

SPACE-SME-UP/2022-2025

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

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SME4SPACE VZW (BE)

Activities of SME4SPACE in support of ESA SME Policy

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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 European SMEs in the space sector. The overarching goal is to enhance our understanding of the evolution and current situation of these SMEs, their financial evolution and innovative performance. This informational leaflet presents key findings derived from the study, that shed light on crucial insights into the economic landscape of European SMEs in the space industry

Population and method

The target population consists of 1,762 SMEs that are active in space activities in the EU-28 countries, Norway and Switzerland¹, 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 2015-2021, 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 leaflet relate to 2021. Results are presented for the period 2015-2021 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 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).

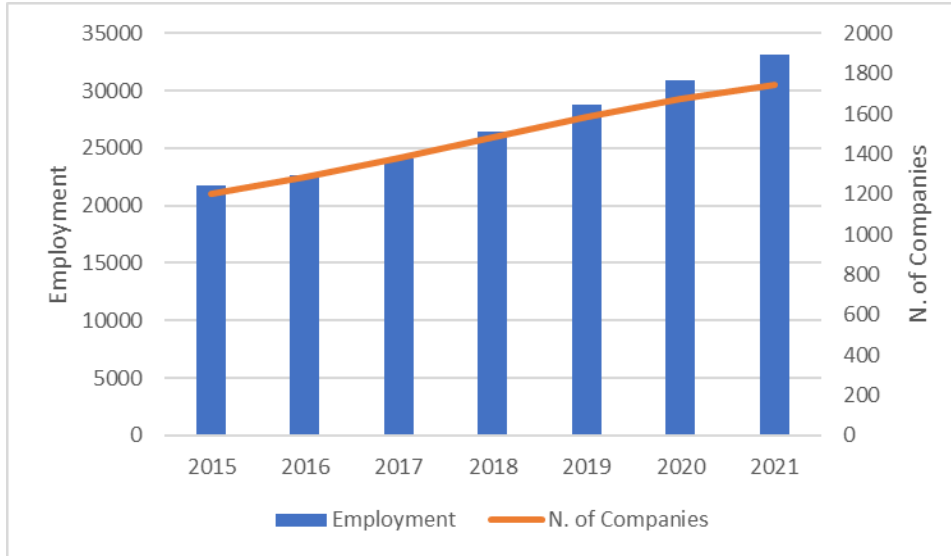
¹ The population also includes 13 Canadian SMEs that received ESA funding. Due to data availability, the number of companies used to generate the figures included in each graph may vary.

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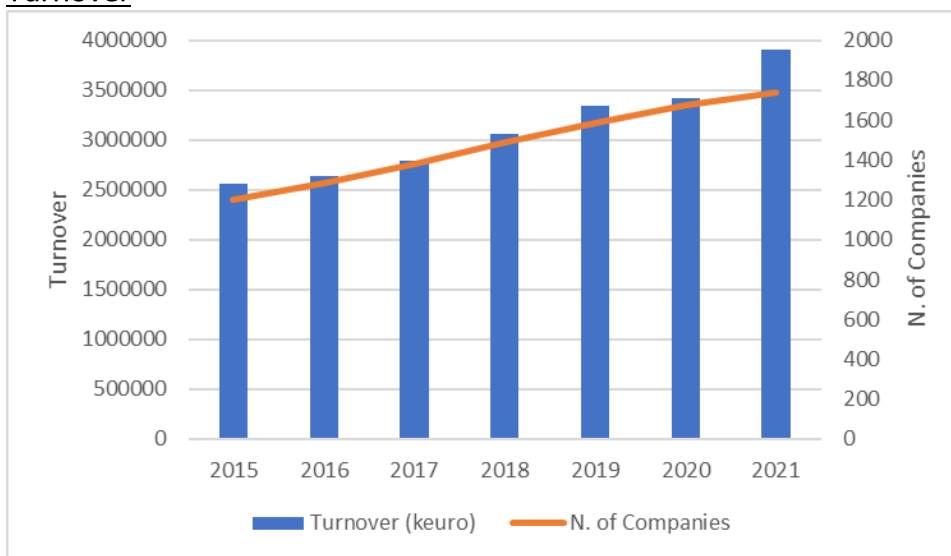
Economic importance

Employment



In 2021, the total employment in SMEs that are involved in space activities amounts to 33,147 full time equivalent employees. On average, employment amounts to 20 full time equivalents in 2021. Over half of the SMEs employ 8 or less employees. Compared to the year 2015 (21,774 employees) an increase by close to 11,400 employees can be witnessed. This increase can be explained by an increase in employment at SMEs that already existed before 2015 (60% of the increase) and by the newly created SMEs in the period 2015-2021 (40% of the increase). Employment in SMEs that were already incorporated before the year 2015 rose from 20.6 to 26.9 full time equivalents on average in the period 2015-2021.

Turnover



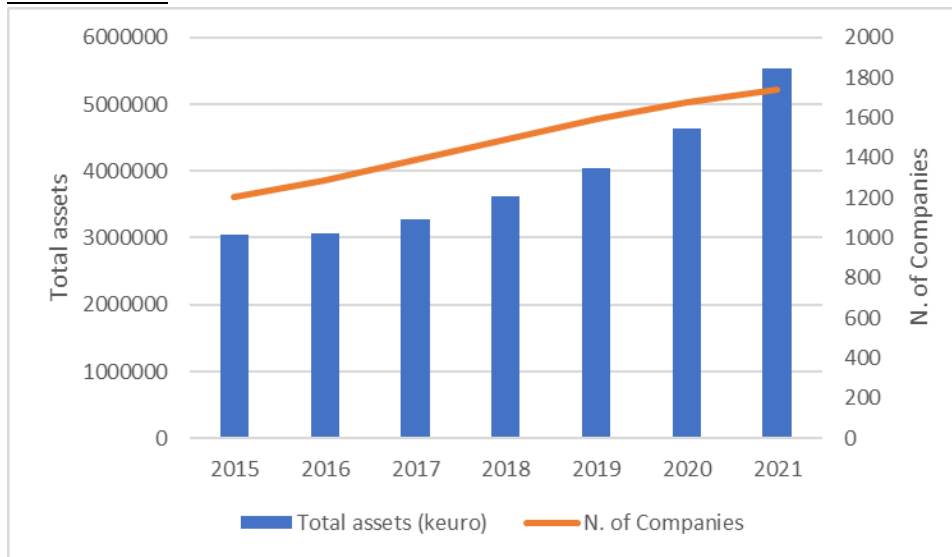
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THE REPRESENTATIVE ORGANISATION OF SMES IN THE EUROPE'S SPACE INDUSTRY

The 1,762 SMEs realized a total turnover of approximately 3.9 billion euro in 2021. The evolution of the turnover since 2015 is largely similar to the evolution in terms of employment. Established companies achieved an increase by over 40% in their total turnover. Newly created companies account for 11% of the total turnover in 2021, which is lower than their share in total employment (15%) and total assets (16%). This is not surprising as it takes time for new companies to generate turnover.

Total assets



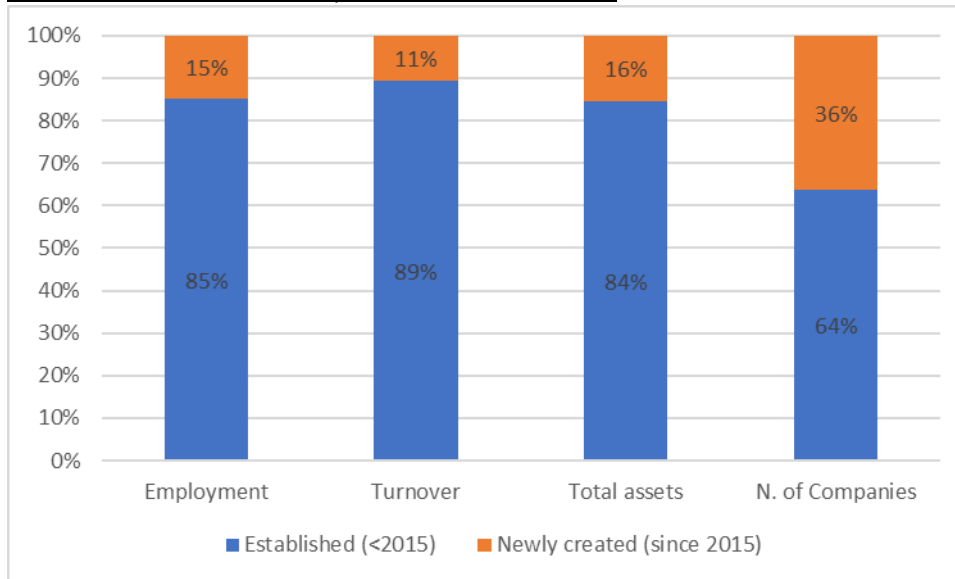
The space industry is highly capital-intensive and companies have to invest heavily in order to compete successfully in the space markets. The invested amount in total assets in the year 2021 is close to 5.5 billion euro, whereas the ratio of turnover to assets, measuring how much turnover a euro investment in assets (regardless of who is financing the assets, i.e. equity or debtholders) generates on a yearly basis, for the average (and medium) company is lower than 1. Although there are no formal benchmarks for this ratio, this can be considered low. Over the period 2015-2021, this ratio decreased from 0.84 to 0.71. For established firms, total assets increased by 58% in the period 2015-2021.

Micro-sized firms account for over half of the population and represent close to 10% of total employment and total assets, and about 8% of the total turnover. The share of small firms in the total number of firms (a bit more than 33%) is more or less equal to their share in turnover, employment, and total assets. Close to one in ten SMEs is a medium-sized firm. Together these firms represent over half of the total assets, turnover, and employment.

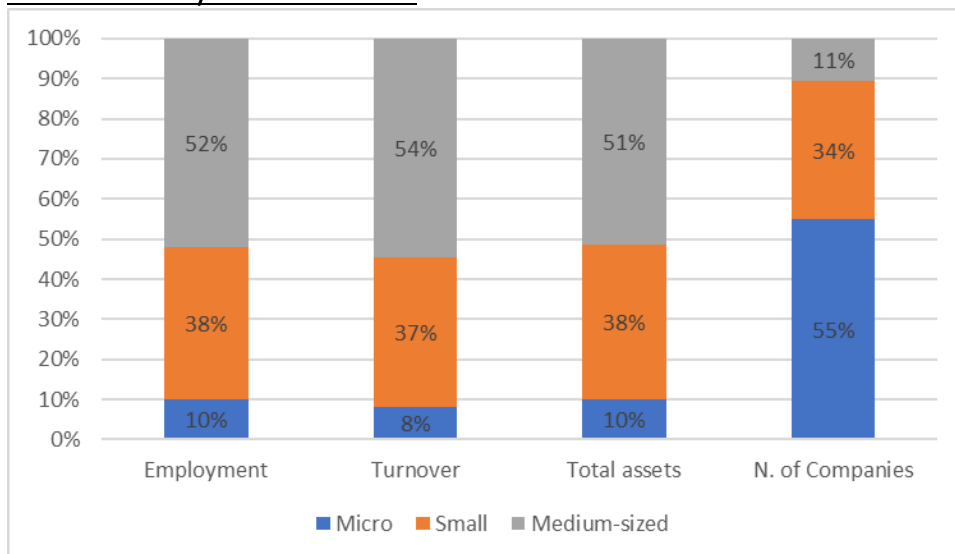
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Established versus newly created SMEs 2021



Distribution by size class 2021



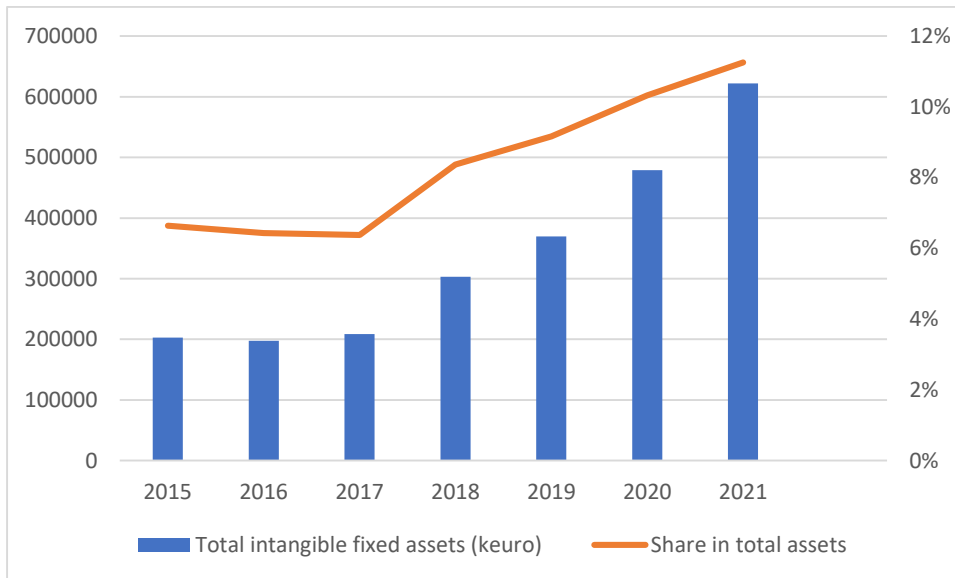
Note: Firms are categorized by size class according to the EU definition: “micro” enterprise: fewer than 10 employees and an annual turnover (the amount of money taken in a particular period) or balance sheet (a statement of a company’s assets and liabilities) below €2 million; “small” enterprise: fewer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

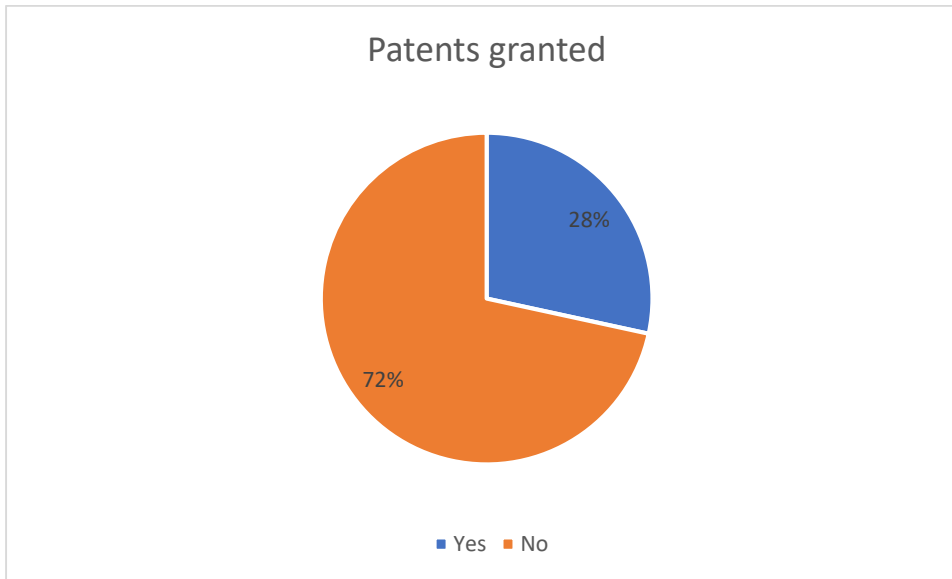
We measure SMEs' innovation activities by the investments in intangible fixed assets and by the number of patents.



Intangible fixed assets include non-physical assets that have value to a company, including intellectual property such as patents, copyrights, trademarks, or software but also capitalized R&D expenses. Intangible fixed assets are seen as a valuable indication of future revenue potential, enhance brand recognition, or provide competitive advantage. Over the period 2015-2021 the total amount of intangible fixed assets tripled. This increase is far more outspoken than the increase in total assets (and employment and turnover) and explains the sharp increase in the share of intangible fixed assets in total assets, in particular from the year 2018 onwards. This trend is witnessed for a large majority of the SMEs and could be the result of maturing research and development activity evolving from activities with high uncertainty revenue outcomes (and as such placed on the profit and loss accounts of the SMEs) to activities entering a level of maturity for which potential future revenues are probable (and as such capitalized on the SMEs balance sheet). Note that this could also be affected by our sample selection which includes firms that have received ESA funding in the period 2015-2012.

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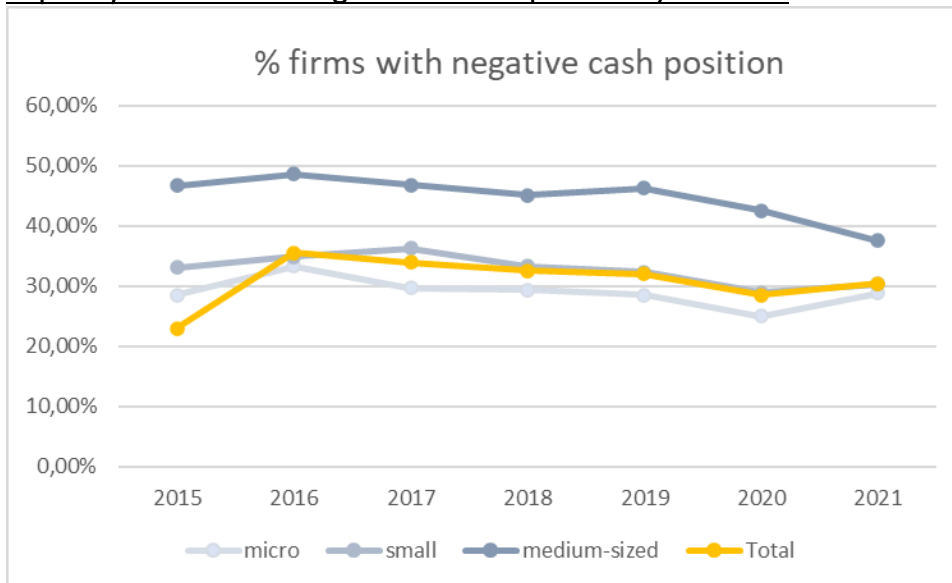
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Over one in four SMEs have granted patents. In total these SMES have 3,637 granted patents, of which close to 37% (1344 patents) have been granted in the period 2015-2021.

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. A negative net cash position indicates a higher likelihood of facing financial difficulties in the short term. However, it's important to note that this does not automatically imply bankruptcy. The situation can be addressed and mitigated by securing additional equity investments, obtaining (bank) financing, or generating a

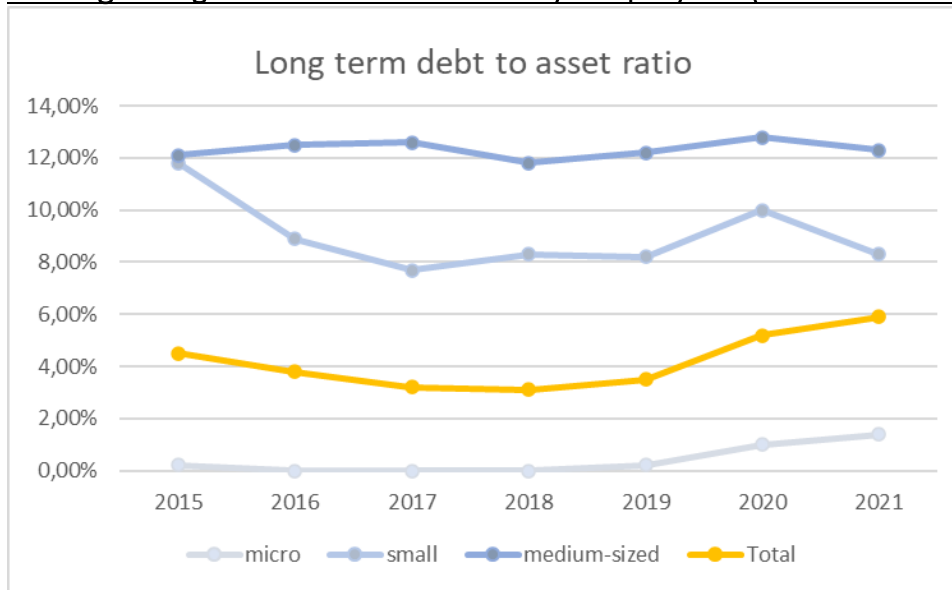
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large cash flow. The financial position, as measured by the net cash position, decreases by company size (as measured by the classification of micro, small and medium companies). The percentage of companies with a negative cash position is smaller for “micro” companies than for “medium-sized companies”, although the proportion of medium-sized companies with a negative cash position decreases since 2019. Because micro-sized firms struggle to access bank financing, their apparently better situation could be driven by a lack of short-term liabilities to banks.

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

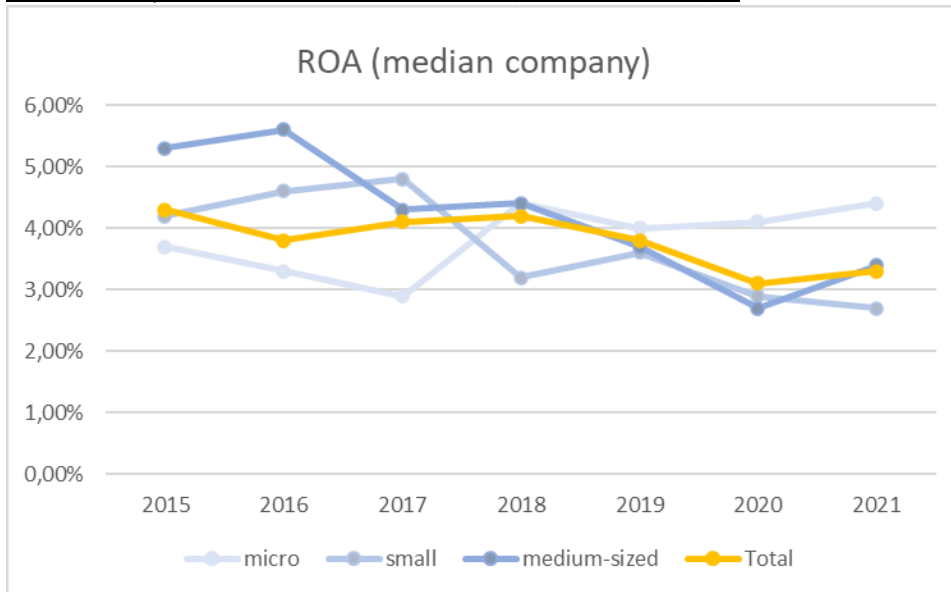


The ratio of long-term debt to assets measures to what extent a company's assets are financed by long-term financing, often bank loans. The graph shows that, overall, the percentage of long-term debt financing is low. The median micro company barely has long-term financing. In medium-sized companies the level of long-term debt financing is 12%, a level that remains stable over time. This reflects that it is challenging for European Space SMEs to get access to long term debt financing such as bank loans.

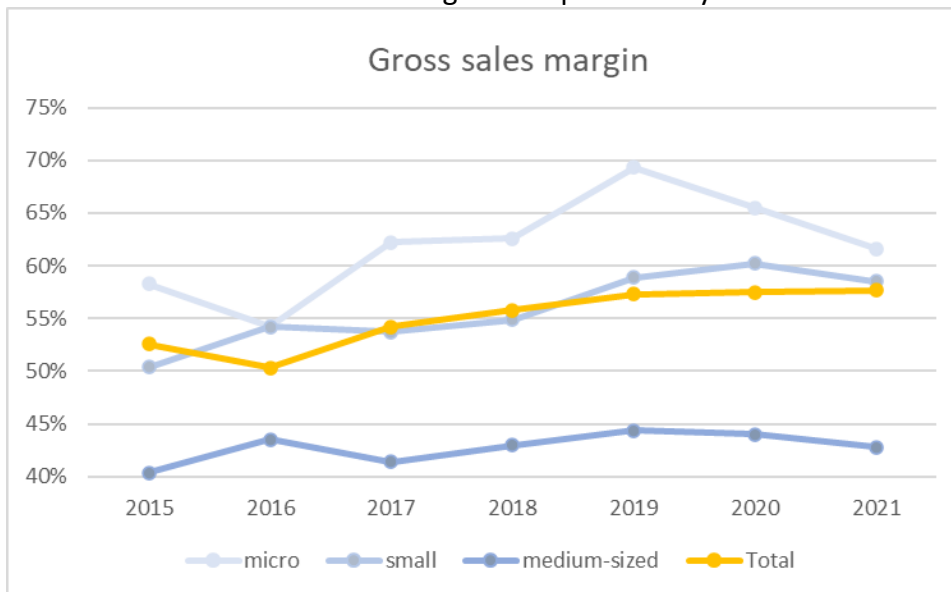
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Profitability: ROA (Return on Assets) & gross sales margin



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 4%) and appears to be decreasing over time (to around 3%). We do not find a consistent trend with respect to differences between the size categories in profitability.



The gross sales margin, which measures gross profit over turnover, on average increased by 5 percent point during the period 2015-2021 and is close to 60%. The margin is highest for micro-sized companies and decreases with firm size. This indicates that European Space SMEs are on average in a comfortable position in terms of sales margin as only about half of the company's turnover is used for 'cost of goods sold' such as supplies (raw materials, finished goods) and labor expenses.

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