



15-Jun-26

Independent Research and Analysis of SpaceX's Total Equity Value as of December 31, 2023

This analysis was prepared to provide an independent retrospective estimate of the total equity value of Space Exploration Technologies Corp. (hereafter “SpaceX” or “the Company”) as of December 31, 2023 (hereafter the “Valuation Date”), and to assess the reasonableness of that estimate in light of the total equity value subsequently implied by the Company’s initial public offering. For purposes of this analysis, total equity value represents the aggregate value attributable to all classes of common and preferred stock and other equity instruments outstanding as of the Valuation Date.

This professional article presents independent research and analysis for professional discussion and educational purposes and is structured in the format of a business valuation report. It was prepared solely out of the author’s professional interest in the subject and was not commissioned, requested or funded by SpaceX, any of its shareholders, investors or any other party. Accordingly, it does not constitute an expert opinion prepared for a client, transaction, legal proceeding or investment decision. Neither the author nor Intrinsic Value – Independent Business Appraisers is affiliated with, retained by, authorized by, sponsored or endorsed by, or acting on behalf of SpaceX, any of its shareholders or any related party, and neither purports to serve as SpaceX’s appraiser. The SpaceX name is used solely and descriptively to identify the subject of this professional article.

In the course of our analysis, we used financial and other information contained in the Prospectus and in other publicly available sources. We assumed such information to be reliable. Our conclusions depend on such information being complete and accurate in all material respects; however, we did not audit or independently verify such information and, accordingly, express no opinion or other form of assurance thereon.

The Prospectus presents the historical financial information in conformity with the reporting structure of the combined company following the mergers. Accordingly, this analysis should be understood as a retrospective valuation of the combined IPO group based on its recast financial information for the year ended December 31, 2023, rather than as a valuation of SpaceX on a standalone legal-entity basis as of that date.

In our analysis, we used computerized calculation tools and unrounded inputs; accordingly, immaterial differences may arise in the presentation of amounts and calculations due to rounding.

SpaceX's business. SpaceX operates in the space transportation, satellite communications and artificial intelligence markets. The Company designs, manufactures, launches and operates advanced rockets and spacecraft; provides reusable launch services to commercial, civil and governmental customers through Falcon 9 and Falcon Heavy; and provides broadband and communications services through the Starlink satellite network. Its activities also include Starshield governmental solutions, satellite-to-mobile services and an integrated artificial intelligence platform.

These markets are highly regulated. SpaceX's launch activities are subject to licenses and approvals from the U.S. Federal Aviation Administration and other governmental agencies. Its satellite communications activities are subject to spectrum allocations, operating licenses and authorizations granted by the U.S. Federal Communications Commission, the International Telecommunication Union and regulators in other countries. The Company is also exposed to substantial technological, execution, capital-investment and competitive risks.

Ownership of SpaceX. As of the Valuation Date, SpaceX was a privately held corporation controlled by its founder, Mr. Elon Musk (hereafter the "Controlling Shareholder"), primarily through his ownership of Class B common stock carrying enhanced voting rights. The Company's complete shareholder structure and the Controlling Shareholder's exact ownership percentage as of the Valuation Date were not disclosed in the Prospectus.

SpaceX's shares had limited liquidity because they were not publicly traded and could generally be transferred only through private transactions or Company-sponsored repurchase programs. During 2023, the Company repurchased approximately 11 million common shares for aggregate consideration of approximately USD 170 million.

Class of shares as of December 31, 2023	Shares outstanding
Redeemable convertible preferred stock	886 million
Class A common stock	1,810 million
Class B common stock	803 million
Class C common stock	367 million

Available financial information. The Prospectus includes recast consolidated statements of operations, comprehensive income (loss), cash flows, and changes in redeemable convertible preferred stock and shareholders' equity for 2023. However, it does not present a consolidated balance sheet as of December 31, 2023. Accordingly, the valuation was based on the operating and cash-flow information available for that year and did not rely on estimated balance-sheet amounts.

Selected financial data for the year ended December 31, 2023	USD in billions
Revenue	10.39
Gross profit	4.28
Cash flow from operating activities	4.52
Capital expenditures	4.42
Cash flow used in investing activities	4.87
Cash and cash equivalents at year-end	4.69
Net loss	(4.63)

Valuation model. The valuation literature generally distinguishes among three principal approaches: discounted cash-flow valuation, relative valuation, and contingent claim valuation. Discounted cash-flow valuation relates the value of an asset to the present value of its expected future cash flows. Relative valuation estimates value by examining how the market prices comparable assets in relation to a common financial or operating variable. Contingent claim valuation applies option-pricing models to assets that possess option-like characteristics.

We applied the relative valuation approach to estimate SpaceX's total equity value as of the Valuation Date. Under this approach, the value of an asset is estimated by reference to the market pricing of comparable assets. Its application requires a group of comparable assets, a standardized measure of value, and, where the assets are not perfectly comparable, consideration of the variables that account for their differences.

The relative valuation approach has been widely discussed in the academic literature and in numerous business valuation textbooks (see also Polanitzer and Dekel, *The Guide for Corporate Valuators* (2025), Chapter 11, for a discussion of this approach). Relative valuation generally requires less information than discounted cash-flow valuation and reflects prevailing market perceptions more directly. Nevertheless, it assumes that the market is reasonably correct in the aggregate, even though it may misprice individual assets. It may therefore produce an estimate that is correct only on a relative basis if the comparable group itself is materially overvalued or undervalued.

Capital expenditures are generally a firm-level measure because they support operations financed by all the Company's capital providers, including both debtholders and equityholders. Accordingly, an EV/CapEx multiple would ordinarily be used to estimate enterprise value, which would then be converted into total equity value by reference to the relevant balance-sheet information.

However, because a consolidated balance sheet as of December 31, 2023, was not available, we could not reliably bridge the Company's enterprise value to its total equity value. Given this information limitation, we derived and applied an MV/CapEx multiple, which relates capital expenditures directly to market capitalization.

Damodaran does not publish an MV/CapEx multiple directly. We derived the multiple from two

aggregate industry figures reported in separate Damodaran datasets for the U.S. Aerospace/Defense industry as of December 31, 2023. Aggregate market capitalization of USD 788,306.41 million was obtained from the *Dollar Value Measures by Industry* dataset. In that dataset, market capitalization represents the estimated market value of equity, calculated by multiplying the number of shares outstanding by the share price. Aggregate capital expenditures of USD 10,982.13 million were obtained from the *Capital Expenditures, Depreciation, Reinvestment Rate and Sales to Capital Ratios by Industry* dataset. Capital expenditures represent cumulative capital spending reported in the statements of cash flows of the companies included in the industry and generally exclude acquisitions.

Accordingly, we calculated the industry MV/CapEx multiple by dividing aggregate market capitalization by aggregate capital expenditures, resulting in an MV/CapEx multiple of approximately 71.78x.

$$MV/CapEx = \frac{\$788,306.41M}{\$10,982.13M} = 71.78x$$

For purposes of this analysis, the total equity value implied by the derived MV/CapEx multiple was treated as a proxy for the Company's total equity value, with all outstanding classes of common and preferred stock and other equity instruments considered on an aggregate basis. This approach enabled us to estimate SpaceX's total equity value without relying on balance-sheet figures from a different valuation date or constructing a hypothetical balance sheet from industry averages. Consequently, the contingent claim valuation approach was not applied as of December 31, 2023.

The use of a capital-expenditure multiple is also consistent with SpaceX's investment-intensive profile in 2023. During the year, the Company used approximately USD 4.87 billion in investing activities, exceeding its year-end cash and cash equivalents of USD 4.69 billion. Capital expenditures therefore provide a meaningful benchmark for the scale of the Company's investment activity during the period.

Parameters. In order to apply the valuation approach described above, we have used the following parameters:

Parameter	Value	Source
Valuation Date	31-Dec-23	Valuation Date selected for purposes of this retrospective analysis
Derived MV/CapEx	71.78x	Derived by dividing the aggregate market capitalization of the U.S. Aerospace/Defense industry by its aggregate capital expenditures, based on two Damodaran industry datasets as of December 31, 2023.
Capital expenditures	4.42B	SpaceX consolidated statement of cash flows for 2023

Results. Based on the parameters described above, the estimated total equity value of SpaceX as of the Valuation Date is **USD 316.91 billion**. This estimate is approximately USD 1,462.63 billion, or 82.19%, below the approximately USD 1,779.54 billion total equity value subsequently implied by the Company's June 2026 initial public offering.

The valuation results are based on the assumptions described above and represent Valuation-Date-specific estimates rather than precise or definitive values. The comparison with the subsequently implied IPO valuation should be interpreted cautiously because it spans approximately two and a half years and therefore reflects changes in the Company's operations, capital structure, market conditions and investor expectations after December 31, 2023. Accordingly, the difference should not be interpreted solely as a valuation error or as evidence that either value is necessarily incorrect.

References:

Damodaran A., "Dollar Value Measures by Industry," Stern School of Business, New York University, U.S. Aerospace/Defense Industry Data, as of December 31, 2023, published on January 5, 2024, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/DollarUS.html.

Damodaran A., "Capital Expenditures, Depreciation, Reinvestment Rate and Sales to Capital Ratios by Industry," Stern School of Business, New York University, U.S. Aerospace/Defense Industry Data, as of December 31, 2023, published on January 5, 2024, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/capex.html.

Polanitzer R., and Y. Dekel, *The Guide for Corporate Valuers*, 2025 (In Hebrew).
<https://polanitz8.wixsite.com/valuationbook>

Space Exploration Technologies Corp., *Prospectus for the Public Offering to Retail Investors*, approved by the German Federal Financial Supervisory Authority (BaFin), June 5, 2026, https://content.spacex.com/cms-assets/FINAL_Documents%20and%20Updates/SpaceX%20-%20EU%20Prospectus%20%28Approved%20by%20Bafin%29%20-%20June%205%2C%202026.pdf.

With our best compliments,



Roi Polanitzer, FRM, FILARM, FAILAVFA, FAILA

Intrinsic Value – Independent Business Appraisers

Polanitz5@gmail.com

Disclaimer. This professional article presents independent research and analysis for professional discussion and educational purposes and is structured in the format of a business valuation report. It was prepared solely out of the author's professional interest in the subject and was not commissioned, requested or funded by SpaceX, any of its shareholders, investors or any other party. Accordingly, it does not constitute an expert opinion prepared for a client, transaction, legal proceeding or investment decision. Neither the author nor Intrinsic Value – Independent Business Appraisers is affiliated with, retained by, authorized by, sponsored or endorsed by, or acting on behalf of SpaceX, any of its shareholders or any related party, and neither purports to serve as SpaceX's appraiser.

The analysis was prepared using information contained in SpaceX's Prospectus and other publicly available sources that we considered reliable. We did not audit or independently verify such information beyond general reasonableness checks and express no opinion regarding its completeness or accuracy. The valuation analysis reflects the information, assumptions and market conditions applicable as of the Valuation Date and represents an indicative economic estimate rather than a precise or guaranteed value.

This professional article does not constitute legal advice, investment advice or a recommendation to purchase, sell or hold any security. The information presented herein is condensed and does not purport to include all information that a prospective investor may require. Different valuation methods, assumptions or investor-specific considerations may result in materially different estimates of value.

SpaceX's name is used solely and descriptively to identify the subject of the independent research and analysis. Neither the author nor Intrinsic Value – Independent Business Appraisers claims any right or interest in SpaceX's name, trademarks, logos, trade dress, reputation or goodwill. No affiliation, sponsorship, endorsement, authorization or commercial association with SpaceX is stated or implied, and no use of the SpaceX name is intended to appropriate or trade upon SpaceX's reputation or goodwill. We have no personal interest in SpaceX, its shareholders or any related party.