

Q4 - 2021

PENSION SCHEMES INVESTMENT PERFORMANCE SURVEY

Actuarial Services (E.A) Ltd.

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Insurance | Financial | Investment | Risk | Pension | Health | I.T

Introduction

The ACTSERV Pension Schemes Investment Performance Survey, prepared by Actuarial Services East Africa Limited (ACTSERV), is a survey on the investment performance of pension schemes in Kenya under segregated funds. In the fourth quarter of 2021, a sample size of 419 schemes with a total fund value of about

Kshs. 850 Billion (excluding property) were analyzed The total fund value of the sample including property and cash was 951 Billion.

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.

The services we offer include:

- Investment Consulting
- Retirement Fund Consulting
- Post Retirement Medical Consulting
- Life Insurance Consulting
- General and Health Care Insurance Consulting
- Management Consulting
- IT Services and Enterprise Risk Management

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QUARTER SUMMARY		QUARTER (3 – MONTHS)						
	Q4 2017	Q4 2018	Q4 2019	Q4 2020	Q4 2021			
Total Fund Value (Kshs. Bn)	651	759	790	841	850			
Sample Size	352	422	423	417	419			
Overall Return	2.3%	0.04%	5.0%	3.0%	0.7%			
Fixed income	2.8%	2.9%	1.4%	2.0%	2.2%			
Equity	1.4%	-6.0%	17.4%	5.9%	-4.4%			
Off Shore	5.0%	-12.6%	6.2%	8.5%	7.2%			
Inflation	-0.3%	0.5%	1.3%	0.01%	0.01%			

Quarterly Figures All Schemes



Overall returns computed for the quarter ending 31st December 2021 was **0.7%** compared to **3.0%** recorded in the same quarter last year and **5.0%** in Q4 2019.

The performance was largely driven by negative returns in equities of **-4.4%** from **5.9%** in Q4 2020. The negative returns were attributable to a decrease in equities from the Q4 2020 majorly as a result of the investor uncertainty over the emergence and persistence of Covid-19 variants and the upcoming general elections.

Fixed income asset class increased to **2.2%** from **2.0%** in Q4 2020. The increase in fixed income was attributable to expected rise in bond yields driven by heavy domestic borrowing by government to fund the upcoming elections and fast track infrastructure projects.

Offshore asset class declined to **7.2%** from **8.5%** in Q4 2020. The decline in offshore performance was attributable to inflation concerns and supply shortages coupled with rising interest rates.



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.

ACTSERV Pension Schemes Investment Performance Survey (Quarter 4 2021)

RISK PROFILE CATEGORIES



Conservative Risk Profile



Non-interest bearing assets (0% - 20%) Interest bearing assets (80%-100%)

Moderate Risk Profile



Non-interest bearing assets (21%-45%) Interest bearing assets (55%-79%)

Aggressive Risk Profile

- Non-interest bearing assets (46%-70%)
- Interest bearing assets (30%-54%)

Size

Small

Schemes

Medium

Schemes

Large Schemes

Mega

Schemes

SAMPLE SIZE

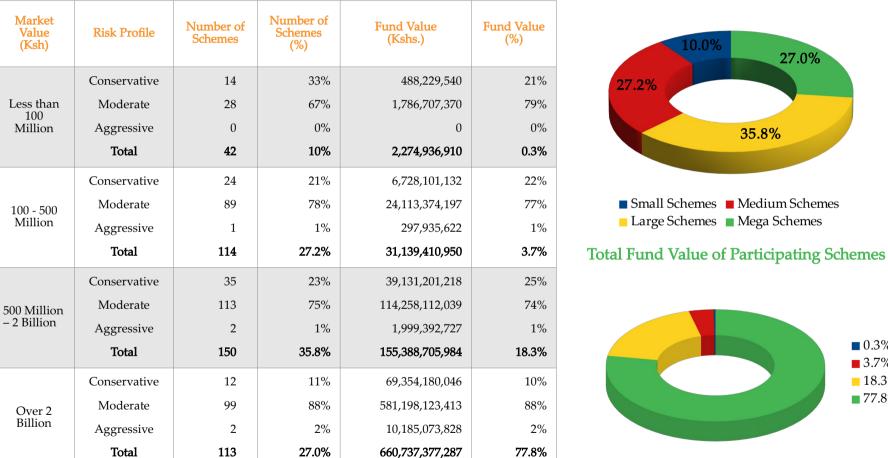
OVERALL

419

100%

Number of Participating Schemes

27.0%



849,540,431,132

100%

Small Schemes Medium Schemes Large Schemes Mega Schemes

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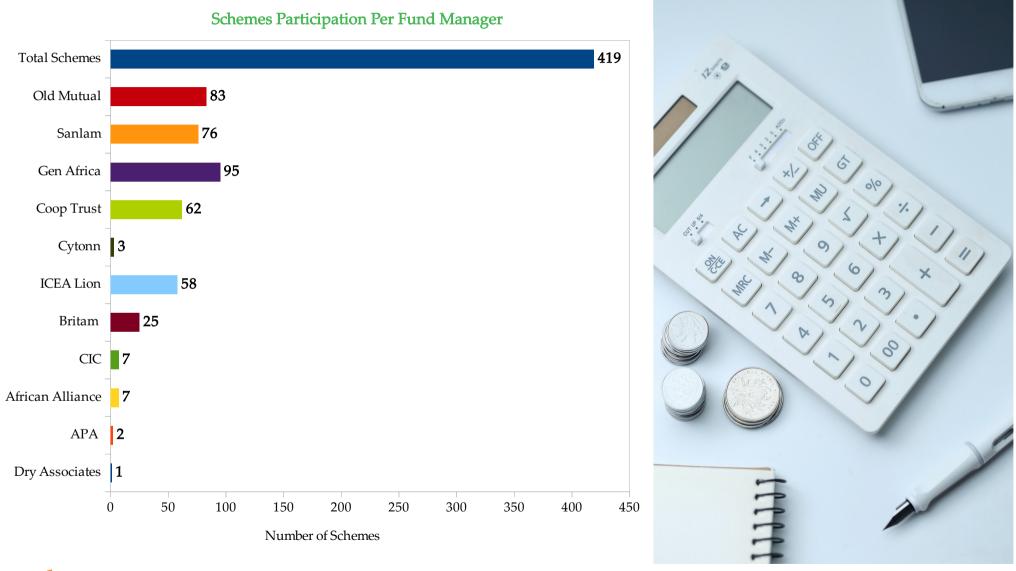
0.3%

3.7% 18.3%

77.8%

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ACTSERV Pension Schemes Investment Performance Survey (Quarter 4 2021)

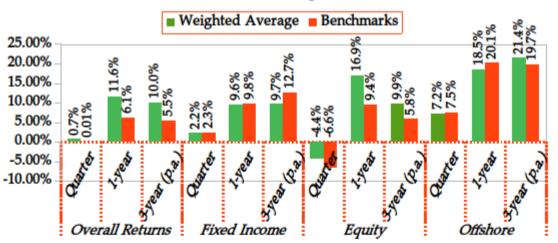


	Overall Returns			Fixed Income			Equity			Offshore		
	Quarter	1-year	3-year (p.a)	Quarter	1-year	3-year (p.a)	Quarter	1-year	3-year (p.a)	Quarter	1-year	3-year (p.a)
Weighted Average	0.7%	11.6%	10.0%	2.2%	9.6%	9.7%	-4.4%	16.9%	9.9%	7.2%	18.5%	21.4%
Average	0.7%	12.2%	12.4%	2.2%	10.4%	12.1%	-4.3%	18.5%	12.7%	6.4%	17.6%	24.3%
Highest	2.9%	18.5%	44.9%	4.4%	13.6%	41.2%	2.8%	32.4%	45.0%	16.8%	45.2%	71.3%
Lowest	-4.8%	6.2%	4.0%	-4.9%	1.7%	6.8%	-9.8%	-2.9%	-23.2%	-9.6%	-2.3%	1.6%
50 th Percentile	0.7%	12.4%	12.2%	2.2%	10.4%	12.0%	-4.3%	18.4%	13.1%	6.6%	20.5%	28.6%
Benchmarks	0.01%	6.1%	5.5%	2.3%	9.8%	12.7%	-6.6%	9.4%	5.8%	7.5%	20.1%	19.7%

PERFORMANCE ANALYSIS - ALL SCHEMES ANALYSIS

OVERALL RETURN BY ASSET CATEGORY

All Schemes Average Returns



Schemes posted a weighted average return of **0.7%**, **11.6%** and **10.0%** in Q4 2021 for the quarter, 1-year and 3-year respectively compared to **3.4%**, **14.9%** and **9.9%** in Q3 2021.

Fixed income decreased over the quarter to **2.2%**, **9.6%** and **9.7%** compared to **2.9%**, **9.6%** and **10.0%** in Q3 2021 and **2.0%**, **12.8%** and **10.9%** in Q4 2020.

Equities decreased over the quarter to **-4.4%**, **16.9%** and **9.9%** for the quarter, 1-year and 3-year periods compared to **5.2%**, **29.1%** and **9.6%** in Q3 2021.

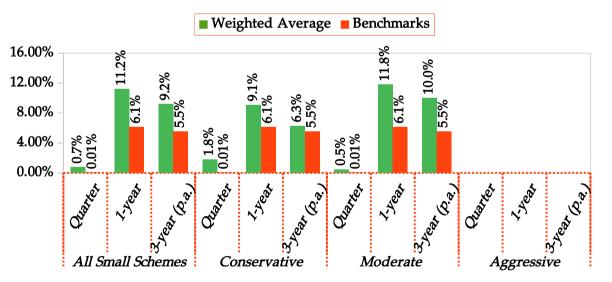
Offshore increased over the quarter to **7.2%**, **18.5%** and **21.4%** compared to **1.9%**, **18.0%** and **15.3%** in Q3 2021.

OVERALL RETURNS

	A	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%	11.2%	9.2%	1.8%	9.1%	6.3%	0.5%	11.8%	10.0%			
Average	0.9%	11.9%	11.6%	1.7%	10.0%	10.3%	0.4%	12.8%	12.1%			
Highest	2.6%	18.5%	14.8%	2.6%	13.6%	14.0%	1.4%	18.5%	14.8%			
Lowest	-0.5%	6.2%	4.0%	0.2%	6.2%	4.0%	-0.5%	10.7%	10.2%			
50 th Percentile	0.7%	12.5%	11.9%	0.7%	11.1%	11.8%	0.6%	12.7%	12.0%			
Overall Inflation	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%			

SMALL SCHEMES ANALYSIS

Small Schemes Overall Average Returns



Q4 2021 recorded a weighted average Small Schemes return of **0.7%**, **11.2%** and **9.2%** for the quarter, 1-year and 3-year annualized periods. This is in comparison to **3.1%**, **16.7%** and **9.8%** recorded in Q3 2021 indicating a decline over the quarter, 1-year returns and 3-year returns.

Moderate Small Schemes had a better performance on average.

The overall All Small Schemes returns were above the benchmark across all the periods.

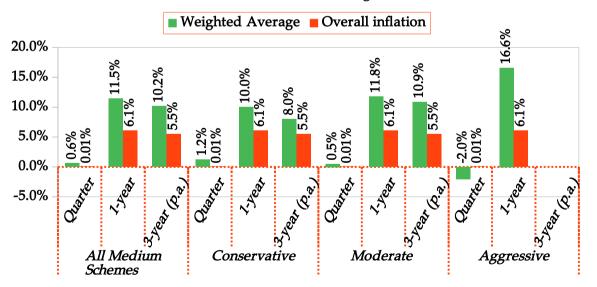


OVERALL RETURNS

Moderate All Medium Schemes Conservative Aggressive 1-vear 3-year (p.a) 1-vear 3-year (p.a) Ouarter 1-vear 3-year (p.a) 3-year (p.a) Ouarter Ouarter Ouarter 1-year 0.6% 10.2% 1.2% 10.0% 8.0% 0.5% 11.8% 10.9% -2.0% Weighted Average 11.5% 16.6% 0.7% 12.1% 12.4% 1.3% 11.1% 11.6% 0.5% 12.4% 12.6% 0.7% 12.1% Average Highest 2.7% 16.6% 44.9% 2.7% 13.1% 12.6% 2.1% 15.3% 44.9% -2.0% 16.6% -4.8% 6.2% 7.9% 0.3% 8.1% 7.9% 6.3% 9.5% -2.0% 16.6% -4.8% Lowest 0.7% 12.4% 12.1% 1.2% 11.1% 11.8% 0.6% 12.5% 12.2% -2.0% 16.6% 50th Percentile 0.01% 5.5% 0.01% 6.1% 6.1% 0.01% 6.1% **Overall Inflation** 6.1% 5.5% 0.01% 5.5%

MEDIUM SCHEMES ANALYSIS

Medium Schemes Overall Average Returns



All Medium Schemes returns decreased across all the periods except for the 3-year return. The weighted average returns were **0.6%**, **11.5%** and **10.2%** for the quarter, 1-year and 3-year annualized periods respectively compared to **3.3%**, **15.9%** and **10.1%** recorded in Q3 2021.

Conservative Medium Schemes returns were **1.2%**, **10.0%**, **8.0%** from **2.8%**, **13.2%**, **10.4%** for the quarter, 1-year and 3-year respectively, a decrease over the quarter and 1-year periods.

Moderate Medium Schemes recorded returns were **0.5%**, **11.8%** and **10.9%** in the quarter, 1-year and 3-year from **3.4%**, **16.3%** and **10.2%** returns in Q3 2021.

Aggressive Medium Schemes had the best performance over the 1-year returns. The returns were **-2.0%** and **16.6%** over the quarter and 1-year periods. In Q3 2021 the returns were **4.3%** and **24.1%**.

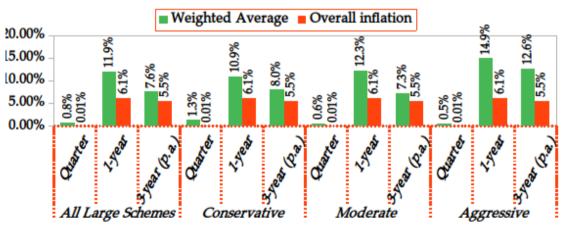


LARGE SCHEMES ANALYSIS

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	0.8%	11.9%	7.6%	1.3%	10.9%	8.0%	0.6%	12.3%	7.3%	0.5%	14.9%	12.6%	
Average	0.7%	12.2%	12.4%	1.2%	11.2%	12.1%	0.6%	12.4%	12.5%	0.4%	14.9%	12.3%	
Highest	2.8%	15.3%	14.9%	2.8%	12.9%	13.0%	1.5%	15.3%	14.9%	0.8%	15.0%	13.6%	
Lowest	-0.6%	9.34%	10.45%	0.5%	9.3%	10.8%	-0.6%	9.55%	10.45%	0.1%	14.7%	10.9%	
50 th Percentile	0.6%	12.2%	12.3%	1.2%	11.3%	12.1%	0.6%	12.5%	12.5%	0.4%	14.9%	12.3%	
Overall Inflation	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	

Large Scheme Overall Average Returns



All Large Schemes quarter, 1-year and 3-year average weighted returns were **0.8%**, **11.9%** and **7.6%** respectively, a decrease from **3.3%**, **15.3%** and **8.4%** in Q3 2021.

Conservative Large Schemes recorded returns of **1.3%**, **10.9%** and **8.0%** for the quarter, 1-year and 3-year periods from **3.0%**, **12.5%** and **9.9%** in Q3 2021.

Moderate Large Schemes had a performance of **0.6%**, **12.3%**, and **7.3%** over the quarter, 1-year and 3-year periods from **3.4%**, **16.0%**, and **7.8%** in Q3 2021.

Aggressive Large Schemes had the best performance for the 1-year and 3-year returns. The returns were **0.5%**, **14.9%** and **12.6%** over the quarter, 1-year and 3-year period from **3.2%**, **20.6%** and **12.8%** respectively in Q3 2021.

The overall all Large Schemes performance were above the benchmarks across all the 3 periods.

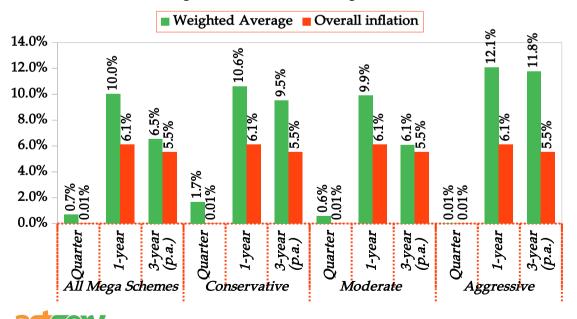


MEGA SCHEMES ANALYSIS

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	0.7%	10.0%	6.5%	1.7%	10.6%	9.5%	0.6%	9.9%	6.1%	0.01%	12.1%	11.8%
Average	0.7%	12.6%	12.3%	1.4%	11.4%	11.9%	0.6%	12.7%	12.4%	-0.03%	12.2%	11.7%
Highest	2.9%	15.3%	14.5%	2.9%	13.0%	12.5%	1.9%	15.3%	14.5%	0.2%	12.9%	12.3%
Lowest	-0.6%	9.6%	10.7%	-0.4%	9.6%	10.79%	-0.6%	10.75%	10.72%	-0.2%	12.9%	11.0%
50 th Percentile	0.7%	12.5%	12.2%	1.4%	11.1%	12.1%	0.7%	12.6%	12.3%	-0.03%	12.2%	11.7%
Overall Inflation	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%	0.01%	6.1%	5.5%

Mega Schemes Overall Average Returns



The returns recorded for Mega Schemes were **0.7%**, **10.0%** and **6.5%** for the quarter, 1-year and 3-year periods from **3.4%**, **14.5%** and **8.7%** in Q3 2021. There is a decrease across all periods.

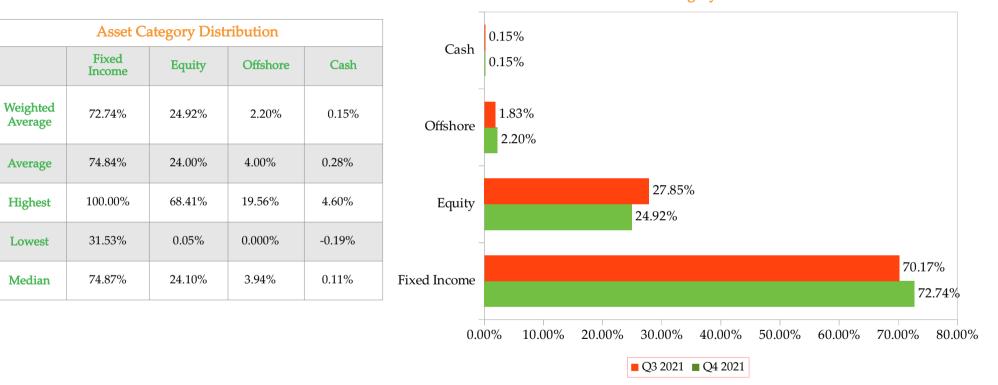
Conservative Mega Schemes recorded returns of **1.7%**, **10.6%** and **9.5%** for the quarter, 1-year and 3-year periods from **3.2%**, **11.2%** and **7.1%** in Q3 2021.

Moderate Mega Schemes had a performance of **0.6%**, **9.9%**, and **6.1%** over the quarter, 1-year and 3-year periods from **3.4%**, **14.7%**, and **8.5%** in Q3 2021.

Aggressive Mega Schemes had the best performance for the 1year and 3-year returns. The returns were **0.01%**, **12.1%** and **11.8%** over the quarter, 1-year and 3-year period from **3.6%**, **15.5%** and **12.4%** respectively in Q3 2021.

All Mega Schemes weighted return over performed the benchmark across all periods.

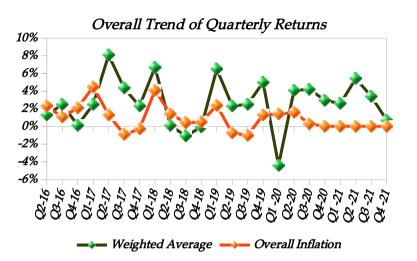
ASSETS DISTRIBUTION ANALYSIS



Asset Category Distribution

actserv

RETURN TRENDS



Overall Trend 1-year Returns

Overall Return Trends

Since Q2-16 overall quarter returns have been above inflation except in Q4-16, Q1-17, Q2-18, Q3-18, Q4-18 and Q1-20 where inflation was marginally higher.

Q4-21 overall quarter return outperformed inflation, however significantly declined to **0.7%** in Q4-21 from **3.0%** in Q4-20. This is attributable to investor uncertainty over the Covid-19 variants coupled with the upcoming elections.

The variance between the quarterly returns and inflation rates has been marginal.

Since Q2 2016 the overall trend of 1-year return has generally outperformed the inflation benchmark except in Q2-2016, Q1-2017, Q4-2018 and Q1-2020.

 12%

 10%

 8%

 6%

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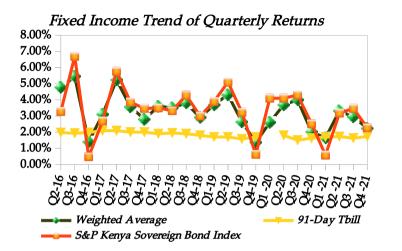
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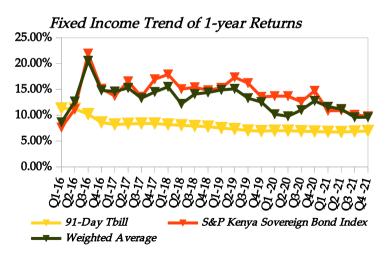
 6%
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---- Weighted Average ---- Overall Inflation

From Q4-16, the overall 3-year annualized return has remained above inflation benchmark except in Q1-17. The return increased over the quarter to **9.9%** from **8.9%** in Q2-21 and **9.8%** in Q4-20.

Since Q2-16's return of **8.64%**, 2019 had the best returns over most quarters of **11.00%** in Q1-19, **11.42%** in Q2-19 and **11.3%** in Q4 -19.





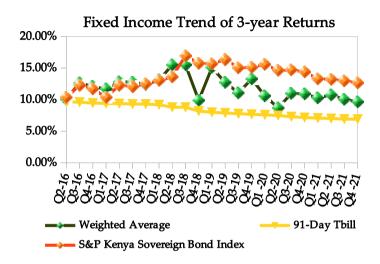
Fixed Income Return Trends

The quarterly fixed income returns have been volatile and generally mirrored the benchmark.

Since Q2-16 the lowest realized quarterly fixed income return was in Q4-16 at **1.39%**, Q4-19 at **1.4%** and Q1-21 at **1.6%**. The highest return was **5.4%** in Q3-16.

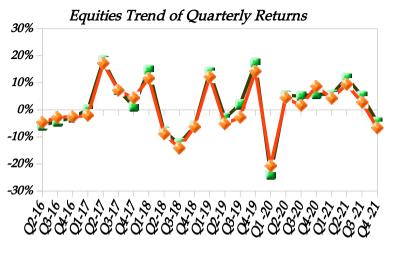
The 1-year fixed income returns have been more stable than the quarterly returns and have remained consistent with the benchmark.

The highest realized 1 year fixed income return was **20.54%** in Q3-16. Q3-21 return of **9.6%** was a decline from **11.2%** in Q2 2021.

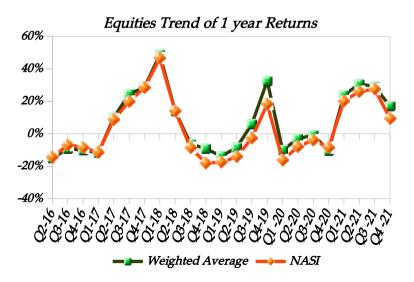


Similar to quarterly returns, the 3-year annualized returns have been volatile over consecutive quarters. Since Q2-16 the highest 3 year fixed income return was recorded in Q2-18 at **15.51%**. Q3-21 return of **10.0%** was a decrease from **10.8%** in Q2 2021.

Single digit returns were recorded in Q4-18 at **9.90%** and Q3-21 at **10.0%**. Since Q3-18 the returns have under performed the S&P Kenya Sovereign Bond Index.



---- Wainhtad Avarana ---- NIASI

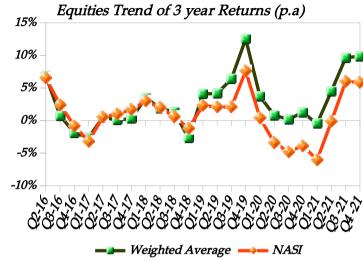


Equities Trend

From Q2-16 quarterly equities returns have remained volatile but above the NASI benchmark index, except in Q2-16 to Q4-16, Q4-17, Q1-20 and Q4-20.

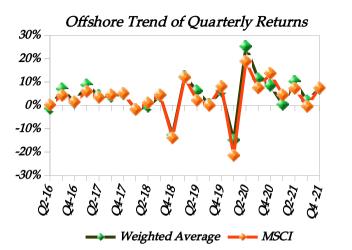
The weighted average equities return for all schemes have remained stable at around **11.9%** from **-5.7%** in Q2-16. The lowest quarterly equity return was in Q1-20 at **-23.9%** followed by Q3-18, **- 12.5%** while the highest was in Q2-17 at **18.32%**.

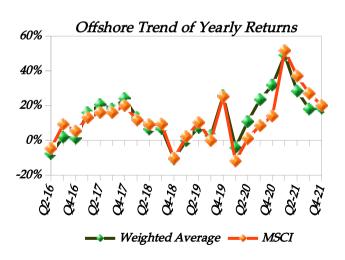
The 1-year equities returns have also been volatile and remained above the NASI benchmark index, except in Q2-16 to Q1-17, Q2-18 and Q4-20. Highest equities returns were realized in Q1-18 at **48.70%**, Q4-19 at **32.5%**, Q1-21 at **23.8%** and Q2-21 at 30.6%. The lowest return was in Q1-19 at **-13.80%**.



Since Q2-16 the highest 3 year return was **12.5%** in Q4-19 while the lowest was in Q1-17 at **-2.60%**. From Q1-19 the 3-year equity trend has remained stable above the NASI benchmark index.

The recovery from the COVID-19 pandemic in Q2-20 has resulted in equities performance increasing from **4.5%** in Q2-21 and **9.6%** in Q3-21.



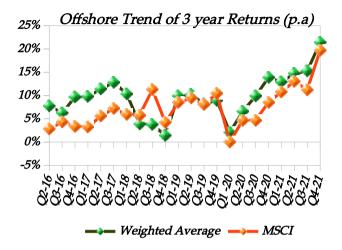


Offshore Trend

The quarterly offshore returns have been volatile. They however have closely matched the benchmark performance outperforming it in certain quarters. In Q4 2021 the returns have been below the benchmark.

The persistence of the COVID-19 variants have slowed the recovery resulting in weighted average quarter offshore returns declining quarter to quarter from **11.30%** in Q3-20 to **10.2%** in Q2-21 down to **1.9%** in Q3-21. Since Q1-17 the highest return was **25.30%** in Q2-20.

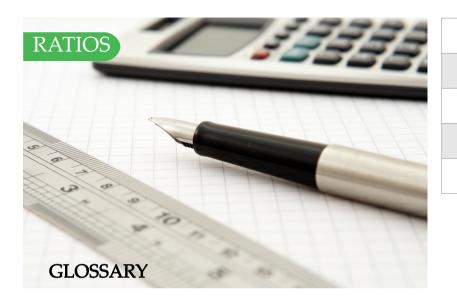
The highest offshore 1-year return on average for all schemes since Q2 2016 was in Q1-21 at **49.1%** while the lowest was in Q4-18 at **-10.70%**. The returns in Q3-21 decreased to **18.0%** from **28.5%** in Q2-21.



The 3-year offshore returns have been volatile and closely matched the benchmark performance outperforming it in most quarters.

From the onset of COVID-19 pandemic weighted average 3-year offshore returns have continued to increase quarter on quarter from **2.10%** in Q1-20 to **13.9%** in Q4-20 and a slight decline to **12.9%** in Q1-21. The highest weighted average return since Q1-17 was at **15.3%** in Q3-21.





- 1) <u>Conservative Risk Profile</u>: 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.
- 2) <u>Moderate Risk Profile:</u> An investing strategy that seeks to have a balanced proportion between low risk and high risk assets in the investment portfolio.
- 3) <u>Aggressive Risk Profile:</u> 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.
- <u>Non-Interest Bearing Assets</u>: The total funds invested in equities, offshore and property. Also considered to be high risk assets.

	Quarter	1-Year	3-Years
Standard Deviation	0.64%	2.20%	4.89%
Tracking Error	0.02%	0.16%	0.81%
Information Ratio	41.30	38.64	7.85
Sharpe Ratio	-61.24	33.29	6.27

- 5 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.
- 6 <u>Information Ratio (IR)</u>: 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.
- 7 <u>Sharpe Ratio:</u> Measures the ratio of average return earned in excess of the risk free rate per unit of volatility or total risk.
- 8 <u>Standard Deviation</u>: A measure of the dispersion of returns from the mean.
- 9 <u>**Tracking Error**</u>: The difference between the returns of the schemes and that of the benchmark (inflation) the schemes are trying to beat.
- 10 <u>Weighted Average Returns</u>: 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.

CONTACT US

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