

## SPACE-SME-UP/2022-2025

# Economic importance and financial health of the SMEs in the European space industry in 2022 - Executive Summary - (D08)

**Version 1, 07/11/2024**

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with  
SME4SPACE VZW (BE)

Activities of SME4SPACE in support of ESA SME Policy

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### HIGHLIGHTS

- ✓ This study provides a synthesis of economic and financial data regarding SMEs with at least part of their activities in the space sector.
- ✓ The target population consists of companies that have received an ESA contract in the last five years, having signed a contract with the EC in 2023; or that are a member of SME4SPACE.
- ✓ The analysis covers the years 2018 to 2022. Each year the target population is updated. The results for each year are based on the list of SMEs that fulfils the criteria in that year. Results are based on Orbis data and include all (space and non-space) firm-level activities.
- ✓ The number of SMEs active in the space industry in 2022 consists of 1,817 firms
- ✓ In 2022, SMEs in the space industry employed 33,653 employees. Compared to the year 2018, the average (21.33 versus 19.1) and median (9 versus 7) number of employees increased.
- ✓ The sum of Total assets amount to more than 5,8 billion euros in 2022, a gradual increase since 2018.
- ✓ Total turnover equals 4,236 million euros in 2022. The average and median turnover decreased in 2020 and stayed below the 2019 level in 2021, possibly indicating a covid19-effect. In 2022, both the average (2.6 million euros) and median (879 thousand euros) turnover exceeded the 2019 levels.
- ✓ The median turnover to total assets ratio (0.86) slightly increased in 2022 but remains below 1. This indicates that a euro investment in total assets yields less than a euro turnover.
- ✓ Over half of the companies have been incorporated since the year 2010, and close to one quarter have been incorporated since 2018.
- ✓ On average, companies incorporated in the last 7 years almost doubled the average number of employees over the last three years (13.2 in 2022 versus 7.9 in 2020). More established companies noticed a small decrease in average employment in the same period (25.7 versus 26.9).
- ✓ Investment in intangible fixed assets amounts to 723 million euros in 2022, a steady increase since 2018, and in line with the evolution of total assets.
- ✓ SMEs active in space activities account for a total of 3,861 patents, in the hands of 437 companies.
- ✓ The median company in our sample, in 2022, has a (high) leverage of 0.6, a low return on assets (0.03), and a good liquidity (1.8 – largely exceeding 1).
- ✓ In particular, micro-sized firms have limited access/do not make use of long-term debt financing (1.5% of non-current liabilities to total assets).

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## THE REPRESENTATIVE ORGANISATION OF SMES IN THE EUROPE'S SPACE INDUSTRY

- ✓ The SMEs' financial position, as measured by the net cash position, decreases by company size in 2022 (as measured by the classification of micro, small, and medium companies). Close to half of the medium-sized firms face financial difficulties.

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### Goal of the study

The purpose of the study is to provide a synthesis containing statistics and tables of aggregated/averaged economic and financial data regarding SMEs in the space sector.

The analysis starts from an initial list of 1,817 companies that were received from SME4space. This database consists of companies satisfying at least one of the following criteria: (i) SMEs having received an ESA contract. These are companies having the SME status in 2023 and having entered a contract with ESA in the period 2019-2023; (ii) SMEs having signed a contract with the EC in 2023; and (iii) SMEs taken from the member database of SME4SPACE.

The analysis covers the years 2018 to 2022. Each year the target population is updated. The results for each year are based on the list of SMEs that fulfill the above-specified criteria in that year.

### Population and method

The target population consists of 1,762 SMEs that are active in space activities in the EU-28 countries, Norway and Switzerland<sup>1</sup>, and that received funding by the European Space Agency (ESA) for research or technological development of space activities at least in one year during the period 2019-2023, and/or that received funding from the European Commission (only Framework Programme data was available), or that are member of SME4Space (the representative organization of SMEs in Europe's space industry).

The financial data used are retrieved from Orbis and have been analyzed and treated (including a method for unit- and item- non-response) by KU Leuven. The most recently available data in the company financial accounts available for this study relate to 2022. Results are presented for the period 2018-2022 for the target population as defined above. Over one out of three SMEs in the target population has been created since 2015, explaining the steep rise in the number of SMEs in the target population over time. Orbis data contain no information about the share of space activities in the total activities of the SMEs and the data presented in this leaflet report the total activities (space and non-space) of these SMEs. Based on a qualitative survey among SMEs it is estimated that an unweighted average of 56% of turnover (57% of employment) of SMEs in the target population is devoted to upstream and downstream activities, and another 11% (respectively 20%) to the use of space technology in other industries (space-derived activities).

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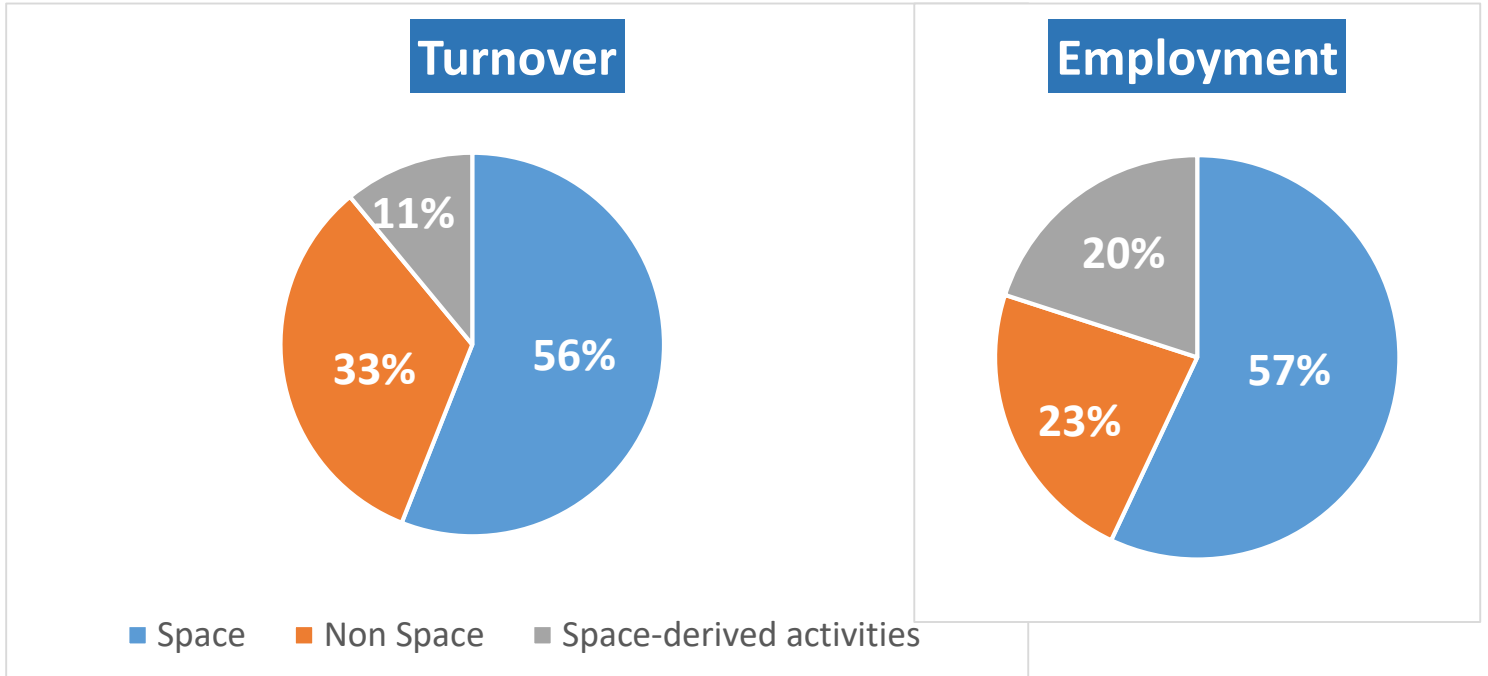
<sup>1</sup> The population also includes 13 Canadian SMEs that received ESA funding. Due to data availability, the number of companies used to generate the figures included in each graph may vary.

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## Space and Non-space activities



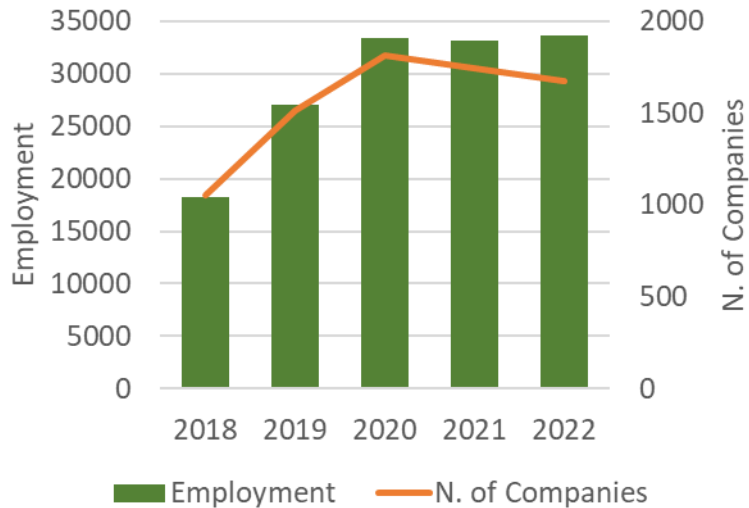
A qualitative survey among SMEs reveals that, on average, 56% of turnover and 57% of employment in the target population are dedicated to upstream and downstream activities. Additionally, another 11% of turnover and 20% of employment are allocated to the use of space technology in other industries (space-derived activities). In total 67% of turnover and 77% of workforce are Space-related.

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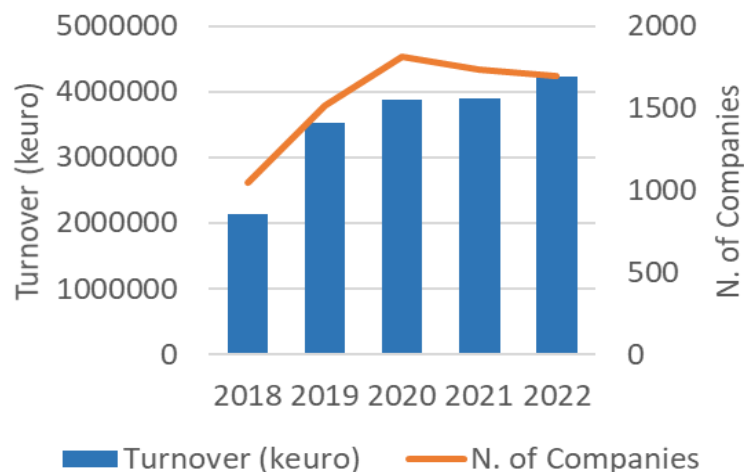
## Economic importance

### Employment



In 2022, SMEs involved in space activities collectively employed 33,653 full-time equivalent (FTE) employees. We observe an increasing trend in the average number of employees from 2018 (19.1) to 2022 (21.33). Similarly, the median number of employees increases from 7 (2018) to 9 (2022).

### Turnover



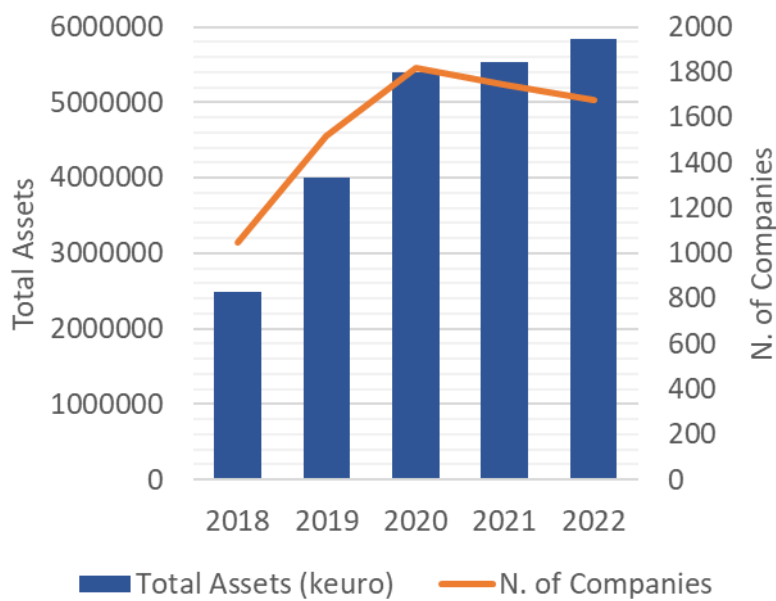
The 1,700 SMEs realised a total turnover of more than 4.2 billion euro in 2022. The average and median turnover decreased in 2020 and stayed below the 2019 level in 2021, possibly indicating a covid19-effect. In 2022, both the average and median turnover exceeded the 2019 levels

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### Total assets

The space industry is highly capital-intensive and companies have to invest heavily in order to compete successfully in the space markets. The invested amount in total assets in the year 2022 is close to 5.8 billion euro, whereas the ratio of turnover to assets, measuring how much turnover a euro investment in assets (regardless of who is financing the assets, i.e. equity or debtholders) generates on a yearly basis, for the average (and median) company is lower than 1. In 2022 for median company it is 0.858. Although there are no formal benchmarks for this ratio, this can be considered low.



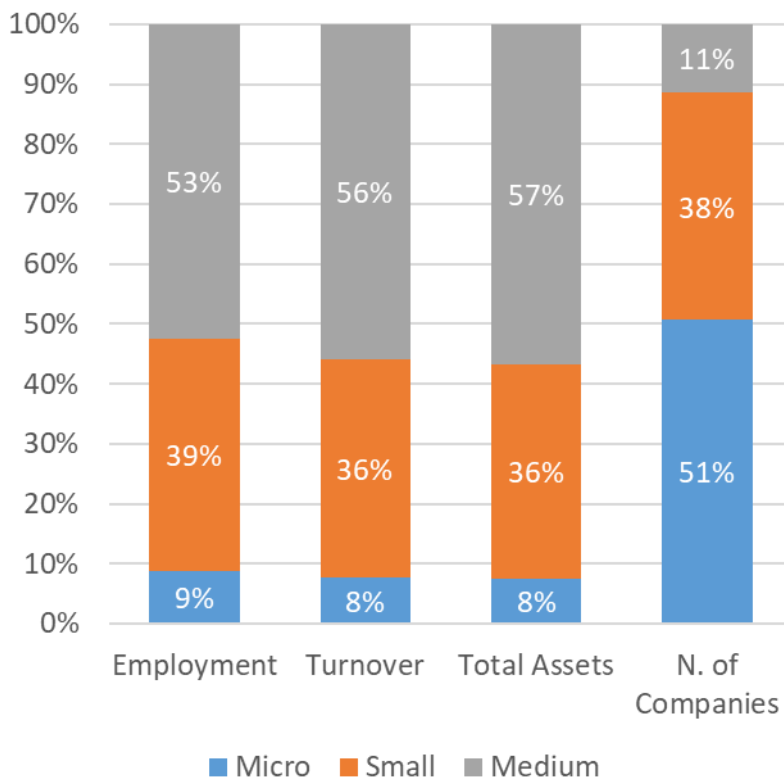


### Overview of Employment, Turnover, and Assets by Company Size in 2022

Micro enterprises account for over half of the population and represent 8% to both turnover and total assets, and 9% to employment.

Small enterprises, representing 38% of the total population, hold almost 40% of the employment and 36% for both turnover and total assets.

Medium-sized enterprises represent the 11% of the population with 57% of the total assets, and 56% and 53% of turnover and employment respectively.



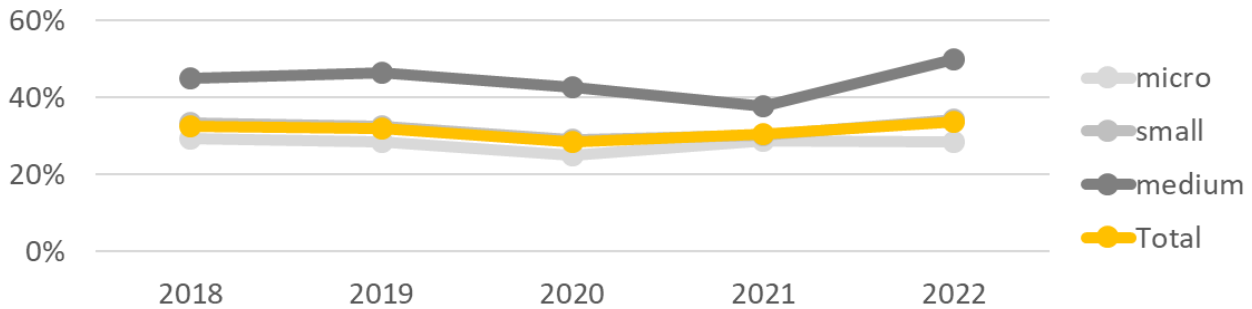
Note: Firms are categorized by size class according to the EU definition: “micro” enterprise: fewer than 10 employees and an annual turnover (the amount of money taken in a particular period) or balance sheet (a statement of a company’s assets and liabilities) below €2 million; “small” enterprise: fewer than 50 employees and an annual turnover or balance sheet below €10 million; “medium-sized” enterprise: fewer than 250 employees and annual turnover below €50 million or balance sheet below €43 million.

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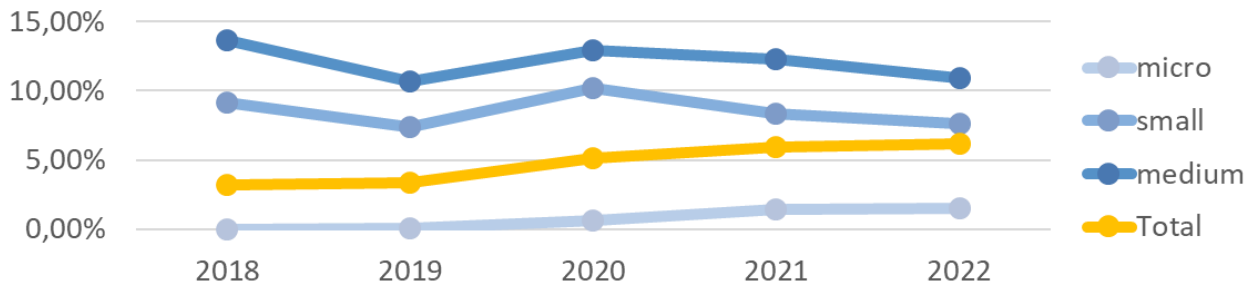
## Financial performance

### Liquidity: % firms with negative net cash position by firm size.



The net cash position measures whether a firm is able to pay its short-term liabilities to banks and financial institutions with its current cash and cash equivalents. The percentage of companies with a negative cash position is smaller for micro enterprises (28%) than for medium-sized enterprises (50%), although the proportion of medium-sized companies with a negative cash position decreases since 2019. The figure for 2022 seems to indicate a reversal, to be confirmed.

### Leverage: Long-term debt to assets ratio by company size (for the median company)

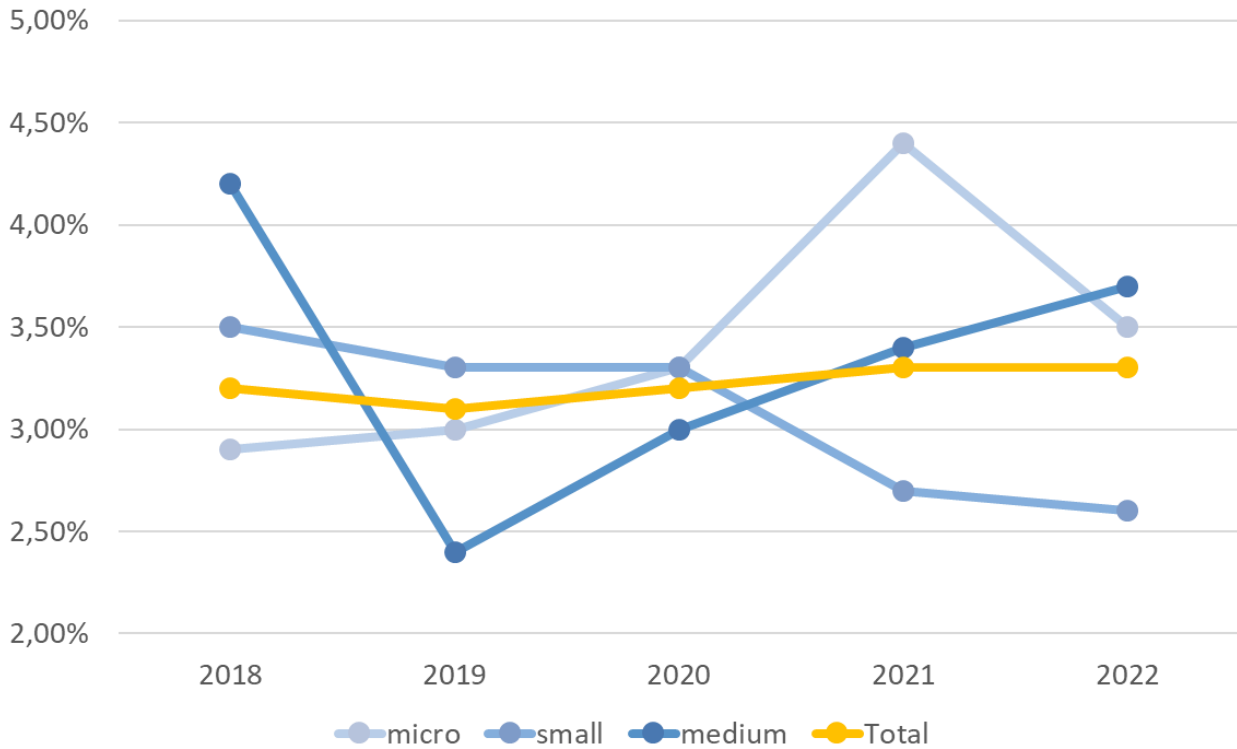


The ratio of long-term debt to assets measures to what extent a company's assets are financed by long-term financing, often bank loans. The graph shows that, overall, the percentage of long-term debt financing is low. The median micro company barely has long-term financing. In medium-sized companies the level of long-term debt financing is 11%, a level that remains stable over time but seems to be declining. This reflects that it is challenging for European Space SMEs to get access to long term debt financing such as bank loans.

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### Profitability: ROA (Return on Assets)



The return on assets (ROA) measures net income over assets and is a widely accepted measure of profitability. Overall, the profitability for the median company is quite low (around 3%) and appears to remain stable. We do not find a consistent trend with respect to differences between the size categories in profitability.

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### Conclusions

Based on the analysed data, it is evident that **SMEs in the European space industry play a crucial role in driving innovation and economic growth**. Financially, while many SMEs demonstrate growth in terms of workforce, **challenges in profitability and liquidity highlight a need for improved access to finance**. Given the significant economic impact and growth potential of our SME community, targeted policy measures are recommended to enhance their financial health and operational environment. This study, backed by an academic seal of expertise, offers an important step towards understanding and analysing the vital contributions of SMEs to Europe's space industry. Summary of conclusions based on the figures above:

- **The industry has experienced significant expansion from 2018 to 2022, marked by remarkable growth in employment and turnover within SMEs.**
- A qualitative survey among SMEs reveals that on average **67% of turnover and 77% of employment are space related**.
- **The space industry requires significant capital investment for companies to remain competitive**. The turnover-to-assets ratio, which indicates the amount of turnover produced per euro of assets is below 1 for the average (and median) company. This means that for each Euro of extra turn-over an investment of 1.2 Euro is required.
- **The profitability for the median company is low ( app. 3%) and is decreasing over time.**
- **It is challenging for European Space SMEs to get access to long term debt financing such as bank loans.**

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