

Seraphim Space Investment Trust

The importance of deal structure in weak markets

In our last update on Seraphim Space Investment Trust (SSIT), published in October 2022 ([Weathering the storm](#)), we reviewed the company's inaugural full year results and in this update we focus on its Q123 NAV performance. SSIT's manager (Seraphim Space Manager LLP) is keen to draw attention to the valuation methodology and deal structure for the nine unquoted holdings in the portfolio's top 10 holdings. These account for c 85% of the current value of all private holdings in the fund and 77% of the overall invested portfolio value at the end of September, highlighting how the structure of an investment is a crucial determinant of performance, especially in a weaker investment environment, and supportive of NAV. Seraphim has modelled the valuation sensitivity of these nine private holdings, testing a theoretical 50% reduction in enterprise value to each holding and gauging the notional impairment to SSIT's NAV. Seraphim is not forecasting this reduction, but even if it were to occur it calculates that the NAV could still be c 85p or only c 19% below the Q123 NAV of 105p.

Q1 NAV results presentation



Source: Seraphim Space Investment Trust

Why consider SSIT now?

There is no denying that 2022 has been a very difficult period for early-stage growth investors. Surging inflation and rising interest rates have removed a substantial leg of valuation support for long-duration growth assets. In this environment there may be some investor concern regarding the apparent disconnect between what has happened to the valuations of some early-stage growth assets in the public markets and the less frequent NAVs published by largely private-focused investment vehicles such as SSIT. In order to address these concerns, the management of SSIT has set out its valuation methodology, the structure of the deals and modelled a majority of the private holdings' value in the event of a 50% decline in their enterprise values, which highlights the resilience of the NAV.

Investment trusts
Growth capital

16 December 2022

Price Ord 45.7p
Market cap £109.5m
Total assets £251.4m

NAV* 1.05p
Share discount to NAV 56.5%

*Including income at 22 November 2022.

Yield 0.0%

Shares in issue 239.4m

Code Ord/ISIN SSIT/GB00BKPG0138

Primary exchange LSE

AIC sector Capital Growth

SSIT's financial year end 30 June

52-week high/low* 130.8p 43.8p

NAV* high/low 104.7p 98.9p

*Including income.

Gearing

Cash at 30 September 2022 £44m

Fund objective

Seraphim Space Investment Trust's objective is to generate capital growth over the long term through investment in a diversified, international portfolio of predominantly early- and growth-stage unquoted space tech businesses with the potential to dominate globally. Space tech businesses rely on space-based connectivity or precision, navigation and timing signals, addressing a broad range of key applications.

Bull points

- NAV resilience.
- Material cash reserves.
- Continued structural long-term tailwinds.

Bear points

- Slowing later-stage transactions.
- Quoted market valuations do matter.
- Wide discount remains.

Analysts

David Holder +44 (0)77962 68072

Andy Chambers +44 (0)20 3077 5700

investmenttrusts@edisongroup.com

[Edison profile page](#)

Seraphim Space Investment Trust is a research client of Edison Investment Research Limited

Q123 NAV performance

SSIT's Q123 (to 30 September 2022) NAV was 1.05p, up from 99.97p at the 30 June 2022 financial year end. The value of the portfolio increased by 11% from £186.1m at 30 June 2022 to £207.0m at 30 September 2022. The fair value of investments was written down by £1.7m, with £8.8m added to existing and new investments. The largest single contributor to the increase in the value of the portfolio was £13.8m driven by the weakness of sterling over the period. At the end of September 2022 there were cash reserves of £44m (30 June 2022: £57m) or 18% of NAV, which, according to the company, is sufficient to support and adequately capitalise portfolio companies into 2024. The manager is maintaining its conservative approach to investment with less than £10m being deployed in each of the last three quarters. In total SSIT had net assets of £250m at the end of September 2022 (30 June 2022: £239m).

Investment activity in Q123

The rate of investment in the quarter was similar to previous quarters, with seven investments made overall during the period, with initiations in Voyager Space Holdings (a B series funding round, with a £2.1m investment), Taranis (a D series funding round, with £2.1m invested) and a modest new position acquired in a seed portfolio company (£0.3m).

Voyager builds next-generation space stations and has been commissioned by NASA in this regard. Its work is critical as the International Space Station reaches the end of its operational life. Voyager's Starlab platform could be a solution to hosting both private and public astronauts. Voyager's key functionality in developing non-earth-based R&D in biopharma has ground-breaking implications for manufacturing in space.

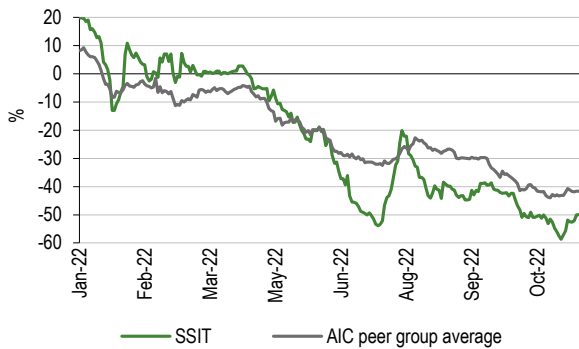
Taranis is an agriculture analytics business that can capture, utilising drones and space observation, sub centimetre level data and subsequently analyse the readings to help early identification of crop diseases, pestilence or crop failures due to lack of water or nutrients. It principally sells its findings to agriculture product retailers, with the ultimate aim of helping farmers maximise their yields, reducing waste and loss.

In addition, there were four follow-on investments including Planet Watchers (£2.5m) and three seed portfolio companies (£1.9m in total).

The anomalies between private and public markets

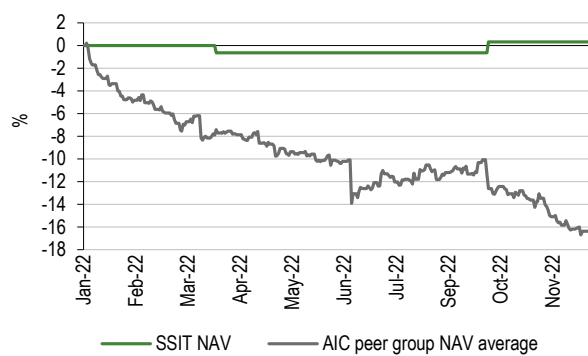
The Q123 NAV of 1.05p equated to a 5% uplift on the June year end figure of 99.97p and leaves the portfolio flat in terms of NAV over 2022. Despite this, the shares currently trade around 45p, which is a c 56% discount to the Q123 NAV.

Exhibit 1: SSIT's discount mirrors that of its AIC peers



Source: Morningstar. Note: AIC peer group returns = simple average.

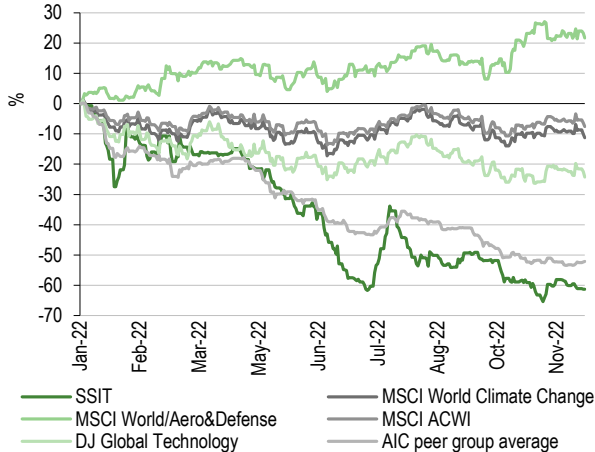
Exhibit 2: SSIT's NAV has held up better than peers



Source: Morningstar. Note: AIC peer group returns = simple average.

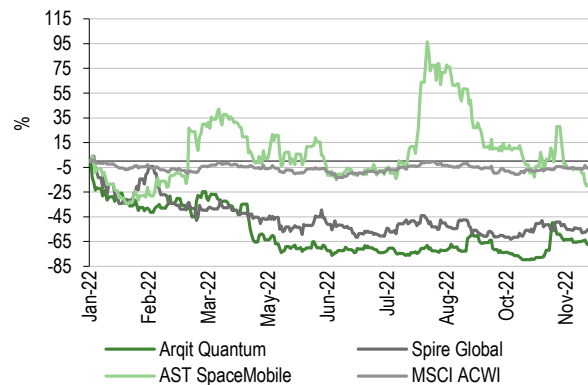
In the year to date, quoted global markets, especially those in long-duration growth assets, have sold off aggressively and there appears to be a disconnect between the valuation attributed to the SSIT unlisted portfolio and what is happening in the quoted markets. While this is not unique to SSIT, investors have been unwilling to trust the NAV performance, instead 'voting with their feet' and leaving this and other private focused trusts on wide discounts to their stated NAVs. Exhibits 1 and 2 illustrate the respective discounts and NAV performance over 2022 to date for SSIT and its AIC Growth Capital peer group, while Exhibits 3 and 4 illustrate the price performances of a range of comparators and of the three listed holdings within the SSIT portfolio.

Exhibit 3: Share price performances of SSIT and comparators through 2022



Source: Morningstar. Note: AIC peer group returns = simple average. In pounds sterling.

Exhibit 4: Quoted holdings performances through 2022



Source: Morningstar. Note: In pounds sterling.

The structuring of an investment is key

In the manager's latest update, it explained more about the structure of the holdings within the portfolio, revealing downside protection measures that are routine across the private companies within the portfolio via preference shares, rather than common equity or convertible loan notes. Preference shares sit above common equity in the capital structure in the event of a liquidity event, but below some other creditors such as banks. Preference shares offer more defensive exposure to an asset with their 'liquidation preference'. Liquidation preferences provide a prioritised return ahead of other share classes, which means value can be preserved even in scenarios where a business is sold at a far lower valuation than that used to make the investment.

Another feature employed by the managers are 'anti-dilution' measures that retrospectively amend the price paid or the number of shares owned where a subsequent funding round is done at a lower valuation (down round). These measures can help mitigate dilution in the event of a down round, but it rarely results in no dilution. Additional shares are often issued at par to ensure that existing investors are not diluted in the event of a down round, protecting their investment and call on the company's assets and cash flows. Anti-dilution can be full ratchet (100% price adjustment, ie the share price of the original investment is re-based to match the share price of the down round) or weighted average dilution, which provides a proportion of adjustment and less protection, but still a better outcome than if no anti-dilution measures were applied in the event of a down round.

All the top 10 private companies in the portfolio are structured via preference shares and feature liquidation preference with weighted average anti-dilution protection. Four of the holdings (ICEYE, HawkEye 360, Altitude Angel and Astroscale), which account for 36% of NAV, rank in the top tier of the company's equity structure, and the remaining top 10 positions vary from 93% of the holding ranked in the top tier (All Space) to 0% (D-Orbit). In aggregate across the top 10 private companies there are quite substantial margins or buffers in place for the current enterprise values used to price the holdings. These margins would require significant derating in order for the holdings to be worth less than cost. Seraphim calculates that on an average NAV weighted basis the margin until loss is 53%, while the mean valuation margin is 62%. This implies that the enterprise values of these holdings in aggregate would have to fall in value by over half to impair their cost value.

Private companies' NAV resilience

In order to address investor scepticism around the Q123 NAV and the wide discount at which SSIT shares currently trade to this, Seraphim has modelled the top 10 private holdings at 30 September 2022 (which accounted for 77% of overall portfolio value) and applied a range of enterprise value impairments to these holdings. If the enterprise value of each of these holdings fell by 50% from the Q123 valuation (via an event such as a funding round, IPO or trade sale etc) then the NAV per share would reduce from the current 105p to c 85p (or a c 19% decline), which compares to the current price of 45.7p, which is a 46% discount to this worst-case theoretical NAV. The current discount to SSIT's Q123 105p NAV is 56.5%. The modelled resilience of the NAV is due to the liquidation preference and anti-dilution measures in place as explained above, which protects the value of these investments even in the event of quite dramatic falls in the enterprise value of the holdings. Seraphim is keen to state that it views a 50% decline in the enterprise values of these holdings as extremely unlikely given their operational performance, but if it did happen then SSIT's NAV should have an element of downside protection.

NAV methodology recap

SSIT's current NAV (at £1.05 per share) is £250.3m with a market cap of £109.5m, which is a discount of 56%. A market cap of £109.5m equates to 45p per share. There is also £43.8m of cash held by the company (equating to 18.3p per share) so the implied portfolio value (if cash is valued at nothing) is £65.7m, which is a 68% discount to the current NAV (less cash) of £206.5m.

An unaudited NAV is calculated quarterly in pounds sterling for end September, December, March and June. The June NAV is independently audited by BDO, which tested 99% of the total investment valuation. Publicly listed securities are valued at their bid price or last traded price (these currently comprise Arqit (ARQQ), Spire (SPIR) and AST SpaceMobile (ASTS)). However, the majority of the portfolio is unquoted. These assets are valued using International Private Equity and Venture Capital Association (IPEV) methodology including earnings multiples, discounted cash flow analysis or the use of the value at the most recent funding round. More recent purchases may be

held at cost until such time that alternative measures become more appropriate. Assets yet to generate profit or revenue are typically valued at the most recent funding round cost. The above factors, and the nature of the portfolio, containing early-stage and unquoted assets, mean that there is likely to be an inherent element of lag in the quarterly reported NAV.

At the 2022 financial year end (30 June) 9.9% of the portfolio was valued via the available market price, which are the listed holdings of Arqit, Spire and AST SpaceMobile, and 11.3% via milestone multiples, with the majority of the portfolio valued in relation to funding rounds between three and six months ago (30.1%) and those where funding rounds occurred over six months ago (35.1%).

Often there will be only one 'event' per year from which to value an unlisted holding such as via a fund-raising, sale or listing. This means that often there is a subjective element to the valuation process (albeit within clearly stated IPEV parameters). In some ways there is a similarity between valuing the early-stage growth businesses within SSIT and biotech, in that the achievement of early-stage milestones are a catalyst for a re-rating, although until these companies fully prove their operational, technological and commercial development then the valuation may be considered transitory. Seraphim is well placed to verify the valuations of the unquoted companies as it tracks public and private industry transactions through its quarterly published [space index](#), has recourse to proprietary databases and also uses third-party information providers such as Pitchbook.

The performance of special purpose acquisition companies (SPACs) through 2022 has been weak as investors have shunned early-stage growth investments. SSIT owns three listed companies (Arqit Quantum, Spire Global and AST SpaceMobile). With the exception of AST SpaceMobile, the share price performances of these holdings has been weak in 2022, with some listed early-stage companies affected by a lack of liquidity or by short sellers. Spire Global and Arqit Quantum are within SPAC structures and have seen their share prices sell off materially in 2022, while AST SpaceMobile, which is also listed via a SPAC, has been more resilient through 2022. Seraphim does not believe that there is 'read across' from the performances of Spire Global and Arqit Quantum to the unquoted portfolio. Instead, it points to the performances of the Nasdaq and sector indices (Exhibit 3) as more relevant proxies.

Conclusion

It is business as usual for SSIT in many regards in that the portfolio is very much geared to address the vast issues confronting the planet now and in the future. We covered these in our August 2022 review ([Derating offers an attractive entry point](#)), highlighting the 90% of earnings from the top 10 private portfolio holdings directly derived from climate change and global security themes. These are themes that are likely to be supportive of very long-term secular growth in these end markets. This focus together with the downside protection measures in place provides a powerful following wind for the portfolio and a degree a downside protection. Investors will be interested to see Seraphim's latest modelling, in which it has applied a 50% decline to the enterprise values of the top 10 private companies, which if were to come to fruition would result in an NAV of c 85p. Given all of these factors, the c 56% discount to NAV could be considered excessive and unrepresentative of the portfolio's operational performance and the vast end market potential demand that the portfolio addresses. Investor sentiment towards early-stage companies could remain fragile for some time yet, however for those investors with the appropriate appetite to risk and investment time horizon, SSIT may be attractive at these levels.

General disclaimer and copyright

This report has been commissioned by Seraphim Space Investment Trust and prepared and issued by Edison, in consideration of a fee payable by Seraphim Space Investment Trust. Edison Investment Research standard fees are £60,000 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2022 Edison Investment Research Limited (Edison).

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

United States

Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

Frankfurt +49 (0)69 78 8076 960
Schumannstrasse 34b
60325 Frankfurt
Germany

London +44 (0)20 3077 5700
280 High Holborn
London, WC1V 7EE
United Kingdom

New York +1 646 653 7026
1185 Avenue of the Americas
3rd Floor, New York, NY 10036
United States of America

Sydney +61 (0)2 8249 8342
Level 4, Office 1205
95 Pitt Street, Sydney
NSW 2000, Australia