

FTSE All Share Index

Performance and Liquidity Analysis

Parth Goyal

I. Performance

ticker	name	gics_sector_name	ytd_rtn
ENQ LN Equity	EnQuest PLC	Energy	94.310897
MNZS LN Equity	John Menzies PLC	Industrials	92.903226
HTG LN Equity	Hunting PLC	Energy	75.531915
PDL LN Equity	Petra Diamonds Ltd	Materials	73.648649
HBR LN Equity	Harbour Energy PLC	Energy	46.977401
TED LN Equity	Ted Baker PLC	Consumer Discretionary	43.646945
ENOG LN Equity	Energear PLC	Energy	39.064327
BRW LN Equity	Brewin Dolphin Holdings PLC	Financials	38.513514
SHEL LN Equity	Shell PLC	Energy	36.992847
XAR LN Equity	Xaar PLC	Information Technology	36.538462

Table 1: Best 10 companies by Returns (%)

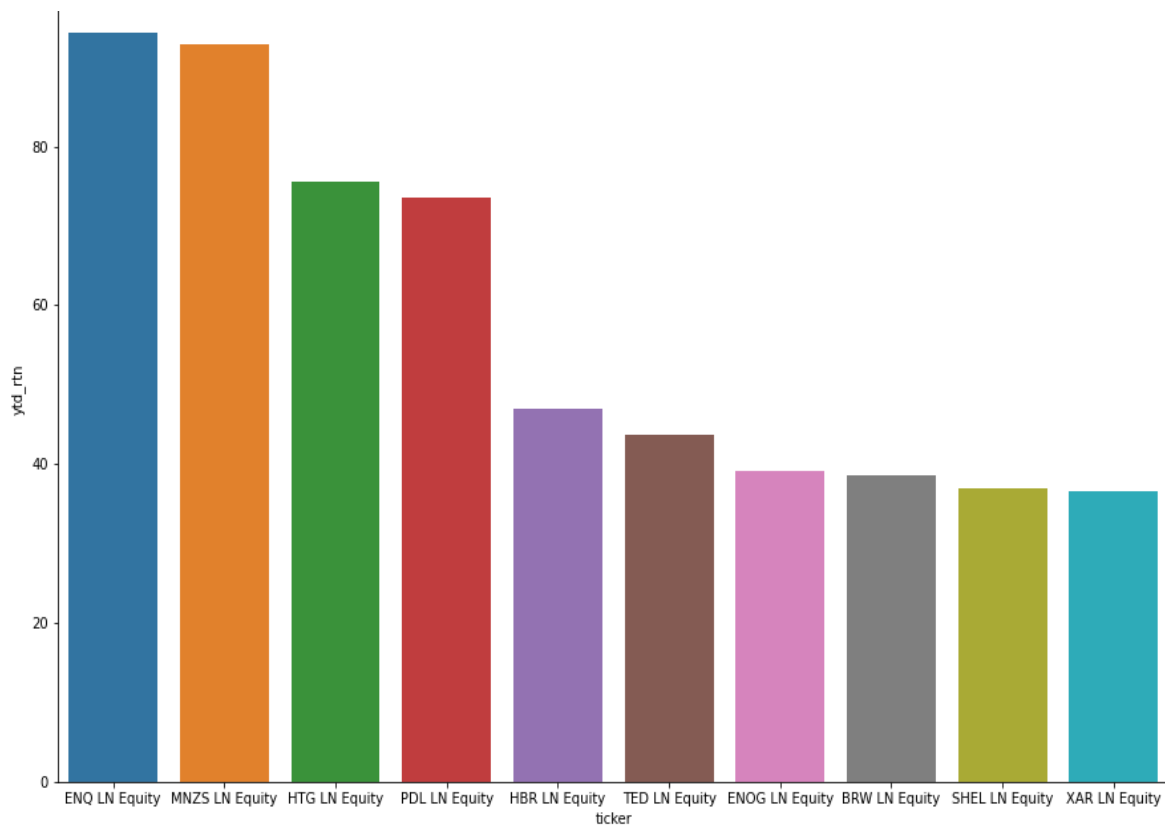


Figure 1: Best 10 companies by Returns (%)

ticker	name	gics_sector_name	ytd_rtn
TRST LN Equity	Investment Fundpilot Group PLC	Communication Services	-59.071472
MADE LN Equity	Made.com Group PLC	Consumer Discretionary	-55.750000
OXB LN Equity	Oxford Biomedica PLC	Health Care	-54.146341
MORE LN Equity	Hostmore Plc	Consumer Discretionary	-46.837607
GNS LN Equity	Genus PLC	Health Care	-46.537060
MOON LN Equity	Moonpig Group PLC	Consumer Discretionary	-46.266667
APTD LN Equity	Aptitude Software Group PLC	Information Technology	-44.741379
LUCE LN Equity	Luceco PLC	Industrials	-44.619799
CSP LN Equity	Countryside Partnerships PLC	Consumer Discretionary	-43.666667
LIO LN Equity	LionInvestment Fund Asset Management PLC	Financials	-43.272727

Table 2: Worst 10 companies by Returns (%)

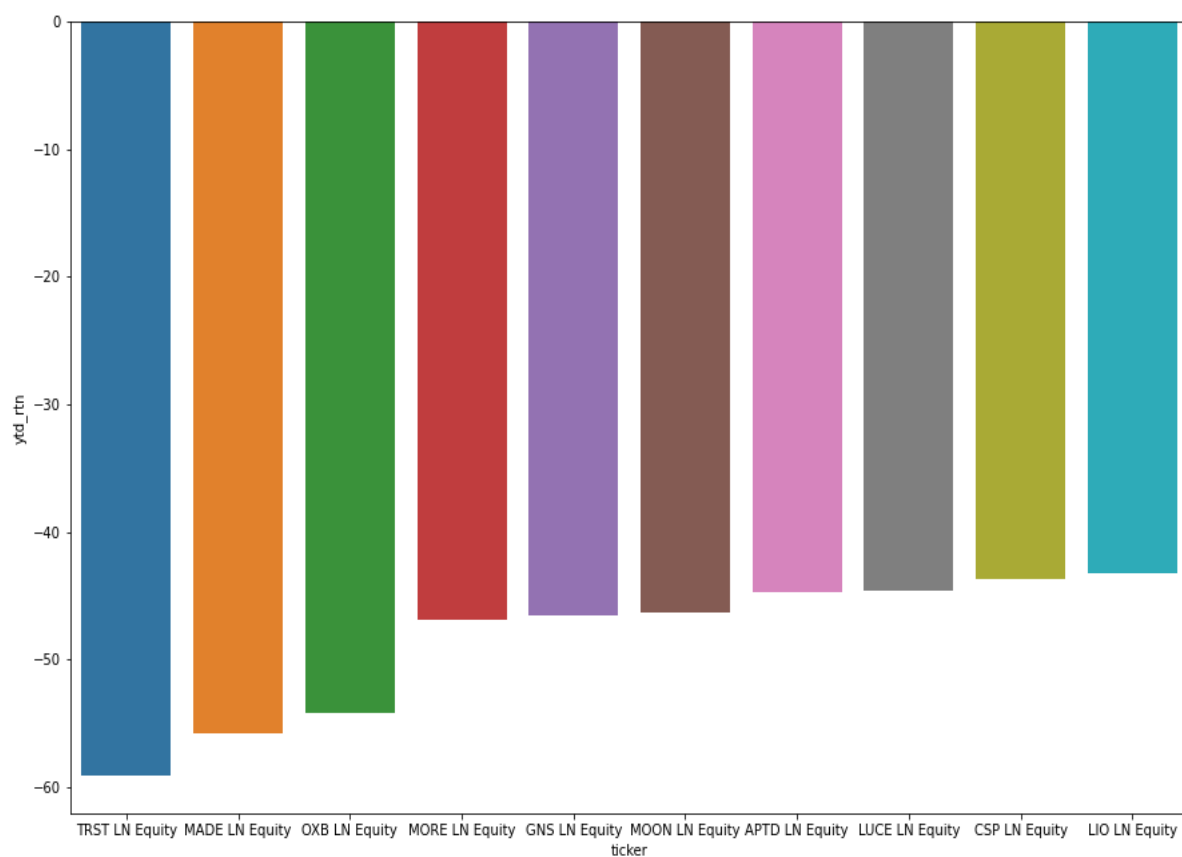


Figure 2: Worst 10 companies by Returns (%)

- The year-to-date return values year to date return from 31st Dec 2021 to the current mid-price.
- The average year to date return for the entire index excluding 'Investment Fund' is **-6.921789 %**. Possible explanation for negative returns is the uncertainty caused by the war with rising costs due to inflation and rising interest rates reducing liquidity in the market
- The average year to date return for the energy sector is + **27.078647%** —the strongest index by far. Moreover, half of the best-performing companies are from the energy sector, while none of the worst-performing companies are from the energy sector—an expected result considering rising commodity and oil prices and shortage of energy supply due to sanctions.

II. Liquidity

	bid-ask spread (%)	avg daily volume(number of shares)	avg daily volume (market value)
Index	0.534308	2.450955	1052.619796
Small Cap	1.343566	0.481303	58.195785

Table 3: Average Spread and Liquidity for the index and small cap stocks

- The avg daily volume(number of shares) is 'VOLUME_AVG_20D', which has been assumed to represent the mean daily volume over 20 days in the number of shares. Similarly, avg daily volume(market value) is 'VOLUME_20D_MV', which has been calculated to represent the mean daily volume over 20 days in terms of market value based on mid-price and 'VOLUME_AVG_20D'
- Small Cap refers to companies with a market cap of less than 500 million
- The average bid-ask spread of the index is + **0.534306 %** suggesting high liquidity and competitive exchange for market makers
- As seen in table 3 the bid-ask spread and volume are much lower for small cap stocks, a reasonable result considering lower liquidity and bigger spreads by market makers due to higher uncertainty in the theoretical value of the stock

III. Additional Insights

- The correlation between year to date returns and market cap is **+0.205828** suggesting a possible relationship between the size of the company and returns. A potential theory is that investor sentiment during higher uncertainty and interest rates leads to lower risk appetite causing them to diversify into bigger, more dependable companies.

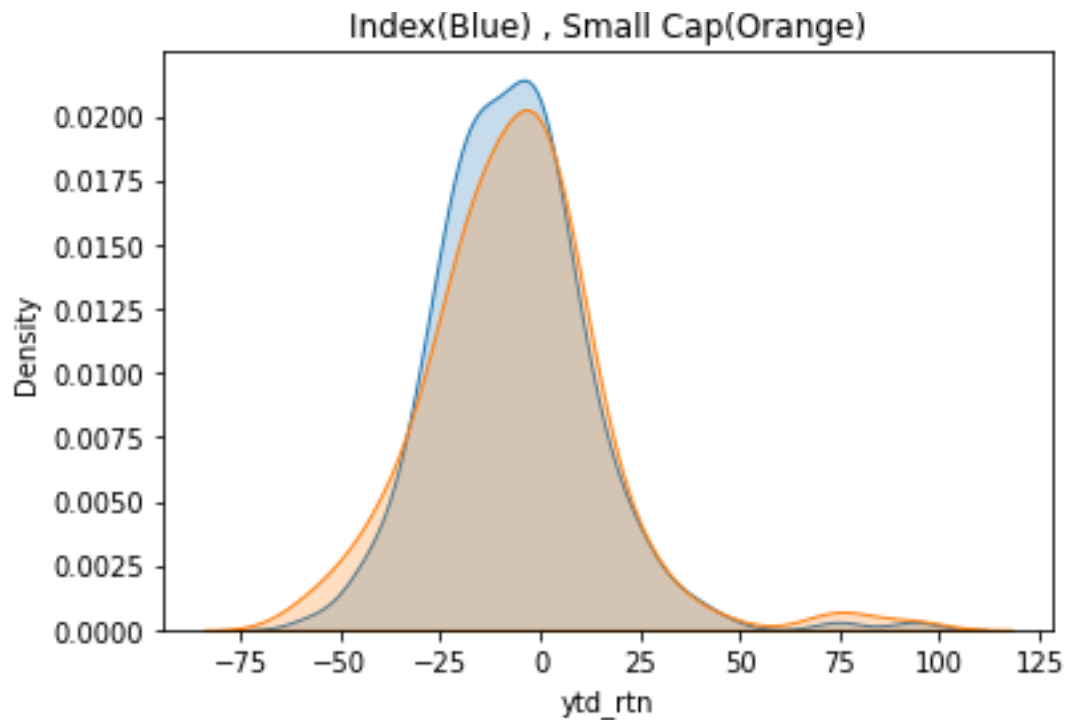


Figure 3: Smooth histogram of year-to-date returns

- Figure 3 shows us that year to date returns potentially follows a normal distribution. This can be tested for statistical significance in R. Nonetheless, it can be a helpful starting point to build a probability distribution for returns which can help us form intervals for expected value and assess and mitigate risk in investments