

Equity Beta for Sequoia Economic Infrastructure Income Fund Limited (“SEQI”)



SEQI has historically achieved a low beta, low R² and has demonstrated that a high proportion of its total risk is explained by unsystematic risk

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Summary: Equity betas of listed infrastructure funds historically are low, which reflect the stable cash flows and low asset betas of the underlying projects. SEQI’s unlevered equity beta since inception is 0.411 and 0.730 over the last year. These statistics indicate that SEQI has a reasonably low correlation and low volatility versus the broader market.⁽¹⁾

Discussion: The scatter plot in Exhibit 3 shows daily percentage changes in SEQI’s share price (vertical or y-axis) vs daily movements in the FTSE 250 (x-axis), with a line-of-best-fit in red. The gradient of this line is the beta and summarises the systematic risk, with steeper lines representing higher betas and more volatile stock prices and flatter lines representing lower betas and less volatile stock prices.

The R² describes how close the distribution is to the line-of-best fit, with a low R² showing little correlation to the market and a higher R² showing greater correlation. R² can also be used to measure the proportion of total risk that is explained by systematic (market) risk and unsystematic (project specific) risk.

In the case of SEQI’s total risk, a low proportion of 10% is explained by systematic risk, whilst a high proportion of 90% is explained by unsystematic risk. This stands to reason as infrastructure projects provide essential services which makes their revenues less susceptible to the business cycle and project cash flow returns less correlated to the market.

Exhibit 1: SEQI Equity Beta & R² (versus FTSE 250)

Period	Unlevered Beta ⁽²⁾	R ²	Unsystematic Risk as % of Total Risk
Last 12 months	0.730	0.342	81%
Last 2-years	0.638	0.300	84%
Fund Life	0.411	0.194	90%

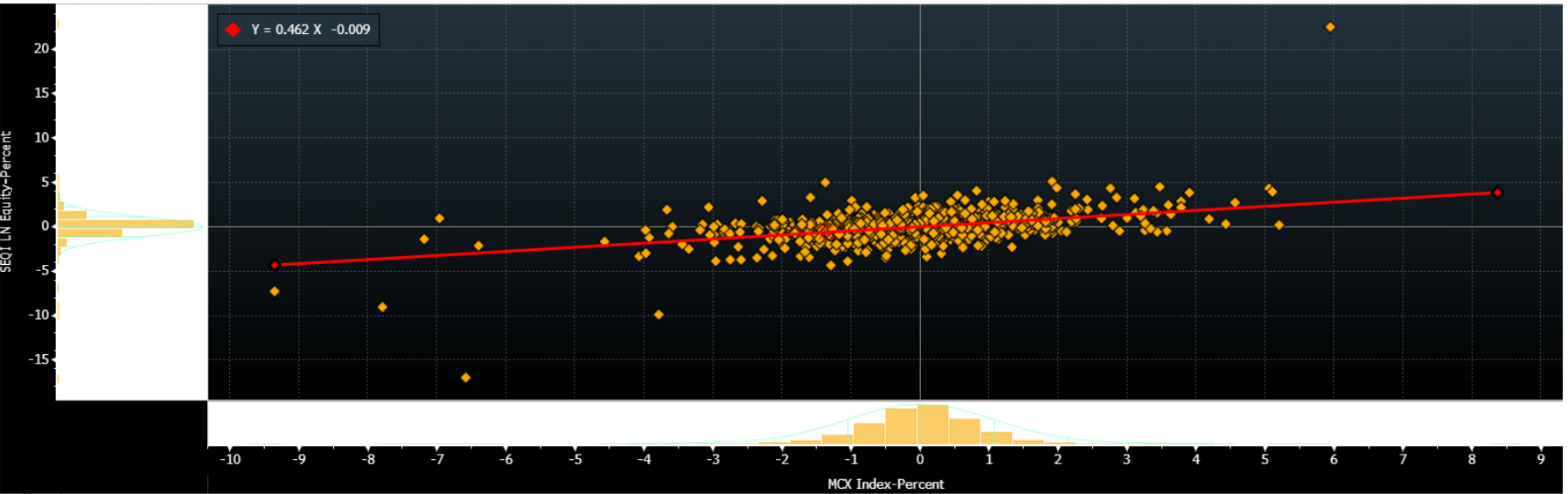
Source: Bloomberg, Sequoia

Exhibit 2: SEQI and FTSE 250 Standard Deviation of Returns

Years	σ of weekly prices	Largest weekly fall
Fund Life	1.77%	8.12%
FTSE 250	2.47%	14.07%

Source: Bloomberg, Sequoia

Exhibit 3: Equity Beta for SEQI since March 2015 using daily data ⁽³⁾



Source: Bloomberg

Notes: (1) Broader market defined as FTSE 250 Index; (2) Bloomberg provides levered beta so this has been adjusted using a 0.05 Debt to Equity ratio; (3) The beta of 0.462 shown in this chart is the levered beta from Bloomberg. Adjusting using the 0.05 Debt to Equity ratio results in an unlevered beta of 0.411 as shown in Exhibit 1.