Zamara Consulting Actuaries Schemes Survey

September 2022





Introduction

We are pleased to present our 67th Investment Performance Survey for the period ending 30 September 2022.

This Survey covers 432 schemes with a total of K Shs 1.05 trillion 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 (KShs m)
African Alliance Kenya Investment Bank Limited	7	
Apollo Asset Managers	2	
British American Asset Managers	21	
CIC Asset Managers	11	
Co-op Trust Investments	65	
Cytonn Asset Managers	3	
GenAfrica Asset Managers	97	
ICEA Lion Asset Management Limited	59	
NCBA Investment Bank Limited	2	
Old Mutual Investment Group Limited	87	
Sanlam Investments East Africa Limited	78	
Subtotal	432	1,047,280

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.

Market Commentary Q3 2022



General Economic Review: The Kenyan Economy recorded a 5.2% growth in the second quarter of 2022 compared to 11.0% in a similar period in 2021 and 6.8% in the first quarter of 2022. The slow growth in GDP – a measure of economic output – was against the backdrop of high inflationary pressures and pre-election jitters. Activity in the private sector rebounded towards the end of the quarter as measured by the Stanbic Bank Purchasing Managers' Index. The index rose to 51.7 at the end of the quarter, compared to 46.8 at the end of the previous quarter. Business conditions saw a renewed uptick as concerns over post-election disruptions faded.

Inflation: Overall inflation increased to 9.2% at the end of the quarter compared, to 7.9% at the end of the previous quarter. The increase was attributed to rising food prices and fuel costs, coupled with a

weakening shilling.

Currency Market: The Kenya Shilling depreciated by 2.4% during the quarter against the U.S. Dollar to close at K Shs 120.7, from K Shs 117.8 on 30 June 2022. The depreciation is due to rising dollar demand from importers and interest rate hikes in the United States of America.

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Index	Q3	YTD	1 yr	3 yr ³	5yr ³
NASI	3.2%	(22.9%)	(28.0%)	(4.1%)	(4.6%)
Zamara Kenya Equity Index	7.6%	(8.7%)	(10.7%)	2.5%	1.2%
NSE 25 Share Index	5.0%	(17.1%)	(20.8%)	(3.7%)	(6.2%)
S&P Kenya Sovereign Bond Index	3.2%	5.1%	7.5%	10.0%	12.3%
91 Day Tbill	2.1%	5.8%	7.7%	7.1%	7.3%
Inflation CPI K Shs	2.0%	7.2%	9.2%	6.0%	5.6%
USD/K Shs ¹	(2.4%)	(6.3%)	(8.5%)	(4.9%)	(3.1%)
MSCI ACWI Index ²	(5.0%)	(21.8%)	(14.8%)	7.3%	5.9%
MSCI Emerging Markets ²	(10.3%)	(24.1%)	(23.6%)	0.6%	(1.1%)
MSCI World Index ²	(4.3%)	(21.5%)	(13.5%)	8.2%	6.8%

- Negative implies Shilling depreciated, positive implies Shilling appreciated.
- 2. Returns are Kenya Shilling adjusted
- 3. For periods more than 1-year; returns are annualized
- 4. All values are as at 30 September 2022

Source: NSE, CBK, MSCI, KNBS

Equity Market: The equity market was on an upward trajectory, with NASI & ZKEI gaining 3.2% and 7.6%. The equities market performance was driven by gains recorded by large-cap banking stocks. During the third quarter of 2022 listed banks released their half year results.

Fixed Income: The Monetary Policy Committee increased the Central Bank Rate from 7.5% to 8.25%, citing elevated pressure from inflation. Central Banks around the world are increasing their lending rates sharply as they try to rein in the rising cost of living, strengthen their currencies, and Fed rate hike in the United States of America.

The average yields on short-term government debt instruments changed marginally upwards with the 364-day, 182-day, and 91-day T-bills averaging at 9.5%, 8.5%, and 7.7% respectively during the quarter. The S&P Kenya Sovereign Bond Index gained 3.2% over the quarter, compared to 0.7% in June 2022.

Offshore markets: Global equity markets recorded declines over the quarter as the Emerging Markets Index, the All Country World Index, and the All-World Index lost 12.5%, 7.3%, and 6.6% respectively in USD terms. The decline was, attributed to cash outflows from the equities market to the fixed income segment. The fixed income market has become attractive to investors with increases in interest rates as Central Banks around the world aimed to tame elevated inflationary pressures.



Executive Summary and Key Highlights

Key Highlights

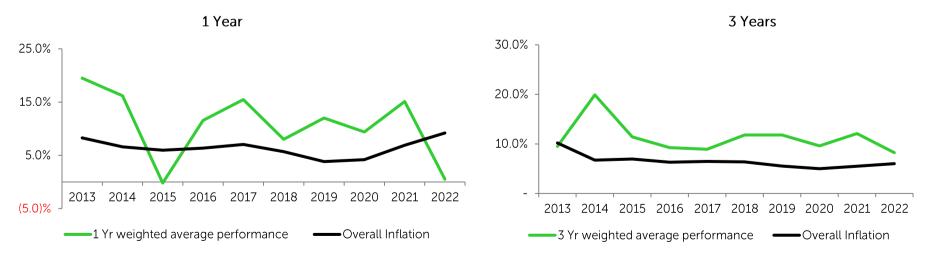
In the table below, we set out a summary of the median performance of schemes for each of the years from 30 September 2013 to 30 September 2022.

Period Ending 30 September	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of Schemes Participating	128	383	380	386	372	404	411	417	423	432
Total Assets K Shs Bn	197.2	524.9	510.3	596.8	633.4	727.7	837.6	922.3	1,033.1	1,047.2
1 Yr Median performance	19.5%	16.2%	(0.2)%	11.6%	15.5%	8.0%	8.0%	9.4%	15.1%	0.5%
3 Yr Median performance	9.5%	19.4%	11.4%	9.2%	8.9%	11.8%	11.8%	9.6%	12.1%	8.2%
Overall 1 year Inflation ¹	8.3%	6.6%	6.0%	6.3%	7.1%	5.7%	3.8%	4.2%	6.9%	9.2%
Overall 3 year Inflation ²	10.2%	6.7%	6.9%	6.3%	6.5%	6.4%	5.5%	5.0%	5.5%	6.0%

Notes:

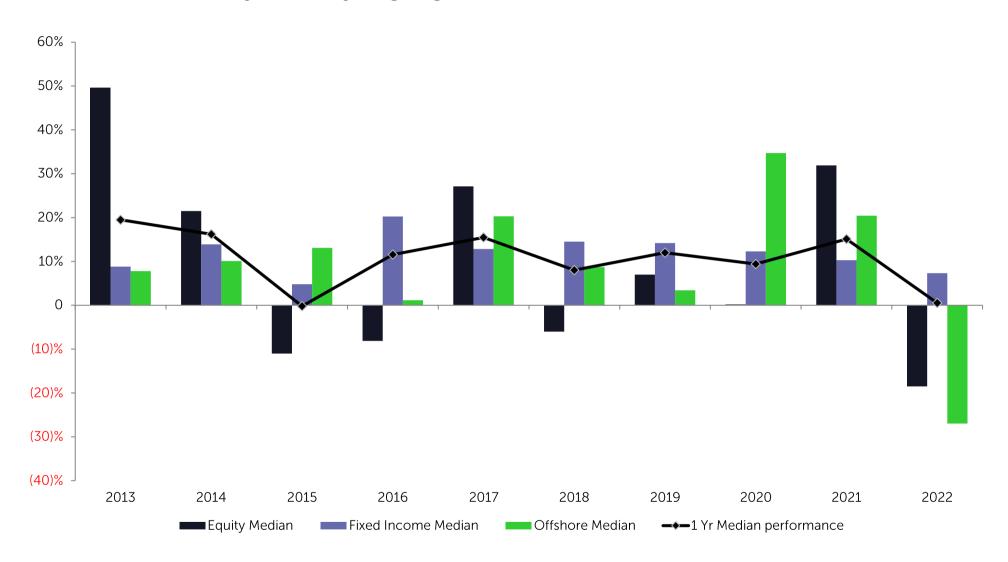
- 1. Based on KNBS Statistics 2013 2022: <u>www.knbs.or.ke/</u>
- 2. Calculated geometric average over 3 years.

The Survey indicates that the median scheme did not always outperform overall inflation over 1 and 3 years. Over 1-year, median returns underperformed inflation in 2015 and 2022, as shown in the 1-year chart below. Over 3-years, median returns have underperformed inflation in 2013 as shown in the 3-year chart below.





Executive Summary and Key Highlights



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

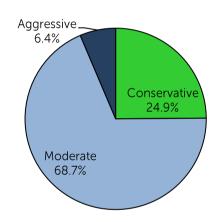
Risk Profile of Participating Schemes



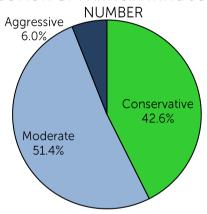
	STATISTICS													
Risk Profile	Fixed Income Allocation*	Number of Schemes	Assets Under Management K Shs m*	Asset Percentage %										
Conservative	Over 80%	184	42.6%	221,240	24.9%									
Moderate	65% to 80%	222	51.4%	611,323	68.7%									
Aggressive	Less than 65%	26	6.0%	56,828	6.4%									
Total		432	100.0%	889,391	100.0%									

^{*}Asset allocation shown above and used to determine the above profiles excludes property

DISTRIBUTION OF PARTICIPATING SCHEMES BY ASSET SIZE



DISTRIBUTION OF PARTICIPATING SCHEMES BY



432 Schemes qualified for inclusion in the Survey on the basis of being segregated arrangements with at least 3 months return periods.

The survey is dominated by moderate schemes; they comprise 51.4% of participating schemes and manage 68.7% of assets in this survey.

Conservative schemes make up 42.6% of number of participating schemes with 24.9% of assets under management. This is in comparison to 44.7% of number of participating schemes with 28.0% of assets under management the previous quarter. The decrease was due to recovery in the Quoted Equities asset class.

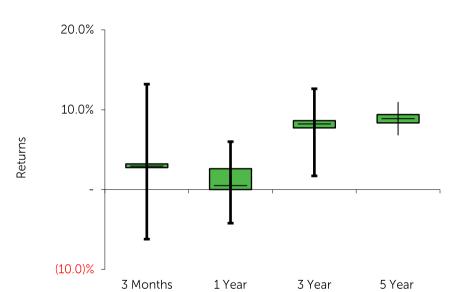
Analysis and Distribution of Returns for the Period



	3 Month	1 year	3 year*	5 year*
25th Percentile	2.7%	(0.8)%	7.7%	8.3%
Median	3.0%	0.5%	8.2%	8.9%
75th Percentile	3.2%	1.8%	8.6%	9.4%
Range of Returns	7.6%	19.4%	10.2%	10.9%
Average	3.0%	0.9%	8.2%	8.9%
Weighted Average	3.2%	0.2%	8.0%	8.6%

^{*}Annualised return





Over the quarter ended 30 September 2022, the median return of the participating schemes was 3.0%, compared to (2.6)% in June 2022. The improvement in performance is due to higher valuations in the Quoted Equities market.

Over the 1-year period to 30 September 2022, the median return of the participating schemes was 0.5% compared to 15.1% over a similar period in 2021. Performance in 2022 was negatively impacted by inflationary pressures and ongoing geopolitical tensions.

Over the 3-year period to 30 September 2022, the median return of the participating schemes was an annualized 8.2%.

Over the 5-year period to 30 September 2022, the median return of the participating schemes was an annualized 8.9%.

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

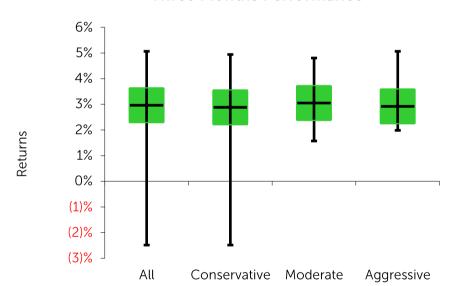
Analysis and Distribution of Returns



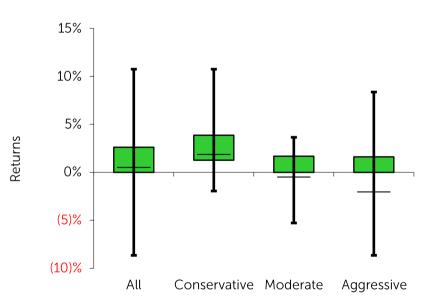
		Return Distribution													
		Conservat	ive Schemes			Moderate	Schemes		Aggressive Schemes						
	3 Month	1 year	3 year*	5 year*	3 Month)	1 year	3 year*	5 year*	3 Month	1 year	3 year*	5 year*			
25th Percentile	2.7%	1.3%	8.2%	8.6%	2.8%	(1.3)%	7.5%	8.2%	2.5%	(3.0)%	7.1%	7.5%			
Median	2.9%	1.9%	8.5%	9.3%	3.1%	(0.5)%	7.9%	8.7%	3.0%	(2.0)%	7.8%	8.4%			
75th Percentile	3.1%	3.9%	8.9%	9.7%	3.3%	0.4%	8.4%	9.1%	3.6%	(1.3)%	8.1%	9.2%			
Range of Returns	7.4%	12.7%	10.2%	10.9%	3.2%	8.9%	6.2%	4.9%	3.1%	17.0%	6.7%	6.4%			
Average	2.8%	2.7%	8.6%	9.2%	3.1%	(0.4)%	7.9%	8.6%	3.1%	(2.0)%	7.6%	8.3%			
Weighted Average	2.9%	2.9%	8.8%	9.5%	3.1%	(0.4)%	7.7%	8.4%	3.0%	(2.7)%	7.3%	7.6%			

^{*}Annualised return

Three Months Performance



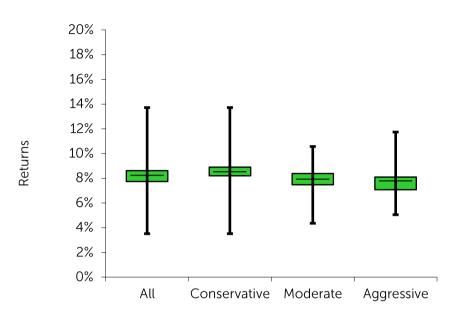
One Year Performance



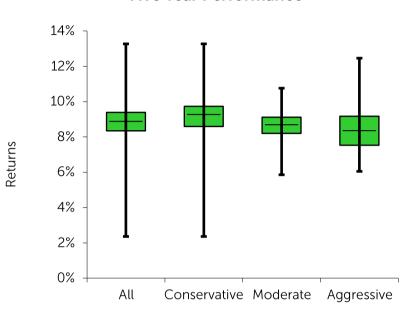
Analysis and Distribution of Returns







Five Year Performance



Moderate schemes posted the highest median returns over the quarter, aided by recovery in performance of the Quoted Equities and Fixed Income asset classes.

Conservative schemes posted the highest median returns in the long term periods as the Quoted Equities and Offshore asset classes suffered losses during these time periods.

Asset Class Returns for 3 Months Ending 30 September 2022

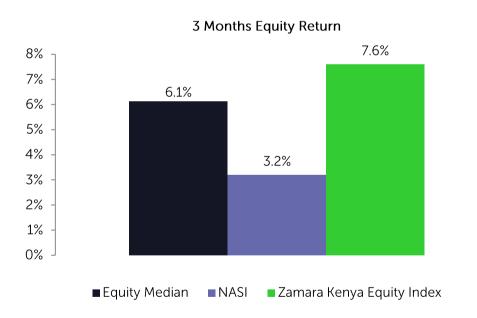


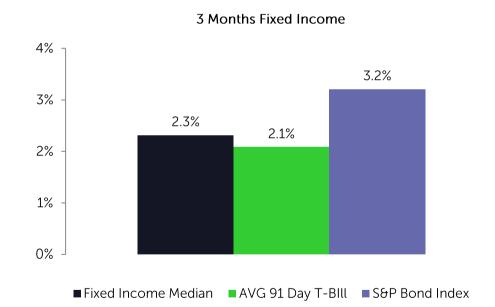
	Equity	Fixed Income	Offshore
25th Percentile	5.6%	2.1%	(3.3)%
Median	6.1%	2.3%	(2.2)%
75th Percentile	6.9%	2.5%	(1.8)%
Range of Returns	33.5%	3.0%	42.7%
Average	6.1%	2.3%	(2.1)%
Weighted Average	6.3%	2.3%	(2.8)%

Equity: The equity median return underperformed Zamara Kenya Equity Index, while outperforming NASI.

Fixed Income: The fixed income median return outperformed the 91 Day Treasury Bill, while underperforming the average S&P Bond Index.

Offshore: The offshore median return outperformed MSCI Emerging, MSCI ACWI indices and the MSCI world Index.







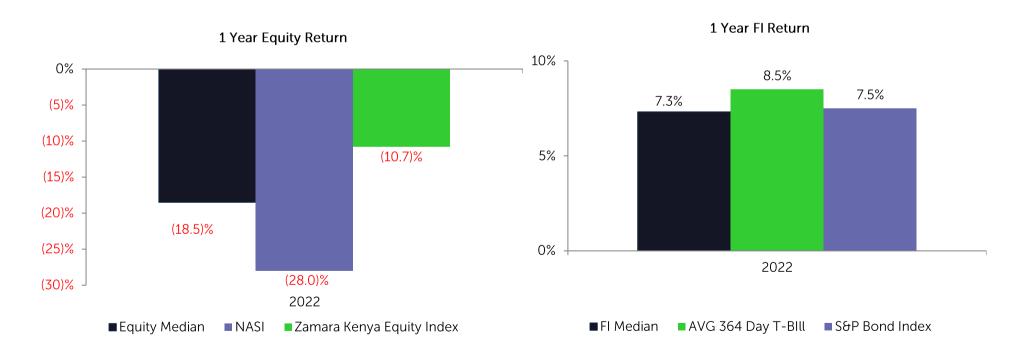


	Equity	Fixed Income	Offshore		
25th Percentile	(20.0)%	7.0%	(28.9)%		
Median	(18.5)%	7.3%	(27.0)%		
75th Percentile	(16.8)%	7.7%	(19.1)%		
Range of Returns	49.9%	14.4%	46.4%		
Average	(18.0)%	7.3%	(23.8)%		
Weighted Average	(18.1)%	7.1%	(21.2)%		

Equity: The equity median return outperformed NASI, while underperforming the Zamara Kenya Equity Index.

Fixed Income: The fixed income median return underperformed the average 364 Day Treasury Bill and the S&P Bond index.

Offshore: The offshore median return underperformed MSCI ACWI index while outperforming the MSCI world and MSCI Emerging Indices.





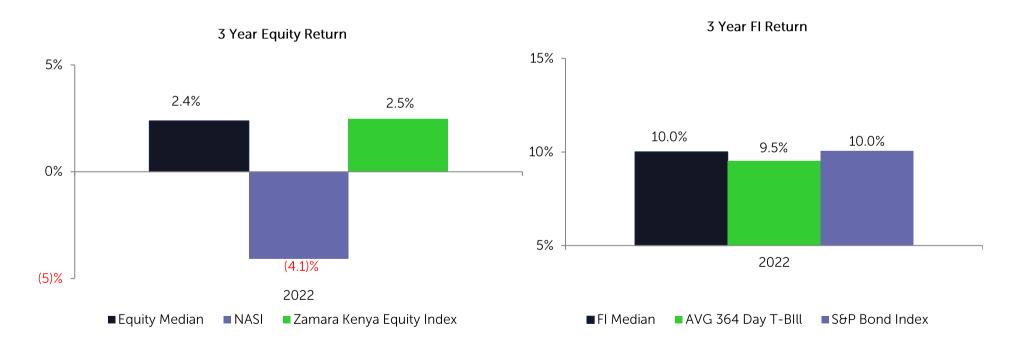
Asset Class Returns for 3 Years Ending 30 September 2022

	Equity	Fixed Income	Offshore
25th Percentile	1.3%	9.7%	4.4%
Median	2.4%	10.0%	8.3%
75th Percentile	3.0%	10.2%	10.0%
Range of Returns	28.9%	10.7%	34.8%
Average	2.0%	9.9%	6.7%
Weighted Average	2.0%	9.9%	7.0%

Equity: The equity median return outperformed the NASI while underperforming the Zamara Kenya Equity Index.

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

Offshore: The offshore median return out-performed MSCI Emerging, MSCI world and MSCI ACWI Indices.





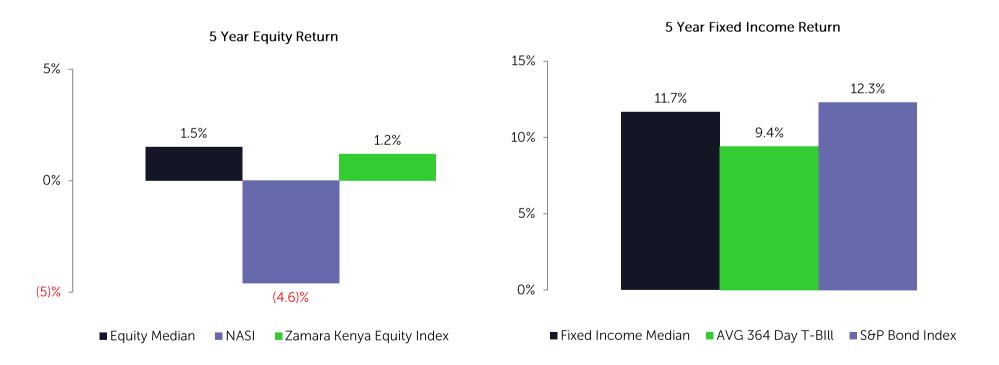
Asset Class Returns for 5 Years Ending 30 September 2022

	Equity	Fixed Income	Offshore		
25th Percentile	0.3%	11.4%	3.8%		
Median	1.5%	11.7%	7.5%		
75th Percentile	2.4%	12.0%	9.0%		
Range of Returns	33.8%	6.6%	21.1%		
Average	1.3%	11.6%	8.0%		
Weighted Average	1.2%	11.7%	6.9%		

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

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

Offshore: The offshore median return out-performed MSCI Emerging, MSCI ACWI and MSCI World indices.





Analysis of Asset Allocation for the Period Ending 30 September 2022

	Asset Class Allocation															
	All Schemes					Conservative Schemes				Moder	ate Schemes	;		Aggressiv	ve Schemes	
	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore	Equity	Fixed Income	Property	Offshore
Average	18.4%	74.1%	5.7%	1.8%	12.8%	84.0%	2.5%	0.3%	22.1%	69.4%	7.0%	1.5%	24.4%	39.7%	20.0%	15.9%
Weighted Average	19.5%	68.0%	11.2%	1.3%	12.7%	81.6%	5.3%	0.4%	20.3%	62.6%	16.0%	1.1%	21.7%	39.8%	33.6%	4.9%
Range of Allocation	77.3%	99.2%	88.3%	99.2%	20.0%	71.8%	71.8%	9.6%	27.6%	54.2%	67.2%	6.1%	77.3%	64.1%	88.3%	99.2%
Median	18.7%	77.0%	-	-	15.2%	83.6%	-	-	20.3%	68.8%	-	0.7%	24.4%	46.3%	-	3.9%

For comparison, we include the asset allocation figures as shown in our June 2022 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	18.3%	73.8%	5.9%	2.0%	13.2%	83.4%	3.0%	0.4%	21.7%	69.3%	7.3%	1.7%	21.6%	39.2%	21.5%	17.7%	
Weighted Average	18.0%	65.1%	15.4%	1.5%	10.2%	67.1%	22.4%	0.3%	19.9%	63.2%	15.5%	1.4%	21.0%	39.5%	33.8%	5.7%	
Range of Allocation	93.9%	98.5%	99.0%	98.4%	19.9%	72.3%	71.3%	10.0%	27.3%	53.6%	66.7%	7.3%	51.3%	64.5%	88.7%	96.12%	
Median	14.4%	70.7%	-	-	15.2%	83.0%	-	-	20.2%	68.2%	-	1.4%	21.8%	44.6%	6.3%	5.5%	

21.1% of the Schemes participating in the Survey had an allocation to property.

37.9% of the Schemes participating in the Survey had an allocation to offshore assets.

The Survey indicates that the average scheme's exposure to fixed income increased while allocation to equities decreased over the quarter.



Historical Economic Indicators

Exchange Rates	Sep-22	Sep-21	Sep-20	Sep-19	Sep-18	Sep-17	Sep-16	Sep-15	Sep-14	Sep-13
KES/ USD	120.7	110.5	108.5	103.9	100.9	103.2	101.3	105.3	89.3	86.6
Inflation										
Headline	7.90%	6.91%	4.20%	3.80%	5.70%	7.10%	6.30%	6.00%	6.60%	8.30%
Food	13.80%	10.63%	5.18%	6.31%	0.50%	11.50%	10.90%	9.80%	8.41%	12.60%
Non-food	6.80%	6.08%	2.18%	0.99%	17.44%	3.27%	0.50%	3.00%	6.00%	5.00%
Interest Rates										
Central Bank Rate	8.25%	7.00%	7.00%	9.00%	9.00%	10.00%	10.00%	11.50%	8.50%	8.50%
Interbank Rate	4.36%	4.73%	2.95%	6.59%	4.28%	5.50%	4.89%	19.85%	7.43%	7.70%
Lending Rate		12.07%	12.00%	12.44%	13.06%	13.66%	16.55%	16.08%	16.51%	17.31%
Government Securities Yields										
AVG 91 Day T-Bill	2.08%	1.62%	1.52%	1.58%	1.86%	1.99%	1.95%	2.96%	2.13%	2.04%
AVG 182 Day T-Bill	2.28%	1.90%	1.98%	1.92%	2.45%	2.50%	2.46%	2.51%	2.43%	2.27%
AVG 364 Day T-Bill	2.40%	2.19%	2.32%	2.25%	2.65%	2.62%	2.75%	2.59%	2.48%	2.58%
Stock Market Indices										
NASI	(28.0)%	27.5%	(3.8)%	(2.8)%	(7.7)%	18.6%	(6.9)%	(10.1)%	28.3%	44.0%
ZKEI	(10.7)%	25.7%	(4.0)%	4.2%	(5.2)%	24.1%	(7.6)%	(8.5)%	25.8%	
MSCI World KES	(20.9)%	27.0%	8.6%	(0.2)%	9.2%	15.9%	9.1%	(6.9)%	10.0%	5.0%
MSCI ACWI KES	(22.0)%	25.5%	8.5%	(0.7)%	7.7%	16.4%	9.6%	(8.4)%	9.1%	(1.9)%
MSCI Emerging KES	(30.1)%	15.8%	8.1%	(4.5)%	(3.1)%	19.7%	14.1%	(21.2)%	1.8%	(13.7)%
Bond Indices										
FTSE Bond Index	-	12.50%	11.20%	14.90%	15.47%	16.50%	9.00%	9.75%	11.68%	15.60%
S&P Sovereign Bond Index	7.50%	10.09%	12.61%	16.22%	15.41%	13.59%	22.03%	1.56%	14.14%	20.50%



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 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) three (3) year and five (5) 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.

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.

For specific Consulting Actuaries Schemes Survey queries, contact:

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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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