BUSINESS REPORT
INVESTMENT VALUATION

This report assesses the profitability of an investment by an Italian entrepreneur in the U.S. media sector. The objective is to provide an estimate of the potential Earnings Per Share (EPS) based on the analysis of selected economic performance indicators, highlighting those with the greatest impact.

Dataset Overview

The available data refer to the economic indicators of 2,482 unique companies operating across various sectors. The following section provides an overview of the initial dataset, aimed at understanding the main characteristics of the observations.

The numerical variables are represented in two separate charts based on their relationships, which will be further explored and analyzed in the subsequent sections.

Figure 1.1: *Indicators by Sector*

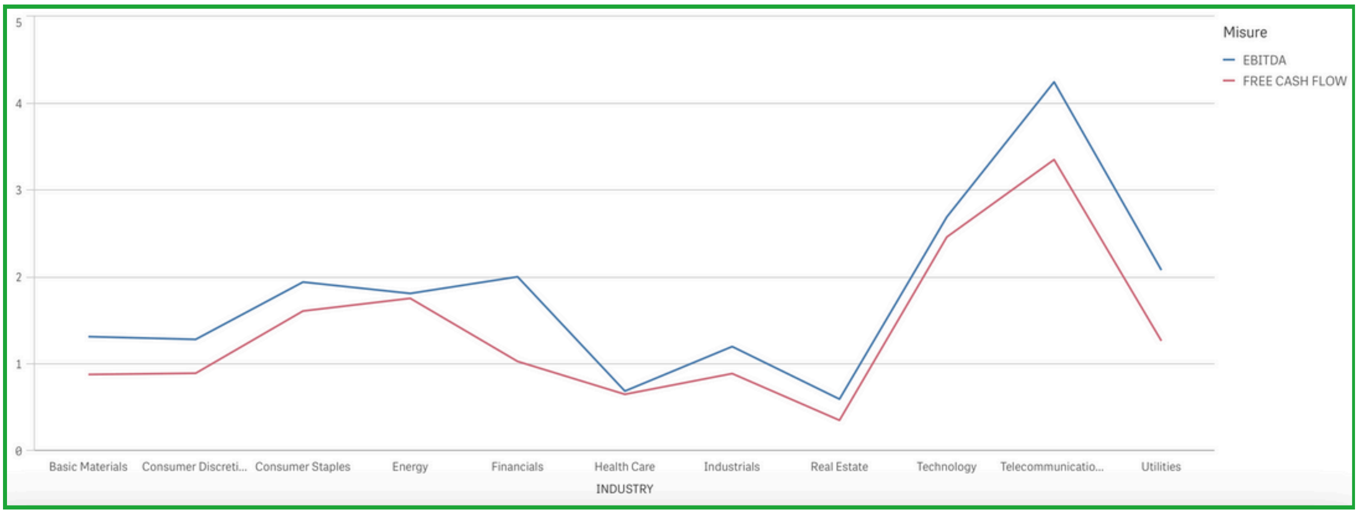
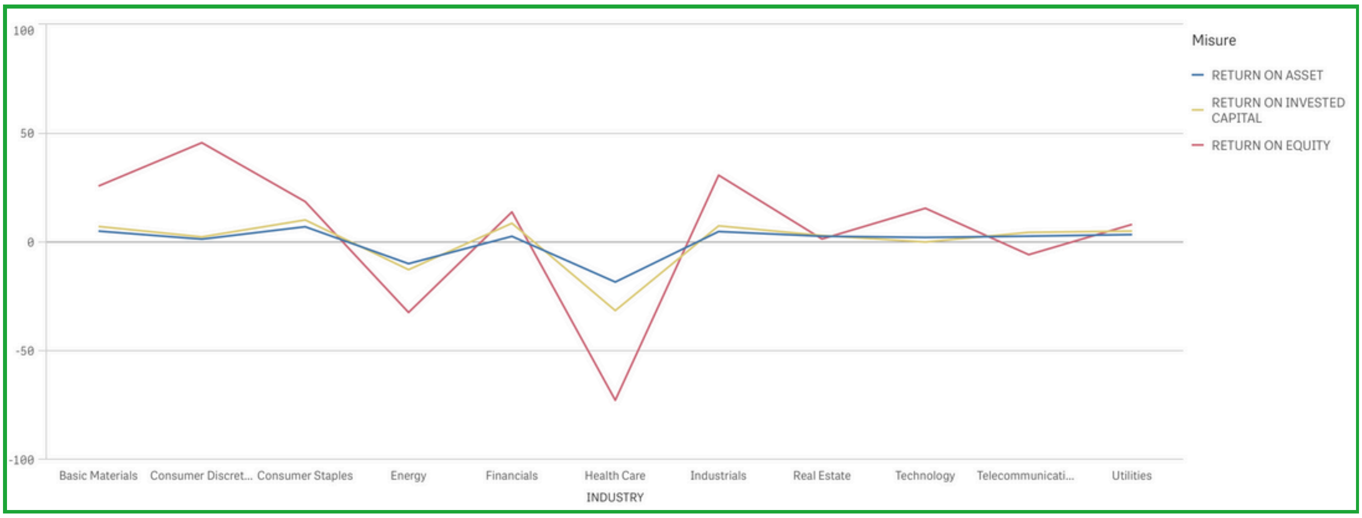


Figure 1.1 shows that in most sectors, a high **EBITDA** is associated with an equally high **FREE CASH FLOW**, indicating a relationship between the two variables. This may suggest that companies with higher operational profitability often tend to generate more cash.

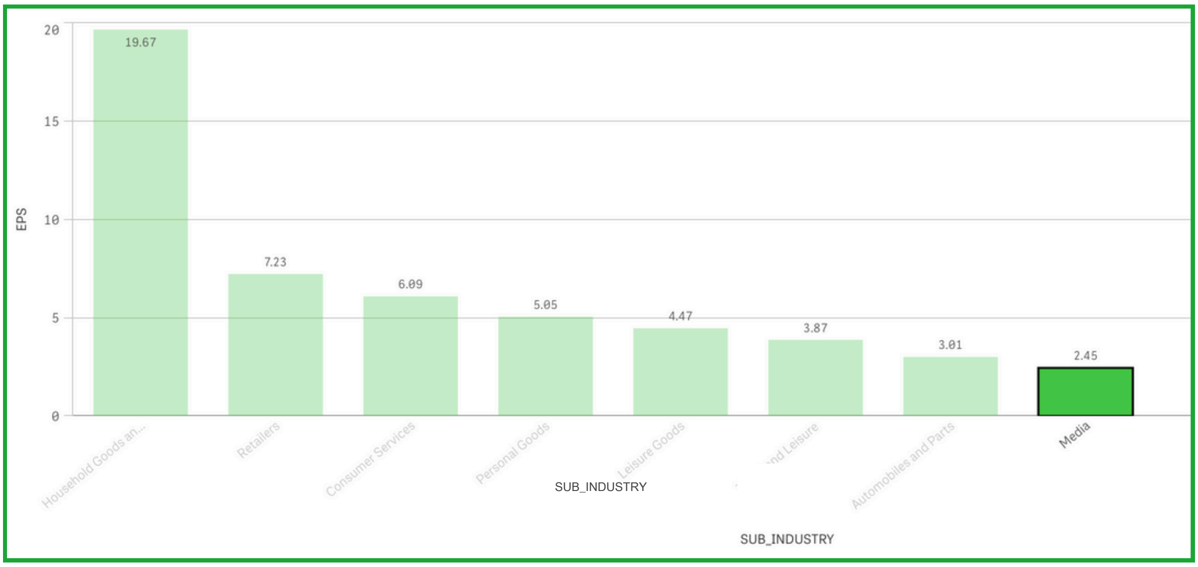
Although they generally exhibit a configuration similar to the other variables, **NET SALES** and **ENTERPRISE VALUE** were not included in the chart due to differences in scale, which would have made visual comparison difficult. These variables are related to **EBITDA** and **FREE CASH FLOW**, as higher revenues may contribute to greater operating profitability, while enterprise value likely reflects expectations of future cash flows.

Figure 1.2: *Indicators by Sector*



From Figure 1.2, it can be inferred that for most sectors, **RETURN ON ASSETS, RETURN ON INVESTED CAPITAL,** and **RETURN ON EQUITY** are interrelated, as they are calculated based on common factors, such as net income.

Figure 2: *EPS by SUB_INDUSTRY*



The analysis of Figure 2 focuses on the sub-industries within the "**Consumer Discretionary**" sector, which includes companies operating in the "Media" segment. For these companies, the average EPS is **2.45** — the lowest among all sub-industries.

The chart suggests that investing in the "**Media**" sector may not be advantageous. At the same time, preliminary analyses did not reveal any clear influence of the economic indicators on the EPS of the companies considered. Therefore, the following section develops a forecasting model aimed at further clarifying this aspect.

Forecasting model

A predictive model for EPS was developed using regression techniques. Among the economic performance indicators, those that were excessively redundant, as identified in the exploratory analysis, and those that proved ineffective in predicting EPS were not selected.

The final model, which emerged as the most effective, leads to the following considerations:

➤ If **NET SALES** increase by **1%**, **EPS** rises by approximately **0.17%**: when the company's revenues grow due to sales, it is likely that value is created for shareholders, albeit moderately;

➤ If **FREE CASH FLOW** increases by **1%**, **EPS** rises by approximately **0.34%**: a company with more available cash may have greater resources to invest, which positively impacts earnings;

➤ If **ENTERPRISE VALUE** increases by **1%**, **EPS** decreases by approximately **0.05%**: a company with a growing market value may experience slightly lower earnings per share, possibly due to higher leverage;

➤ If **RETURN ON EQUITY** increases by **1%**, **EPS** rises by approximately **0.18%**: more efficient management of equity could lead to slightly higher gains for shareholders.

Highlights

According to the forecasting model, companies within the "**Media**" sub-sector have an average EPS of **2.39** (compared to the actual 2.45). Therefore, the investment that the Italian company intends to make would be **relatively unprofitable** when compared to other business areas. However, if the company still chooses to invest in this sector, it is recommended to identify companies that exhibit the conditions (discussed in the previous section) capable of increasing EPS, albeit to a limited extent.

Alternatively, if the company is open to exploring other investment opportunities, it could consider sectors with higher potential returns. For example:

➤ If the company has experience in trade and distribution, the "**Retailers**" sector represents an attractive option, as it is characterized by a higher EPS and therefore greater profit potential;

➤ Alternatively, if the company leverages digital infrastructures in its operations, it could be strategic to focus on the "**Telecommunications Service Providers**" sector, which offers higher profit margins and growth opportunities in the technology context.

Appendix

The predictive model was developed using the **Weighted Least Squares (WLS)** regression technique, which is capable of addressing the heteroscedasticity present in the data by assigning greater weights to observations with smaller error variance, and vice versa.

The assumptions required for its application are satisfied, and a logarithmic transformation was applied to all numerical variables to mitigate the effect of outliers. Moreover, all sectors were considered to enhance the model's generalization capability.

Indeed, by analyzing the RMSE and R^2 of the model on both the training and test sets, it was concluded that there is no tendency toward overfitting, and the model demonstrates good adaptability to the data (**R^2 on the test set: 63.4%**).