: All schemes offshore median return outperformed MSCI Emerging index but underperformed the MSCI world and MSCI ACWI Indices.

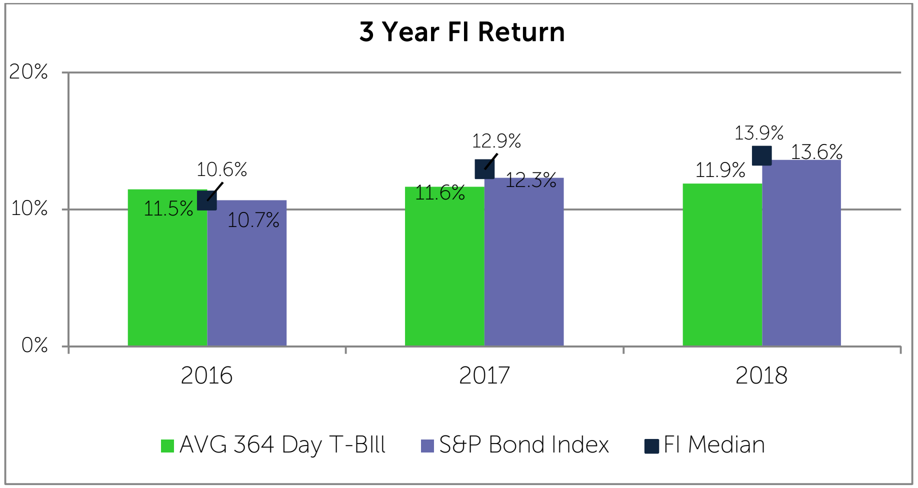
Asset Class Returns for 3 Years Ending 30 June 2018

	All Schemes			Conservative Schemes			Moderate Schemes			Aggressive Schemes		
	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore
25th Percentile	2.1%	13.3%	7.4%	1.1%	12.5%	7.1%	2.2%	13.4%	8.2%	2.1%	8.2%	4.0%
Median	3.7%	13.9%	8.8%	3.5%	13.5%	7.1%	3.8%	14.1%	9.3%	3.2%	13.6%	7.9%
75th Percentile	5.2%	14.4%	9.6%	5.3%	14.1%	7.1%	5.2%	14.5%	10.5%	5.0%	14.0%	8.9%
Range of Returns	33.3%	17.7%	20.9%	32.0%	13.8%	0%	22.5%	10.0%	20.9%	24.6%	15.3%	38.0%
Average	3.3%	13.6%	7.9%	3.0%	12.5%	7.1%	3.3%	13.9%	8.7%	3.4%	10.3%	5.5%
Weighted Average	2.1%	12.3%	8.8%	2.0%	13.3%	7.1%	1.9%	14.2%	9.5%	3.1%	11.7%	8.5%

NB: Numbers shown above have been annualised

For comparison, the charts below indicate historical three year performance of select benchmarks and the Z - CASS asset class return median for the periods ending 30 June.





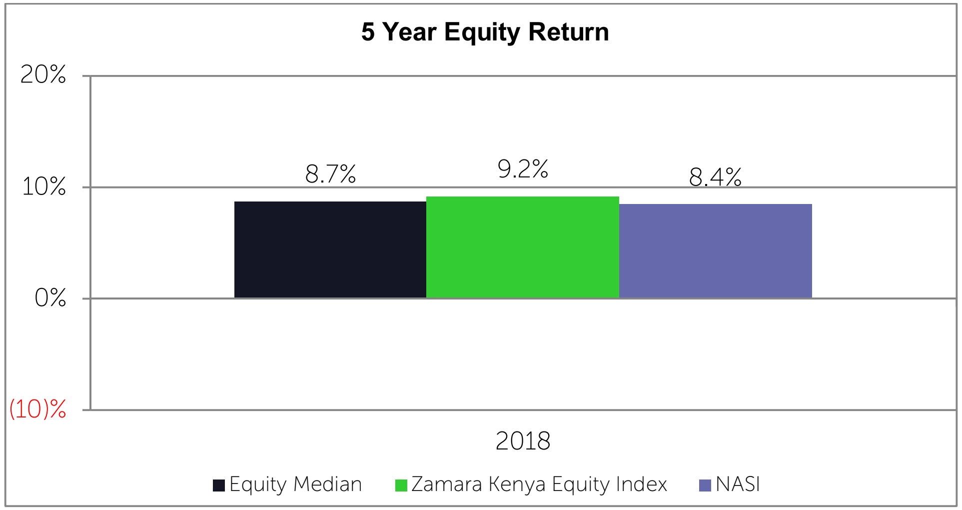
Equity: All schemes equity median return outperformed NASI and Zamara Kenya Equity Index.

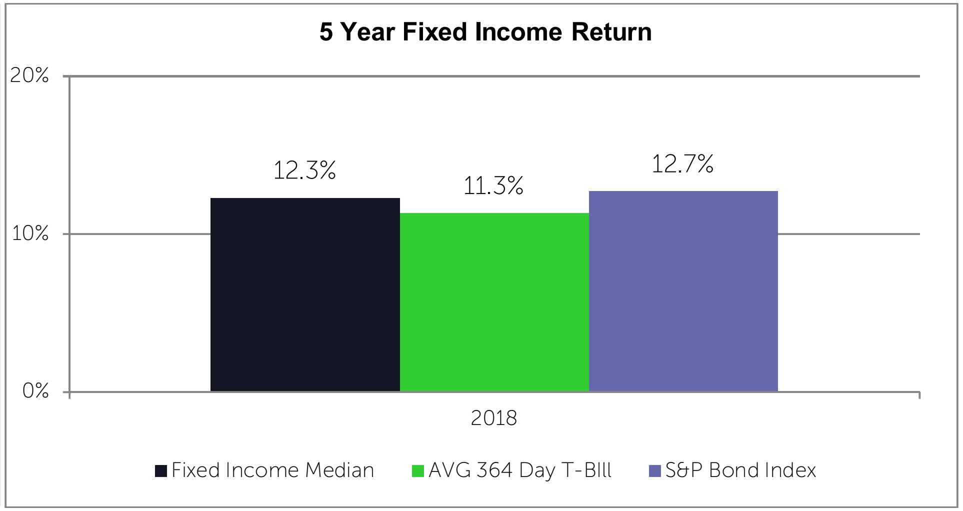
Fixed Income: All schemes fixed income median return outperformed the average 364 Day Treasury Bill, however, underperformed the S&P Bond Index.

Offshore: All schemes offshore median return outperformed MSCI World, MSCI ACWI, and MSCI Emerging Indices.

Asset Class Returns for 5 Years Ending 30 June 2018

	All Schemes			Conservative Schemes			Moderate Schemes			Aggressive Schemes		
	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore	Equity	Fixed Income	Offshore
25th Percentile	7.9%	11.6%	11.5%	4.4%	11.4%	3.4%	8.0%	11.5%	11.9%	7.9%	12.0%	11.6%
Median	8.7%	12.3%	12.6%	6.9%	12.1%	3.4%	8.6%	12.3%	12.8%	9.2%	12.4%	12.6%
75th Percentile	9.9%	12.7%	13.1%	9.6%	12.5%	3.4%	10.0%	12.6%	14.1%	9.8%	12.9%	12.9%
Range of Returns	34.7%	10.0%	30.6%	34.7%	7.1%	0%	15.7%	8.9%	17.4%	9.9%	4.8%	10.3%
Average	8.8%	12.1%	11.0%	8.3%	12.1%	3.4%	8.7%	12.0%	13.0%	9.1%	12.4%	11.9%
Weighted Average	8.0%	12.3%	6.3%	9.8%%	13.4%	3.4%	7.7%	13.0%	10.8%	8.7%	12.6%	12.4%





Equity: All schemes equity median return outperformed the NASI indices but underperformed Zamara Kenya Equity Index.

Fixed Income: All schemes fixed income median return outperformed the average 364 Day Treasury but underperformed the S&P Bond Index.

Offshore: All schemes offshore median return outperformed MSCI World, MSCI ACWI and MSCI Emerging indices.

Analysis of Asset Allocation for the Period Ending 30 June 2018

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Asset Class Allocation																
	All Schemes				Conservative Schemes				Moderate Schemes				Aggressive Schemes			
	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore
Average	25.0%	68.4%	4.9%	1.7%	7.5%	90.6%	1.8%	0.2%	25.8%	70.3%	2.9%	1.0%	31.8%	52.0%	11.9%	4.3%
Weighted Average	26.9%	59.6%	11.5%	2.0%	9.3%	87.6%	2.9%	0.2%	27.5%	65.9%	5.7%	0.9%	28.0%	47.2%	20.9%	3.8%
Range of Allocation	75.3%	85.3%	82.3%	51.9%	19.7%	82.3%	82.3%	6.2%	24.2%	47.2%	56.6%	7.4%	73.3%	50.3%	77.2%	51.9%
Median	25.4%	70.5%	0.0%	0.0%	5.1%	91.4%	0.0%	0.0%	25.3%	71.9%	0.0%	0.0%	31.1%	55.9%	0.0%	4.2%

For comparison, we include the asset allocation figures as shown in our March 2018 report.

Asset Class Allocation																
	All Schemes				Conservative Schemes				Moderate Schemes				Aggressive Schemes			
	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore
Average	27.3%	66.8%	4.2%	1.7%	8.5%	91.3%	0.1%	0.1%	27.2%	71.8%	0.1%	0.9%	32.2%	53.6%	11.0%	3.2%
Weighted Average	30.1%	58.1%	9.8%	2.0%	11.1%	88.3%	0.5%	0.1%	27.4%	71.2%	0.2%	1.2%	32.0%	51.9%	13.6%	2.4%
Median	27.4%	69.0%	0.0%	0.0%	7.9%	91.4%	0.0%	0.0%	26.9%	71.7%	0.0%	0.0%	31.8%	57.6%	0.0%	2.7%

We note that 22% of the Schemes participating in the Survey had allocations in property.

We also note that 36% of the Schemes participating in the Survey had allocations in offshore.

The Survey indicates that the average scheme's exposure to fixed income and property increased over the quarter while the equity decreased over the quarter. Offshore exposure remained relatively the same.

Zamara Consulting Actuaries Schemes Survey FAQs

What is the Z - CASS Survey?

The Z - CASS Survey is an industry first initiative of Zamara Actuaries, Administrators and Consultants Limited (previously Alexander Forbes Financial Services (East Africa) Limited) and analyses the returns of retirement schemes invested in segregated vehicles with both discretionary and non-discretionary mandates. Schemes invested on an insured deposit administration basis are excluded as well as schemes having incomplete performance periods or returns.

What does the Consulting Actuaries Schemes Survey mean to a trustee?

One of the benefits of having a scheme based survey is that retirement scheme trustees are given the opportunity to compare the performance of their scheme relative to their peers within the broader retirement scheme industry. The Survey considers the returns over a rolling one (1) and three (3) year period and trustees can gain valuable insight into how similar sized schemes performed over the same period.

The Survey further analyses the allocation across four broad asset classes: equity; fixed income, property, and offshore. The asset class allocation analysis is based on a point in time, which corresponds with the Survey reporting period. The benefit of this is that trustees can gain valuable insight into how similar sized schemes are invested and how asset class allocation contributed to their specific scheme's performance. Attribution performance for property asset class was unavailable from the data provided and hence excluded from the Survey.

An addition to the Survey is an analysis of the performance attributed to equity, fixed income and offshore over a rolling one (1) year period. This analysis will assist the Trustees in understanding which of the asset classes contributed to the overall performance of their scheme.

Important issues to be aware of

The Survey is based on individual scheme returns rather than fund manager performance. Trustees also need to be aware that the schemes in the Survey differ in terms of their risk profiles, investment mandates and fund manager reporting bases (as a consequence of the absence of a uniform reporting basis by the fund managers). These factors may have an impact on the reported performance. It should also be noted that performance should not be assessed over the short-term and past performance is not necessarily a guide to future performance.

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Glossary of Terms

Annualised
To convert an investment return into an equivalent one-year rate of return.

Asset Class Allocation
The allocation of a scheme's assets between different asset classes. i.e. equity, fixed income and interest, property and offshore investments.

Average
The mean or simple average of the schemes' performance and asset class allocation.

Discretionary Investment Mandate
This refers to the level of freedom (i.e. discretion) given to a fund manager by the trustees to invest the scheme's assets in accordance with the fund manager's best investment view. In many instances broad parameters are set by the trustees but the fund manager has complete autonomy in the investment decision making.

Inflation
Inflation is defined as a continued increase in the general level of prices and represents the cost of living index. Overall inflation includes in the 'basket' fuel and food stuffs, while underlying inflation excludes these from the 'basket'.

Median
The median is the return or weighting of the middle scheme (irrespective of size) when all the schemes' returns and asset allocations are ranked in order of performance or weighting. The median is not skewed by a wide range of returns or asset class weightings.

Non Discretionary Investment Mandate
This refers to the degree of prescription to how the scheme's assets are invested and is the opposite of a fully discretionary mandate. The Trustees will be involved in the investment decision making and will instruct the fund manager how and in which assets to invest.

Percentile
Or quartile is one quarter of a sample. If returns of a scheme are ranked in a league table, then, for example, a second quartile ranking indicates that 25% of the schemes performed better and 50% achieved a lower return. i.e. the return in the second quarter or 25% of returns.

Performance Attribution
The composite performance broken down between the asset classes to determine how the respective classes contributed to the overall performance i.e. to which asset classes the performance was attributed.

Return
The increase in the value of an investment over a period of time, expressed as a percentage of the value of the investment at the start of the period.

Weighted Average
The mean or average of the schemes weighted according to the size of the assets under management.

Disclaimer

In preparing this Survey, we have used data supplied by the fund managers of the participating schemes. The data has been checked for reasonability where possible. While all possible care is taken in the compilation of the Survey to ensure that this document is accurate in all material respects, reliance is placed on information received from the fund managers.

Whereas the above constitutes the participating schemes per manager in the survey, it is not representative of the total schemes under management by the various fund managers

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