Zamara Consulting Actuaries Schemes Survey

June 2022





Introduction

We are pleased to present our 66th Investment Performance Survey for the period ending 30 June 2022.

This Survey covers 436 schemes with a total of K Shs 1.04 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	22	
CIC Asset Managers	11	
Co-op Trust Investments	66	
Cytonn Asset Managers	3	
GenAfrica Asset Managers	98	
ICEA Lion Asset Management Limited	60	
NCBA Investment Bank Limited	2	
Old Mutual Investment Group Limited	87	
Sanlam Investments East Africa Limited	78	
Subtotal	436	1,042,688

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 Q2 2022



General Economic Review: The Kenyan Economy recorded a 6.8% growth in the first quarter of 2022 compared to 2.7% in 2021. The strong performance was supported by recovery in several sectors of the economy with the exception of the agricultural sector that remained subdued due to unfavorable weather conditions. The Stanbic Bank Purchasing Managers' Index declined to 46.8 at the end of the quarter from 50.5 the previous quarter. The decline indicates further economic downturn for the private sector due to increasing price pressures.

Inflation: Overall inflation increased to 7.9% at the end of the quarter breaching the Central Bank's target range of 2.5%-7.5% for the first time since 2017. The increase was attributed to supply disruptions caused by the Russia-Ukraine crisis as well as the increase in food prices.

Currency Market: The Kenya Shilling depreciated by 2.4% during the quarter against the U.S. Dollar to close at K Shs 117.8, from K Shs 115.0 on 31 March 2022. The depreciation is attributable to rising dollar demand and increased uncertainty in global oil prices.

Index	Q2	1 yr	3 yr ³	5yr ³
NASI	(20.1%)	(28.3%)	(5.9%)	(4.0%)
Zamara Kenya Equity Index	(11.9%)	(13.6%)	0.7%	1.1%
NSE 25 Share Index	(17.2%)	(21.7%)	(6.3%)	(6.2%)
S&P Kenya Sovereign Bond Index	0.7%	7.8%	10.1%	12.5%
91 Day Tbill	1.9%	7.2%	6.9%	7.2%
Inflation CPI K Shs	3.4%	7.9%	5.7%	5.5%
USD/K Shs ¹	(2.4%)	(8.5%)	(4.6%)	(2.5%)
MSCI ACWI Index ²	(14.0%)	(9.4%)	9.5%	7.8%
MSCI Emerging Markets ²	(10.2%)	(20.5%)	3.0%	2.4%
MSCI World Index ²	(14.5%)	(7.8%)	10.4%	8.6%

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

Source: NSE, CBK, MSCI, KNBS

Equity Market: The equity market was on a downward trajectory with NASI & ZKEI losing 20.1% and 11.9% respectively as foreign investors remained net sellers during the guarter.

Fixed Income: The Monetary Policy Committee increased the Central Bank Rate to 7.5% in May 2022 for the first time since 2020. The committee noted that there was need to tighten the monetary policy given the increasing inflationary pressures. The average yields on short-term government debt instruments changed marginally with the 364-day, 182-day, and 91-day T-bills averaging at 8.9%, 7.9% and 7.2% respectively during the quarter. The S&P Kenya Sovereign Bond Index gained 0.7% over the quarter compared to 1.1% in March 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 11.4%, 15.6%, and 16.2% respectively in USD terms. The losses were attributable to supply issues due to continued conflicts between Ukraine and Russia coupled with increased interest rates in markets such as the USA, promising investors higher yields.



Executive Summary and Key Highlights

Key Highlights

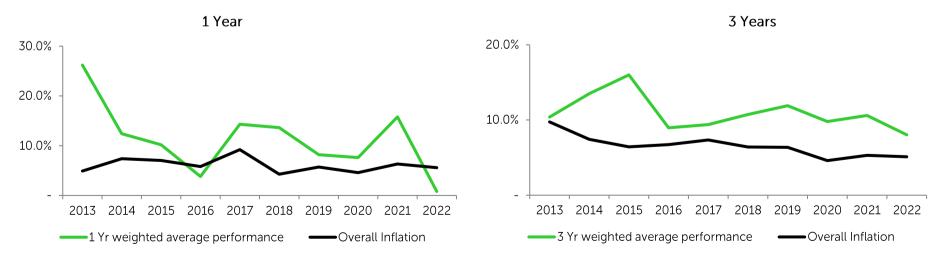
In the table below, we set out a summary of the median performance of schemes for each of the years from 30 June 2013 to 30 June 2022.

Period Ending 30 June	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of Schemes Participating	131	381	372	388	379	417	417	421	424	436
Total Assets K Shs Bn	201.3	500.7	548.0	581.3	654.8	732.1	822.7	902.0	976.8	1,042.7
1 Yr Median performance	26.2%	12.4%	10.2%	3.8%	14.3%	13.6%	8.2%	7.6%	15.8%	0.8%
3 Yr Median performance	10.4%	13.5%	16.0%	9.0%	9.4%	10.7%	11.9%	9.8%	10.6%	8.0%
Overall 1 year Inflation ¹	4.9%	7.4%	7.0%	5.8%	9.2%	4.3%	5.7%	4.6%	6.3%	7.9%
Overall 3 year Inflation ²	9.7%	7.4%	6.4%	6.7%	7.3%	6.4%	6.4%	4.6%	5.3%	5.7%

Notes:

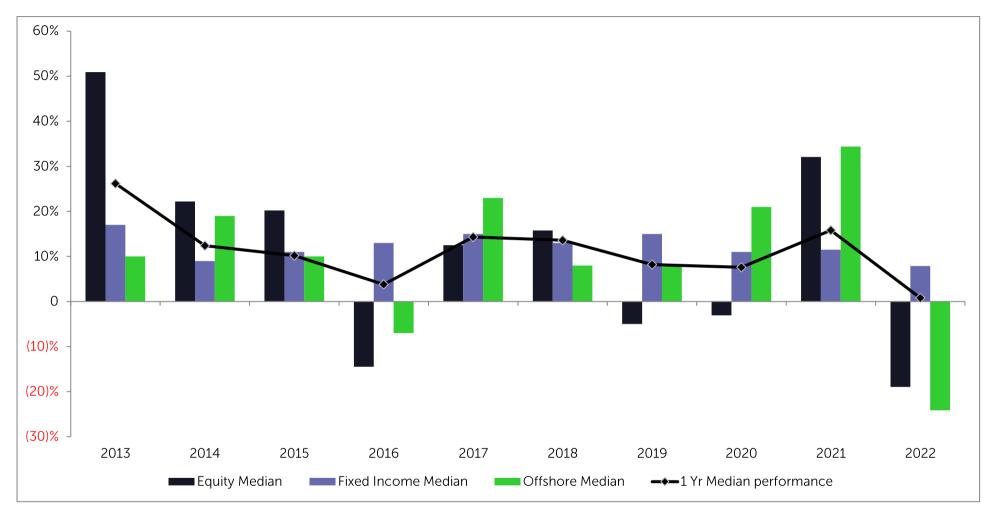
- 1. Based on KNBS Statistics 2013 2022: <u>www.knbs.or.ke/</u>
- 2. Calculated geometric average over 3 years.

The Survey indicates that the median scheme did not always outperform overall inflation over the 1-year. Over 1-year, median returns underperformed inflation in 2016 and 2022, as shown in the 1-year chart below. Over 3-years, median returns have outperformed inflation in all periods. 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 June for each of the last 10 years.

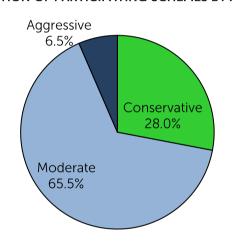
Risk Profile of Participating Schemes



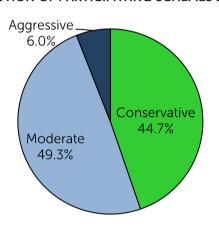
	STATISTICS													
Risk Profile	Fixed Income Allocation*	Number of Schemes	Scheme Percentage %	Assets Under Management K Shs m*	Asset Percentage %									
Conservative	Over 80%	195	44.7%	235,471	28.0%									
Moderate	65% to 80%	215	49.3%	550,856	65.5%									
Aggressive	Less than 65%	26	6.0%	54,718	6.5%									
Total		436	100.0%	841,045	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 NUMBER



436 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 49.3% of participating schemes and manage 65.5% of assets in this survey.

Conservative schemes make up 44.7% of number of participating schemes with 28.0% of assets under management. This is in comparison to 26.7% of number of participating schemes with 15.1% of assets under management the previous quarter. The increase was due to lower valuations in the Quoted Equities and Offshore asset classes.

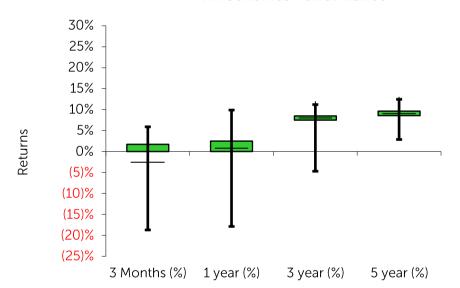
Analysis and Distribution of Returns for the Period



	3 Month	1 year	3 year*	5 year*
25th Percentile	(3.5)%	(0.5)%	7.5%	8.6%
Median	(2.6)%	0.8%	8.0%	9.1%
75th Percentile	(1.8)%	2.0%	8.5%	9.6%
Range of Returns	24.6%	27.8%	15.9%	9.6%
Average	(2.5)%	1.0%	7.9%	9.1%
Weighted Average	(2.9)%	0.5%	7.7%	8.8%

^{*}Annualised return





Over the quarter ended 30 June 2022, the median return of the participating schemes was (2.6)%, compared to (0.4)% in March 2022. The decline in performance is due to losses in the Quoted Equities and Offshore markets. The Fixed Income markets also experienced reduced performance over the quarter.

Over the 1-year period to 30 June 2022, the median return of the participating schemes was 0.8% compared to 15.8% over a similar period in 2021.

Over the 3-year period to 30 June 2022, the median return of the participating schemes was an annualized 8.0%.

Over the 5-year period to 30 June 2022, the median return of the participating schemes was an annualized 9.1%.

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.

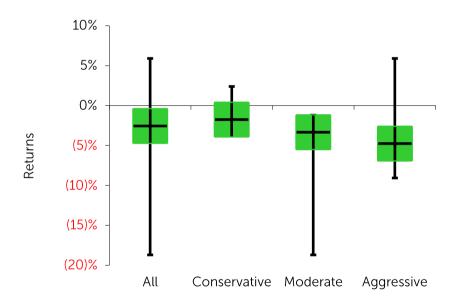
Analysis and Distribution of Returns



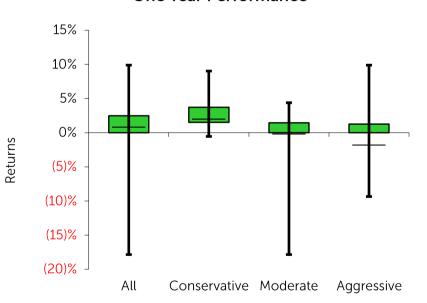
						Return D	Distribution						
		Conservat	ive Schemes			Moderate	Schemes		Aggressive Schemes				
	3 Month	1 year	3 year*	5 year*	3 Month)	1 year	3 year*	5 year*	3 Month	1 year	3 year*	5 year*	
25th Percentile	(2.1)%	1.5%	8.1%	8.8%	(3.8)%	(1.0)%	7.1%	8.4%	(5.4)%	(2.5)%	5.9%	7.7%	
Median	(1.7)%	2.0%	8.4%	9.6%	(3.3)%	(0.2)%	7.8%	8.9%	(4.8)%	(1.8)%	7.3%	8.8%	
75th Percentile	(0.8)%	3.7%	8.8%	10.0%	(2.8)%	0.5%	8.2%	9.4%	(4.1)%	(1.3)%	7.9%	9.6%	
Range of Returns	5.4%	9.6%	4.8%	9.4%	5.0%	9.1%	14.3%	6.7%	15.0%	19.3%	11.4%	8.3%	
Average	(1.3)%	2.8%	8.5%	9.4%	(3.4)%	(0.3)%	7.6%	8.8%	(4.6)%	(1.5)%	6.8%	8.2%	
Weighted Average	(1.2)%	2.9%	8.6%	9.6%	(3.4)%	(0.3)%	7.5%	8.7%	(5.1)%	(2.3)%	6.8%	7.9%	

^{*}Annualised return

Three Months Performance



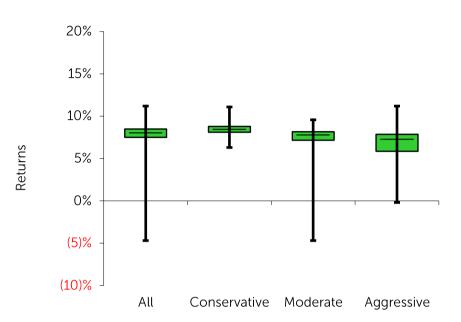
One Year Performance



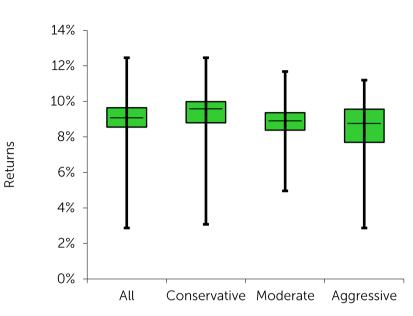
Analysis and Distribution of Returns







Five Year Performance



Conservative schemes posted the highest median returns over the all periods, aided by a higher allocation towards Fixed Income that performed strongly over these periods.

Aggressive schemes had the lowest median return over all the periods due to lower performance from the quoted equities asset class.

Asset Class Returns for 3 Months Ending 30 June 2022

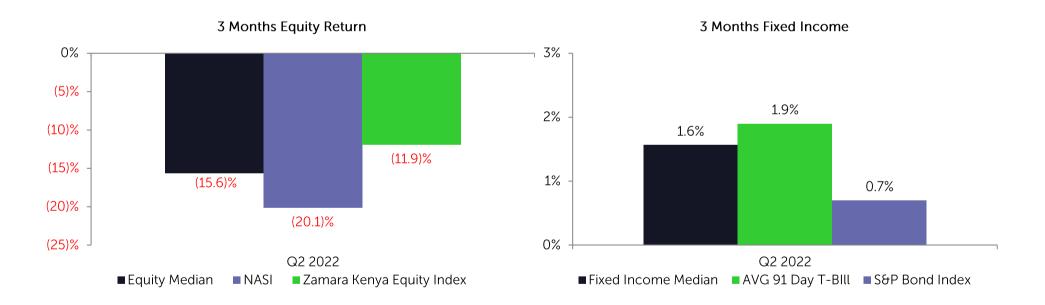


	Equity	Fixed Income	Offshore
25th Percentile	(16.45%	1.4%	(22.1)%
Median	(15.6)%	1.6%	(20.4)%
75th Percentile	(14.7)%	1.7%	(15.3)%
Range of Returns	32.8%	11.1%	53.4%
Average	(14.8)%	1.6%	(15.9)%
Weighted Average	(14.9)%	1.5%	(17.2)%

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

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

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





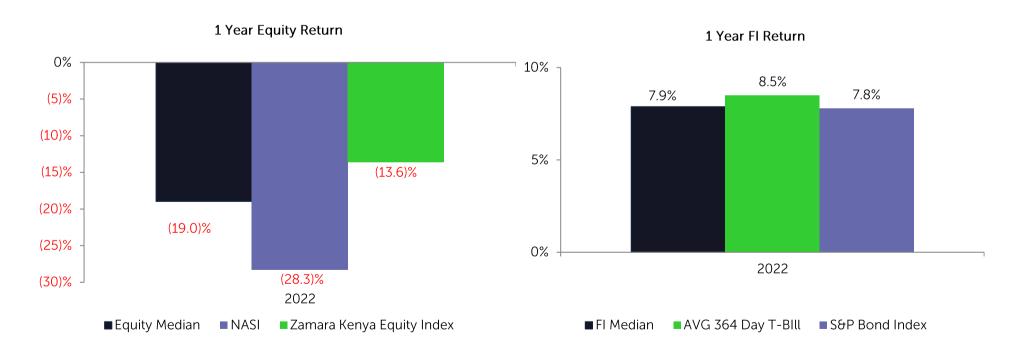


	Equity	Fixed Income	Offshore		
25th Percentile	(20.3)%	7.5%	(25.1)%		
Median	(19.0)%	7.9%	(24.2)%		
75th Percentile	(17.7)%	8.2%	(17.0)%		
Range of Returns	44.1%	15.9%	53.0%		
Average	(18.6)%	7.6%	(21.2)%		
Weighted Average	(18.7)%	7.6%	(18.2)%		

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 while outperforming the S&P Bond index.

Offshore: The offshore median return underperformed MSCI Emerging, MSCI world and MSCI ACWI Indices.





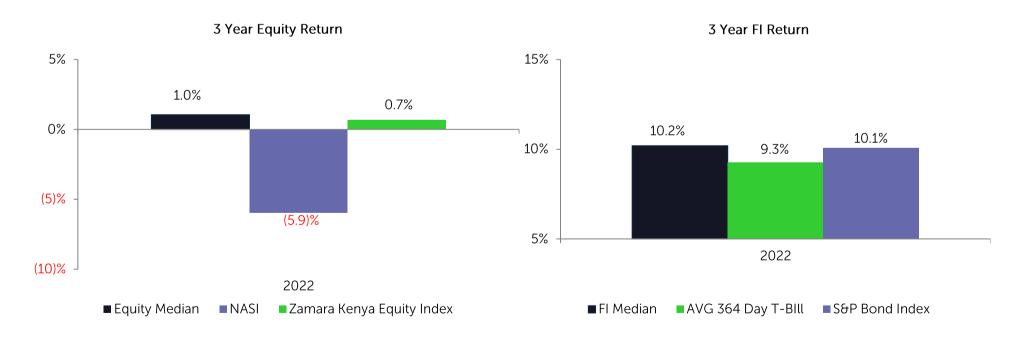
Asset Class Returns for 3 Years Ending 30 June 2022

	Equity	Fixed Income	Offshore
25th Percentile	0.1%	9.9%	4.4%
Median	1.0%	10.2%	8.5%
75th Percentile	1.7%	10.4%	10.9%
Range of Returns	40.7%	13.8%	58.9%
Average	(0.3)%	10.0%	5.7%
Weighted Average	(0.0)%	10.1%	7.3%

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 world and MSCI ACWI Indices.



Asset Class Returns for 5 Years Ending 30 June 2022



	Equity	Fixed Income	Offshore		
25th Percentile	1.0%	11.5%	4.4%		
Median	2.4%	11.8%	8.8%		
75th Percentile	3.4%	12.2%	10.5%		
Range of Returns	14.8%	8.9%	43.5%		
Average	2.5%	11.7%	6.7%		
Weighted Average	2.0%	11.7%	7.8%		

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.

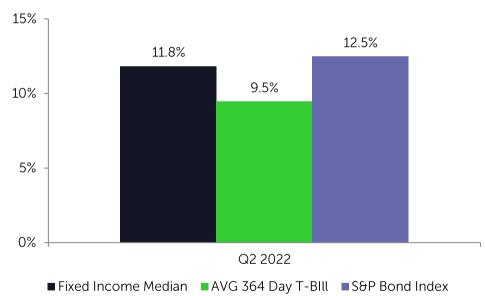
Offshore: The offshore median return out-performed MSCI Emerging, MSCI ACWI and MSCI World indices.

5 Year Equity Return 2.4% 1.1% (4.0)% Q2 2022

■ Zamara Kenya Equity Index

■ Equity Median ■ NASI

5 Year Fixed Income





Analysis of Asset Allocation for the Period Ending 30 June 2022

	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%		

For comparison, we include the asset allocation figures as shown in our March 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	20.3%	71.9%	5.7%	2.1%	12.9%	85.0%	1.9%	0.2%	22.9%	70.1%	5.5%	1.5%	23.9%	41.1%	21.7%	13.4%		
Weighted Average	21.4%	66.2%	10.6%	1.8%	12.9%	83.8%	3.2%	0.2%	22.9%	66.4%	9.3%	1.4%	22.2%	41.0%	30.9%	6.0%		
Range of Allocation	61.0%	99.2%	89.3%	99.2%	20.0%	73.0%	73.0%	6.4%	25.5%	60.4%	71.2%	7.1%	61.0%	62.5%	89.3%	99.2%		
Median	17.3%	68.4%	-	-	15.4%	83.4%	-	-	20.6%	68.7%	-	-	23.5%	45.2%	13.1%	4.0%		

21.8% of the Schemes participating in the Survey had an allocation to property.

37.8% 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	Jun-2022	Jun-2021	Jun-2020	Jun-2019	Jun-2018	Jun-2017	Jun-2016	Jun-2015	Jun-2014	Jun-2013
KES/ USD	117.8	107.9	106.5	102.3	101.1	103.7	101.1	98.6	87.6	86.0
Inflation										
Headline	7.90%	6.30%	4.59%	5.71%	4.27%	9.21%	5.80%	7.03%	7.39%	4.91%
Food	13.80%	8.50%	8.15%	6.98%	0.90%	15.81%	8.89%	13.39%	8.41%	12.98%
Non-food	6.80%	4.01%	1.41%	4.07%	14.17%	2.96%	1.84%	2.01%	7.23%	9.17%
Interest Rates										
Central Bank Rate	7.50%	7.00%	7.0%	9.0%	9.0%	10.0%	10.5%	10.0%	8.5%	8.5%
Interbank Rate	4.60%	4.82%	2.8%	1.9%	6.5%	4.8%	9.1%	10.7%	10.0%	7.7%
Lending Rate		12.02%	11.9%	12.5%	13.2%	13.7%	18.2%	16.1%	16.4%	17.0%
Government Securities Yields										
AVG 91 Day T-Bill	1.86%	1.73%	1.75%	1.75%	1.93%	2.01%	1.97%	2.02%	2.22%	2.13%
AVG 182 Day T-Bill	7.89%	1.90%	1.98%	1.92%	2.45%	2.50%	2.46%	2.51%	2.43%	2.27%
AVG 364 Day T-Bill	8.93%	2.19%	2.32%	2.25%	2.65%	2.62%	2.75%	2.59%	2.48%	2.58%
Stock Market Indices										
NASI	(28.27)%	26.04%	(7.97)%	(14.19)%	14.02%	8.76%	(14.48)%	9.3%	29.3%	44.0%
ZKEI	(13.64)%	25.73%	(6.07)%	(10.56)%	15.51%	11.79%	(13.46)%	11.5%	26.9%	
MSCI World KES	(7.80)%	38.72%	5.27%	5.55%	6.22%	18.91%	(2.37)%	12.1%	23.9%	-90.0%
MSCI ACWI KES	(9.44)%	38.85%	4.44%	4.89%	5.84%	19.49%	(3.36)%	11.2%	22.8%	-1.9%
MSCI Emerging KES	(20.46)%	39.84%	(1.75)%	(0.15)%	3.09%	24.31%	(12.07)%	4.2%	13.8%	-13.7%
Bond Indices										
FTSE Bond Index	7.28%	12.63%	11.60%	15.88%	16.47%	16.70%	9.17%	9.89%	11.92%	16.98%
S&P Sovereign Bond Index	7.79%	10.92%	11.49%	17.42%	18.04%	13.65%	9.33%	11.10%	11.61%	22.22%



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.

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