



FINANCIAL ANALYTICS REPORT OF THE TOP COMPANIES



Introduction



In today's dynamic and competitive market environment, understanding the financial health and performance of leading companies is crucial for making informed investment decisions. This report focuses on analyzing the top 488 companies, providing a comprehensive overview of their Market Capitalization and Quarterly Sales. By leveraging financial analytics, I aim to uncover key insights, trends, and growth patterns that can guide strategic decision-making.

The top 488 companies, representing a diverse array of industries and sectors, serve as a significant indicator of overall economic health and market trends. These companies not only drive substantial portions of global economic activity but also set benchmarks for financial performance and corporate governance.

Objectives

Data Preprocessing

Gathering and Preprocessing Financial Data for Top 488 Companies, Ensuring data Quality and Consistency.

Financial Ratio Analysis

Calculating key Financial ratios such as the Price-to-Sales (P/S) ratio to evaluate the relative valuation of Companies.

Growth Trend Analysis

Analyzing trends in Market Capitalization and Quarterly Sales to Identify Growth Trajectories.

Performance Benchmarking

Compare the performance metrics of different companies to identify top performers and laggards within the industry.

Predictive Modeling

Develop and validate predictive models to forecast future sales and market capitalization using historical data.

Few Rows of Financial Analytics Dataset



S.No.	Name	Mar Cap - Crore	Sales Qtr - Crore	Unnamed: 4
0	1 Reliance Inds.	583436.72	99810.00	NaN
1	2 TCS	563709.84	30904.00	NaN
2	3 HDFC Bank	482953.59	20581.27	NaN
3	4 ITC	320985.27	9772.02	NaN
4	5 H D F C	289497.37	16840.51	NaN
5	6 Hind. Unilever	288265.26	8590.00	NaN
6	7 Maruti Suzuki	263493.81	19283.20	NaN
7	8 Infosys	248320.35	17794.00	NaN
8	9 O N G C	239981.50	22995.88	NaN

Statistical Analysis of Financial Dataset

	count	mean	std	min	25%	50%	75%	max
S.No.	488.0	251.508197	145.884078	1.00	122.7500	252.50	378.2500	500.00
Mar Cap - Crore	488.0	27708.961086	58963.329098	3017.07	4879.6125	9885.05	23400.8150	583436.72
Sales Qtr - Crore	488.0	3610.168955	9684.943920	47.24	725.7325	1278.30	2084.0975	110666.93

Number of variables

15

Number of observations

488

Missing cells

526

Missing cells (%)

21.6%

Duplicate rows

0

Duplicate rows (%)

0.0%

Total size in memory

19.2 KiB

Average record size in memory

40.3 E

Variable types

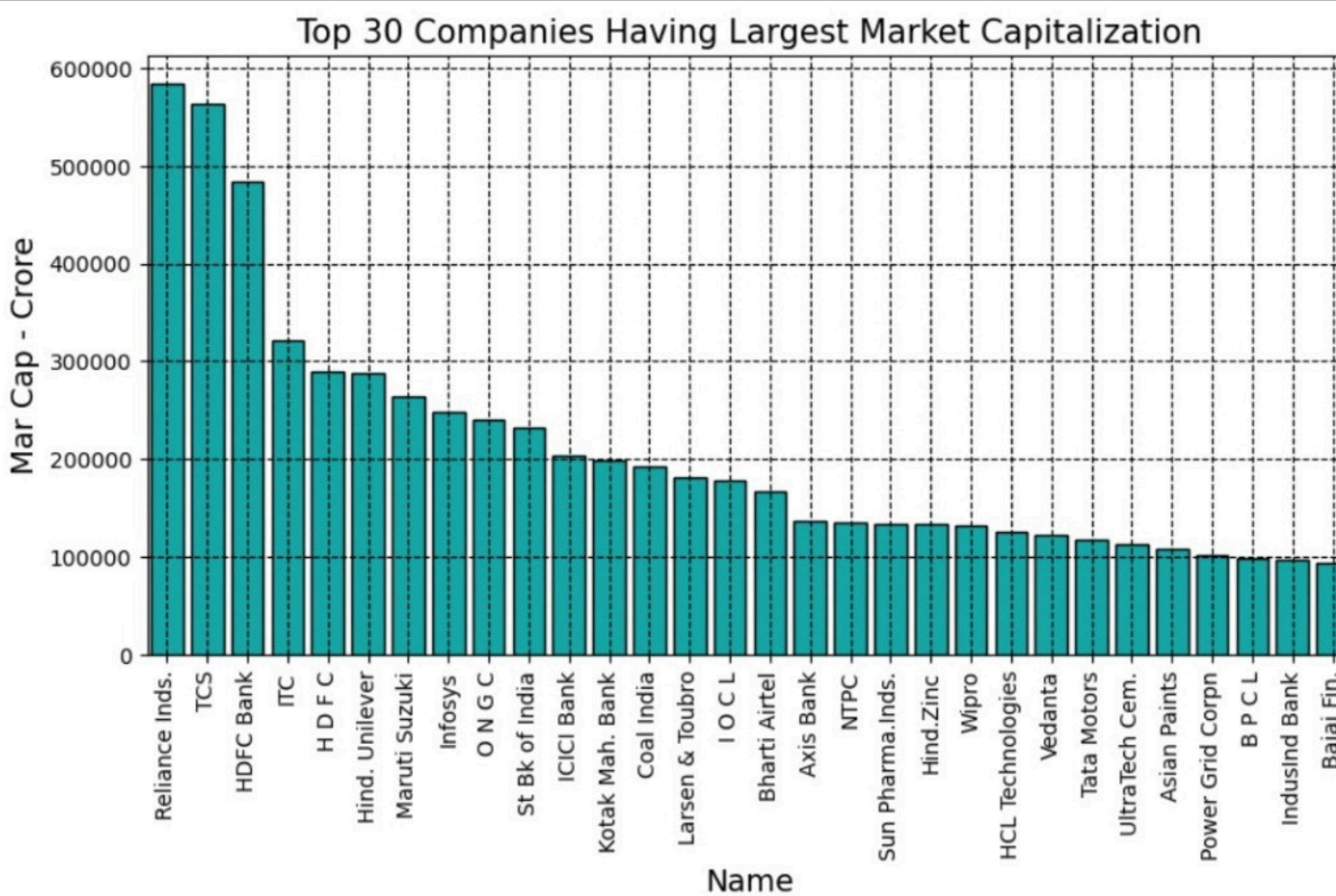
Numerical

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Top 30 Companies Having Highest Market Capital



Observation:

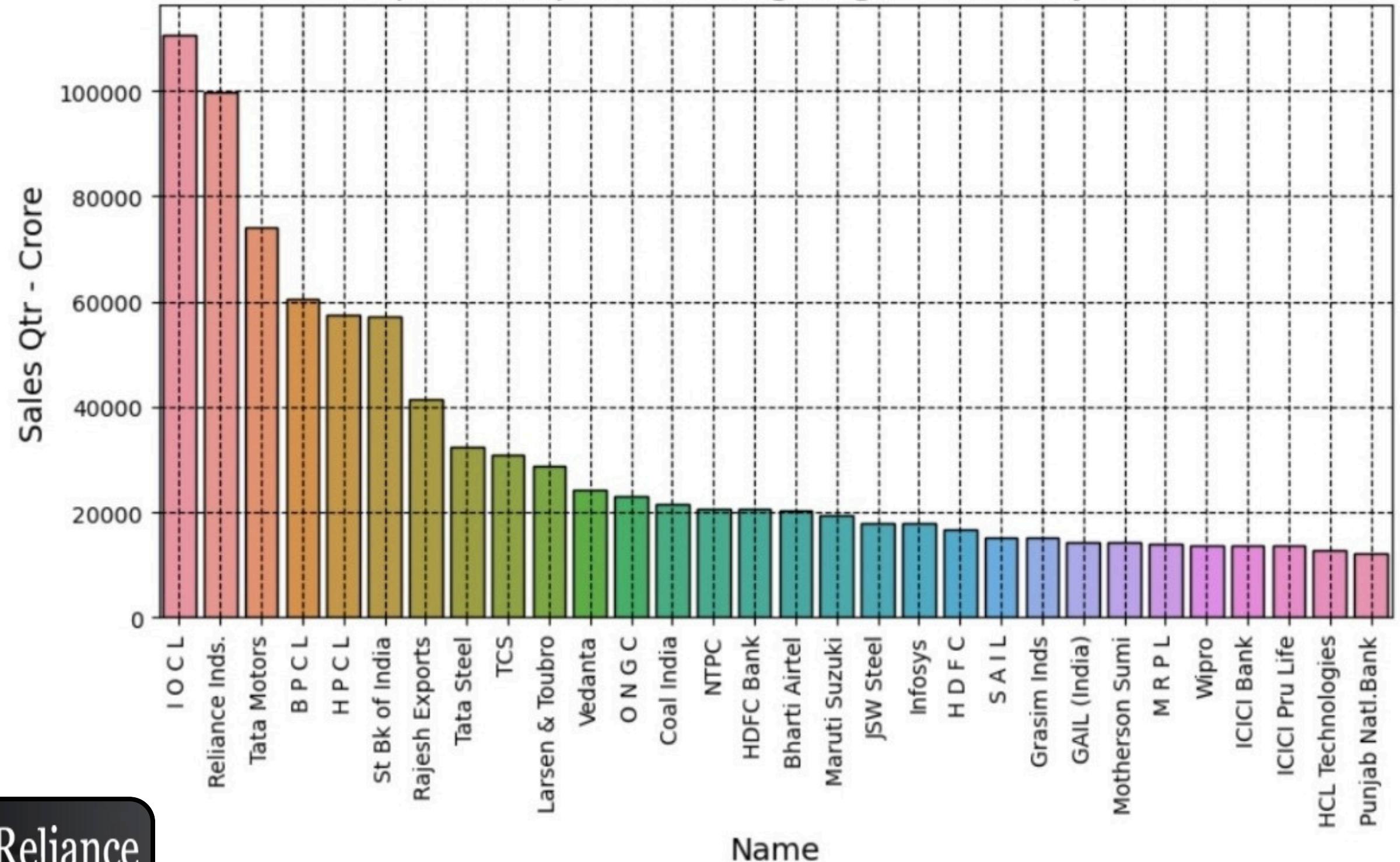
- Among 488 Companies Reliance Indus. having highest Market Capitalization as per it's Quarterly Sales, Following TCS, HDFC Bank, Infosys, Wipro etc.
- These companies having a dominant market presence, reflecting investor confidence and substantial market share.
- High market capitalization often correlates with financial stability, making these companies reliable long-term investments.

Top 30 Companies Having Highest

Quarterly Sales



Top 30 Companies Having Largest Quarterly Sales



Observation:

- Among 488 Top Companies IOCL having highest Quarterly Sales, following Reliance Indus, Tata Motors, TCS, Wipro, HDFC Bank Coal India etc.
- The substantial quarterly sales of these companies contribute significantly to the overall economy.
- Their performance can influence economic trends and investor confidence, making them critical players in the financial markets. From an investment perspective, these companies are attractive due to their proven track record of high sales.
- Investors may view them as stable and profitable, making them favorable candidates for long-term investments.

Top 30 Countries Having Lowest Quarterly Sales and Market Capitalization

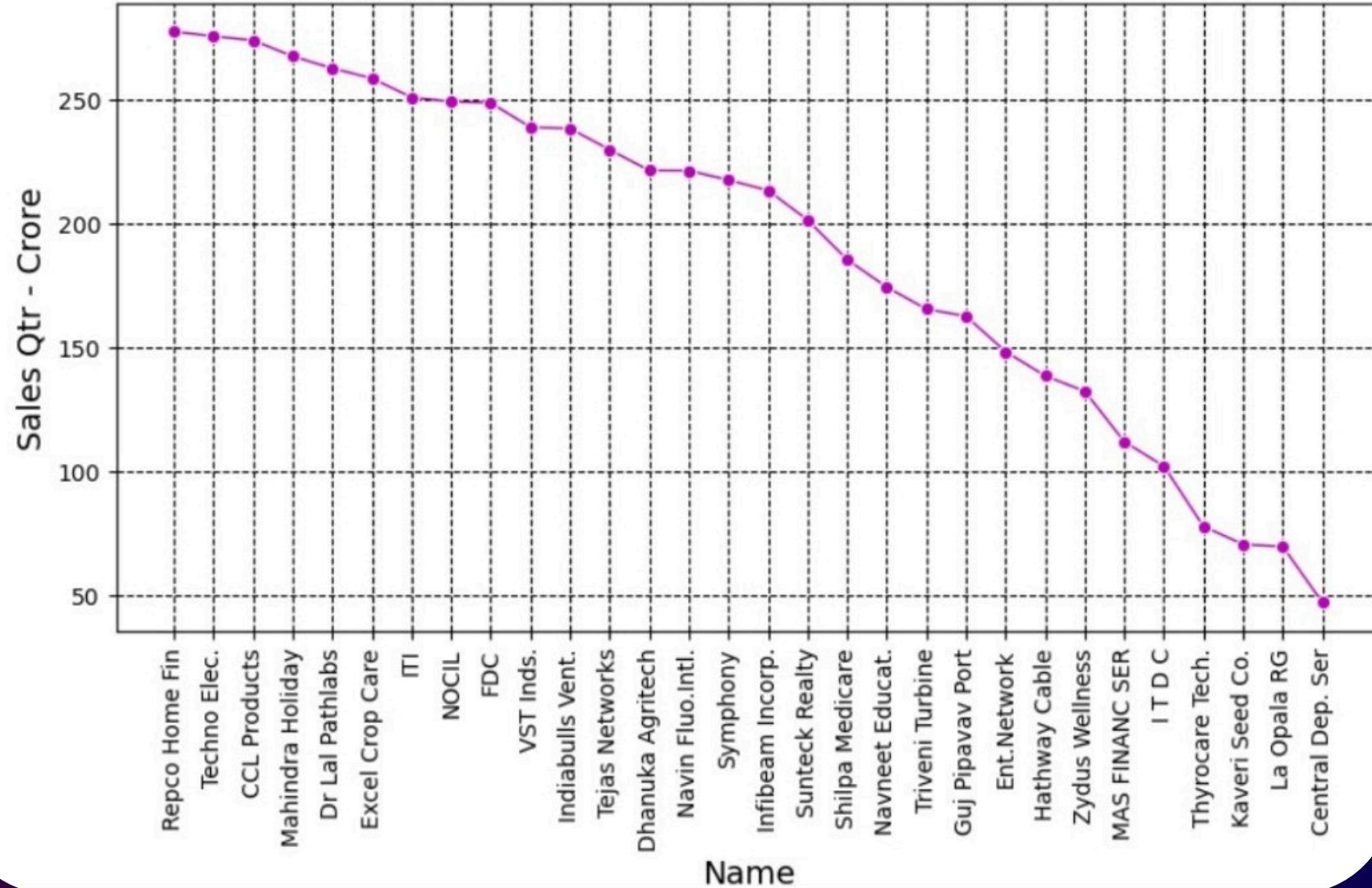


Market Capitalization

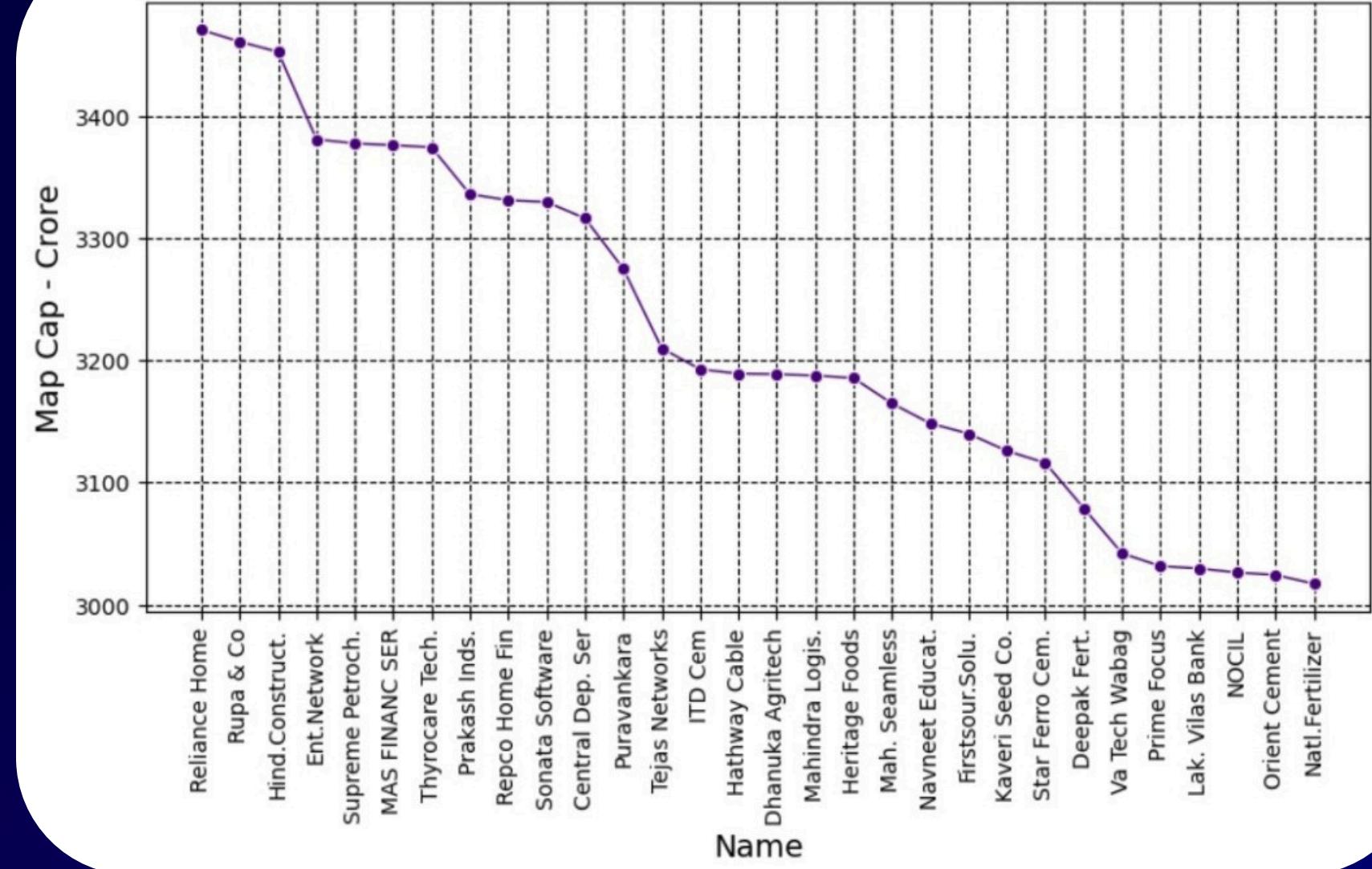
ORIENT
CEMENT



Top 30 Companies Having Lowest Quarterly Sales



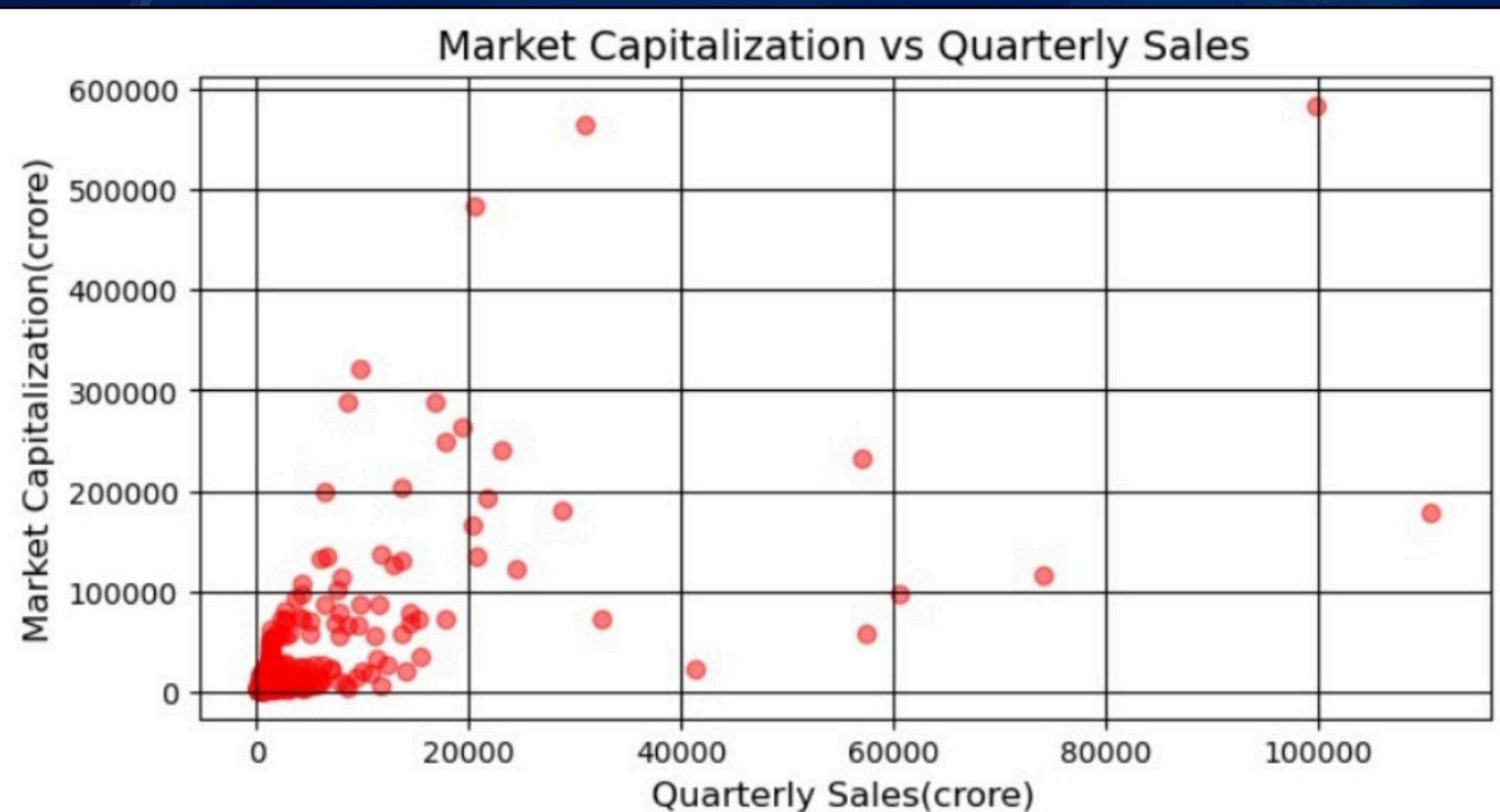
Top 30 Companies Having Lowest Market Capital



These companies exhibit significantly lower market presence compared to their peers, as reflected by their modest market capitalizations and quarterly sales figures.

Companies with lower sales and market caps often face higher volatility and business risks. Investors should approach with caution, considering the potential for sudden market shifts or business challenges.

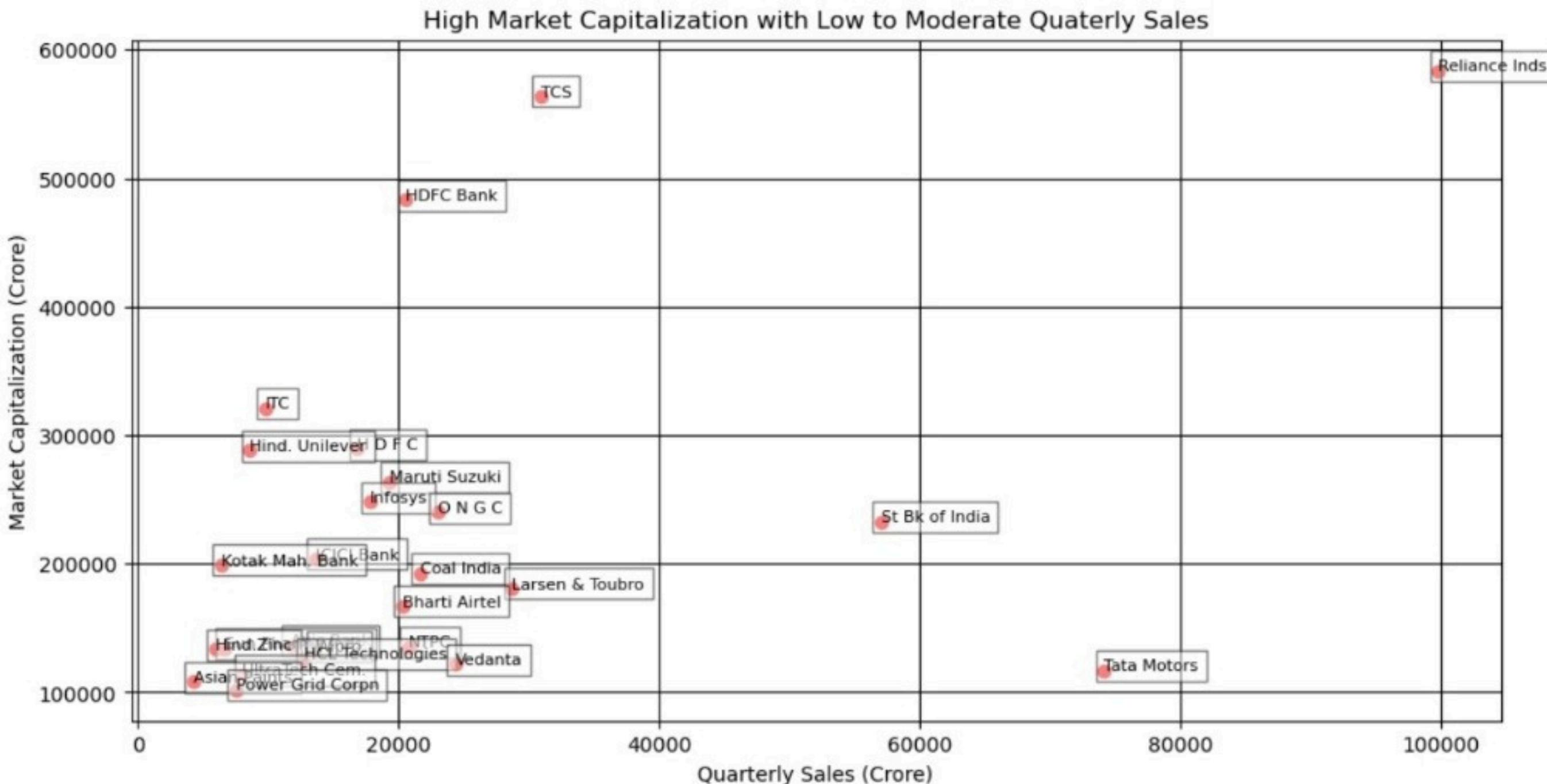
Relationship Between Market Capitalization and Quarterly Sales



Observations:

1. There is positive correlation between Quarterly sales and Market Capitalization. However this trend is not perfect linear.
2. The Majority of companies are clustered in the lower-left corner of the plot. This suggests that most companies have lower market capitalization and lower Quarterly Sales.
3. There is very few companies with extremely high Market Capitalization and quarterly sales.
4. A few companies have exceptionally high market capitalisation.

Companies Having High Market Capital with Low and Moderate Quarterly Sales



OBSERVATIONS:

Reliance, HDFC, TCS, etc. states innovative potential, or strong future growth projection. Following St. Bank of India, Kotak bank, Maruti Suzuki, Tata motors etc . Companies with high market capitalization despite low to moderate sales often indicate strong investor confidence. This confidence may be driven by factors such as market dominance.



High Quarterly Sales with High Market Capitalization

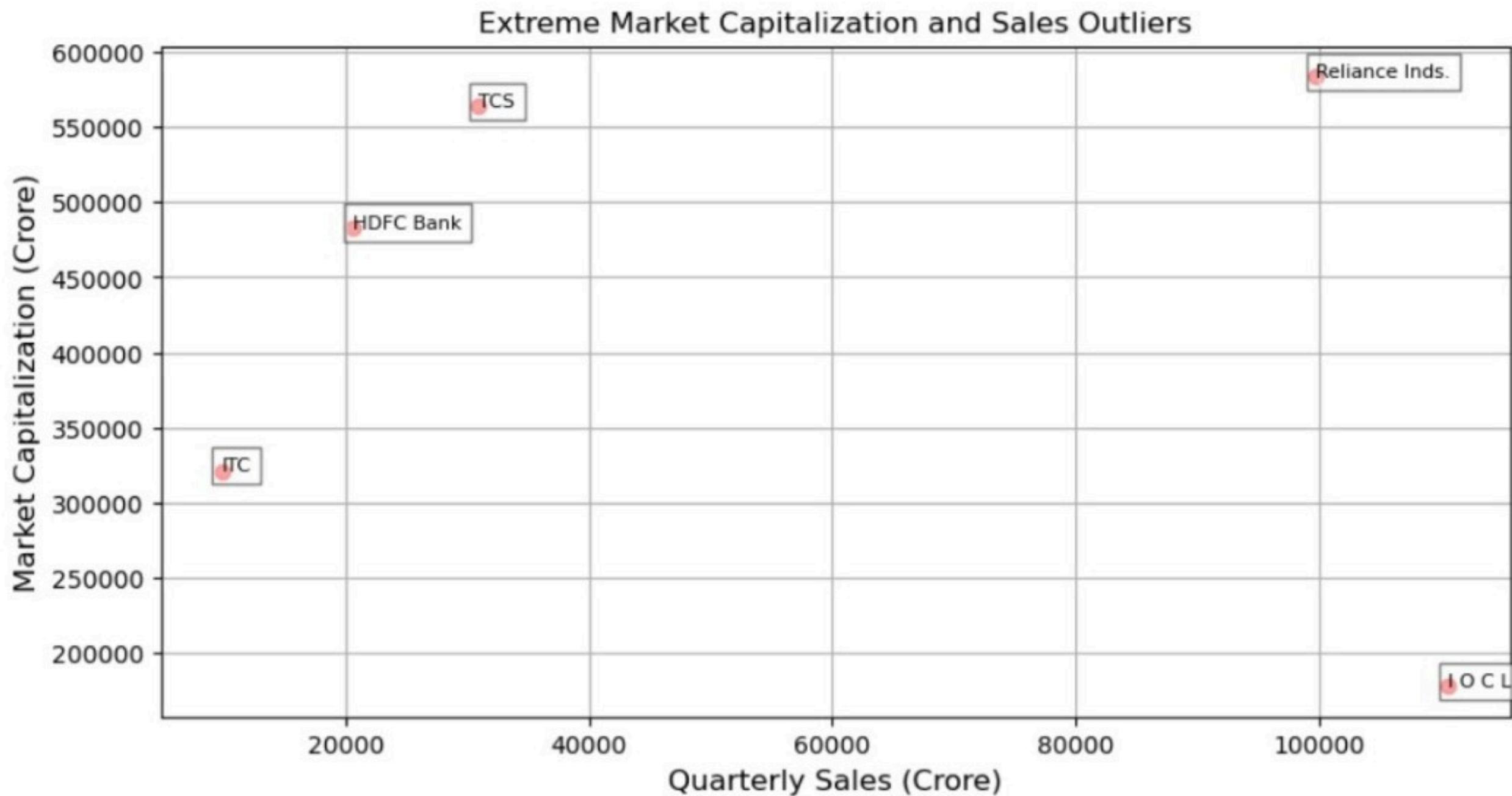


Name	Mar Cap - Crore	Sales Qtr - Crore
Reliance Inds.	583436.72	99810.00
St Bk of India	232763.33	57014.08
IOCL	178017.48	110666.93
Tata Motors	117071.87	74156.07

This correlation suggests that these companies have a significant market presence and strong revenue-generating capabilities



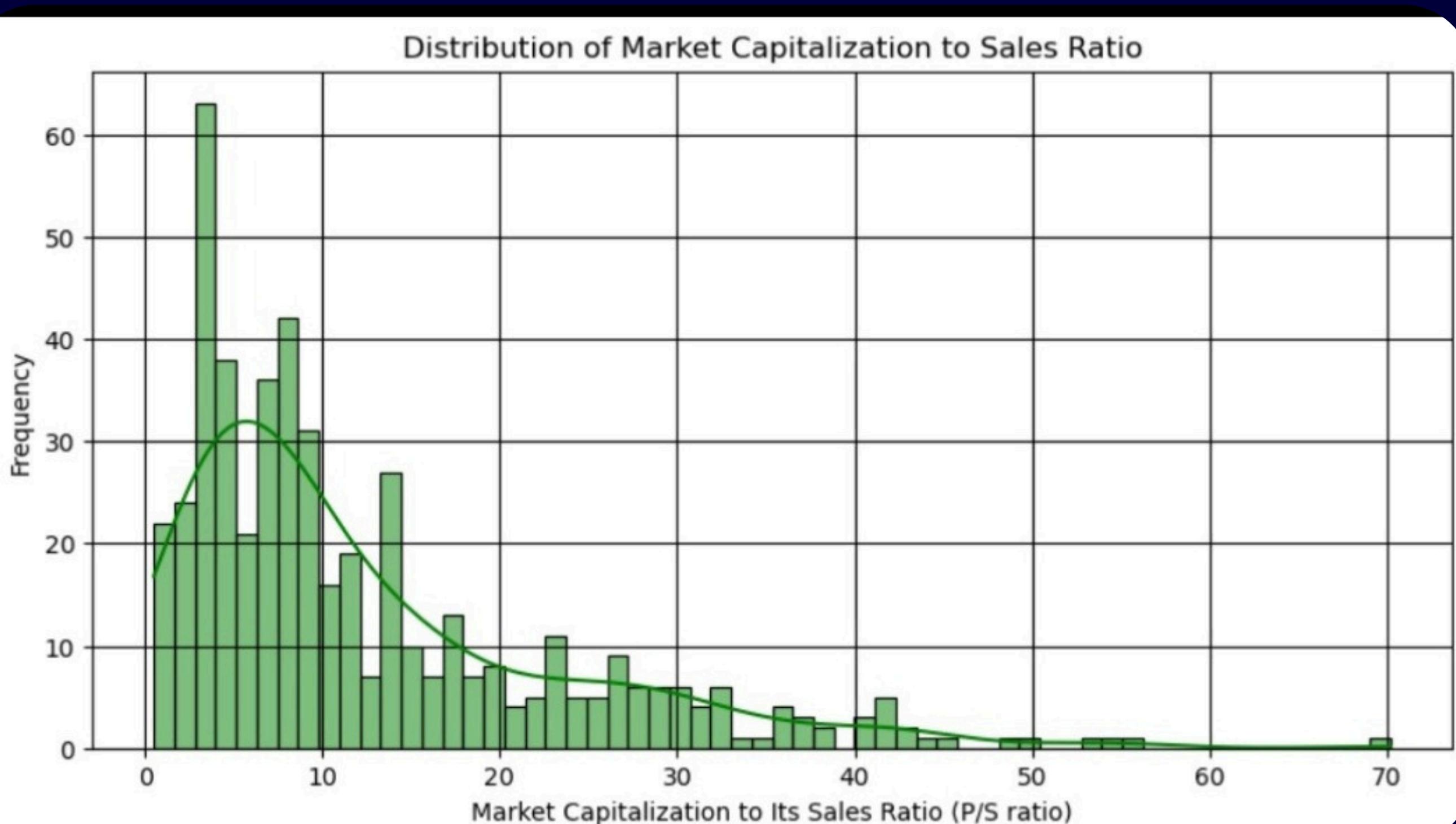
Extremely High Market Capital and Quarterly Sales



Name	Mar Cap - Crore	Sales Qtr - Crore
Reliance Inds.	583436.72	99810.00
TCS	563709.84	30904.00
HDFC Bank	482953.59	20581.27
ITC	320985.27	9772.02
IOCL	178017.48	110666.93

From the analysis, it is evident that these companies with extremely high market capitalization paired with high quarterly sales are typically market leaders in their respective industries. These companies demonstrate strong financial health, substantial market influence, and robust operational efficiency.

Distribution of Companies's Market Capitalization And It's Sales Ratio

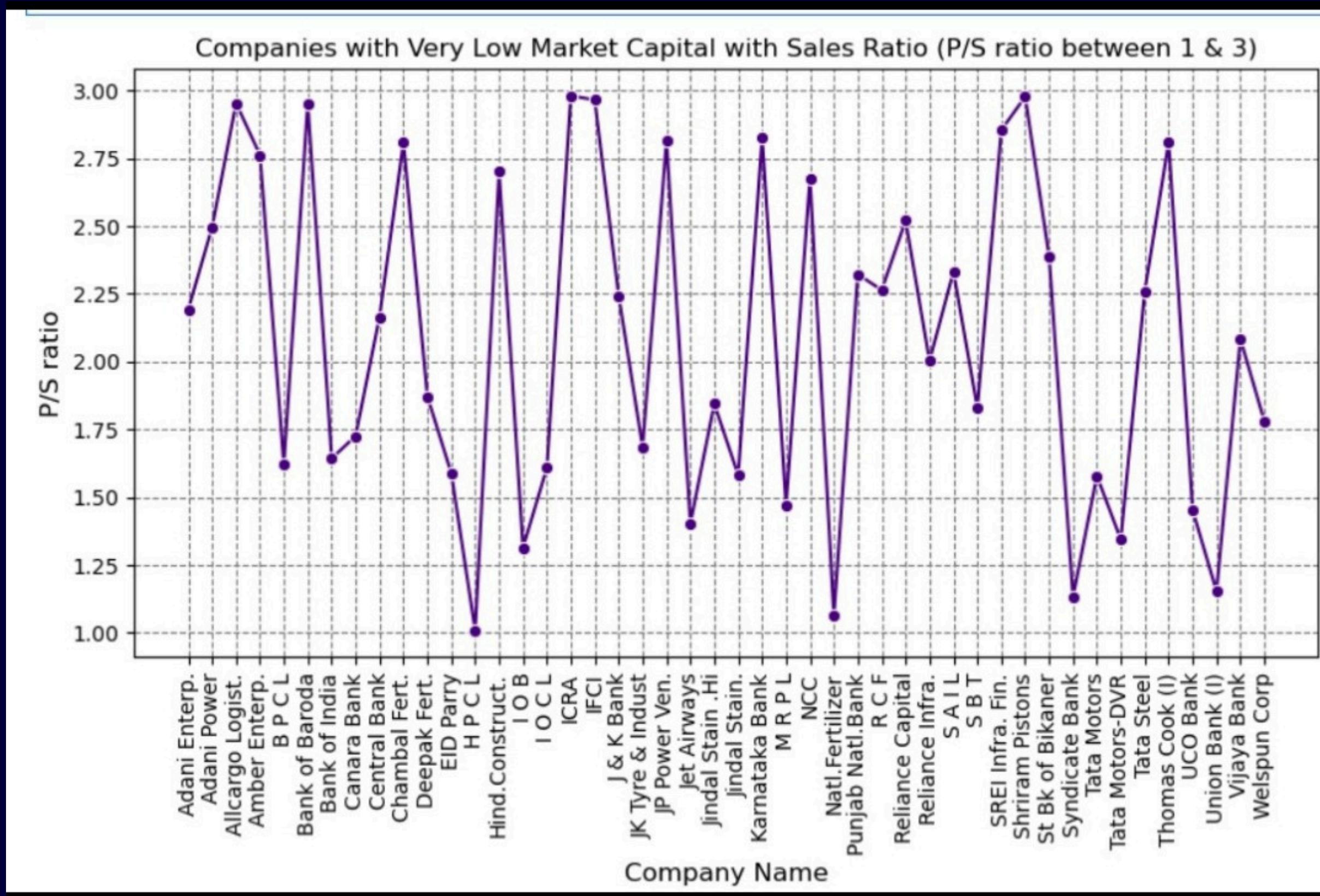


Observations:

1. The distribution is right skewed meaning most companies have lower P/S ratio, with the fewer companies having very high P/S ratio.
2. The highest frequency is observed for companies with a P/S ratio between 2 and 4.
3. This suggests that majority of companies have a P/S ratio within this range.
4. There is a long tail extending to the right, indicating that while few companies have very high P/S ratio (>20).
5. The presence of companies with very high P/S ratios (>40) suggests these companies are either high-growth industries or have strong investor sentiment driving up their valuations.

adani Companies Having Lowest Sales Ratio

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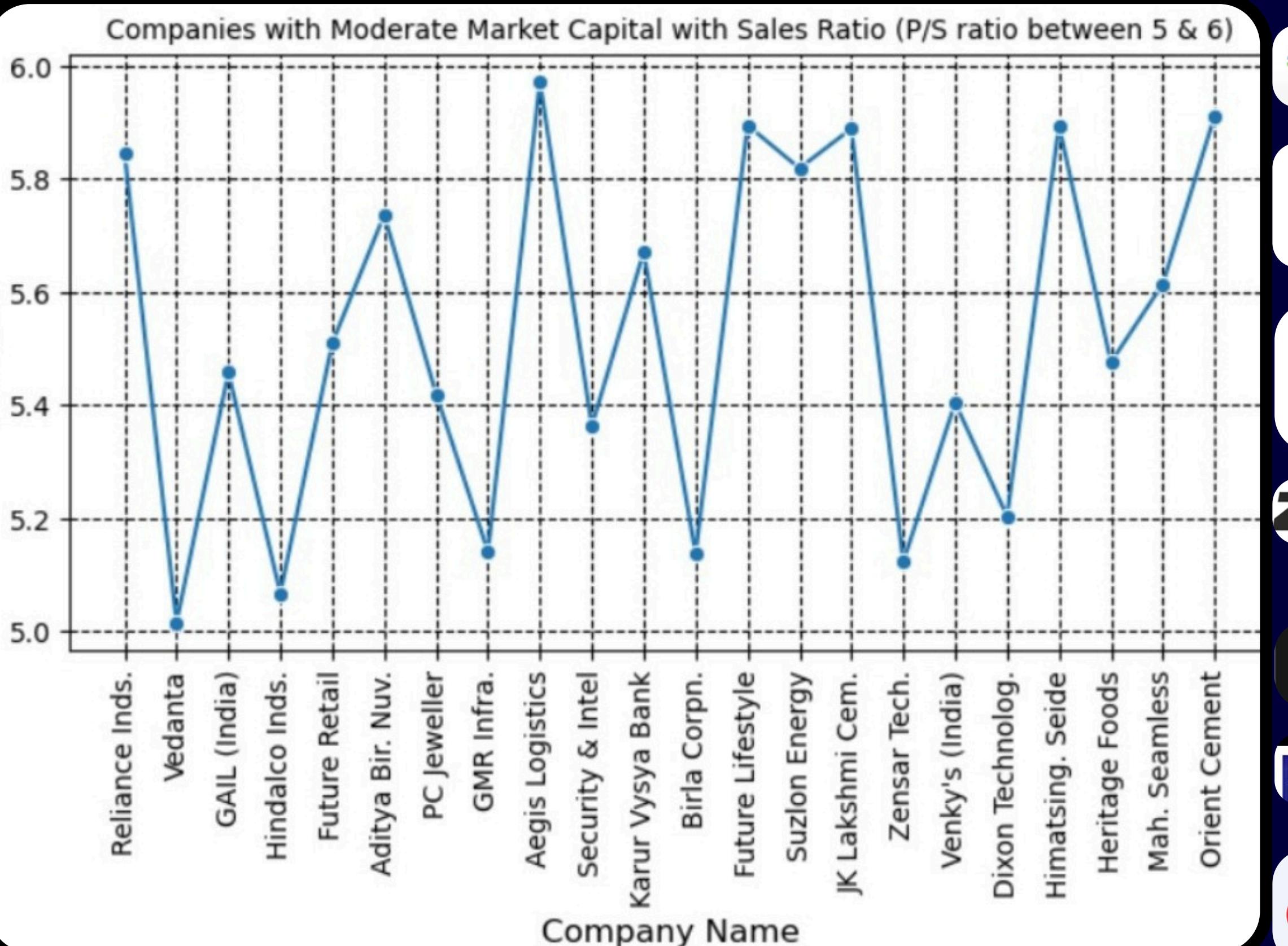


Observations:

Adani Enterprises , Union Bank, Thomas Cook, BPCL, Bank of Baroda , Canera Bank etc.

- These Companies with a low P/S ratio might be undervalued in the market. This suggests that their current stock prices do not fully reflect the revenue they generate
- While a low P/S ratio can indicate undervaluation, it may also reflect underlying issues such as market skepticism about future growth prospects, higher debt levels, or other financial challenges. It's crucial to conduct thorough due diligence before making investment decisions.

Companies Having Moderate Sales Ratio



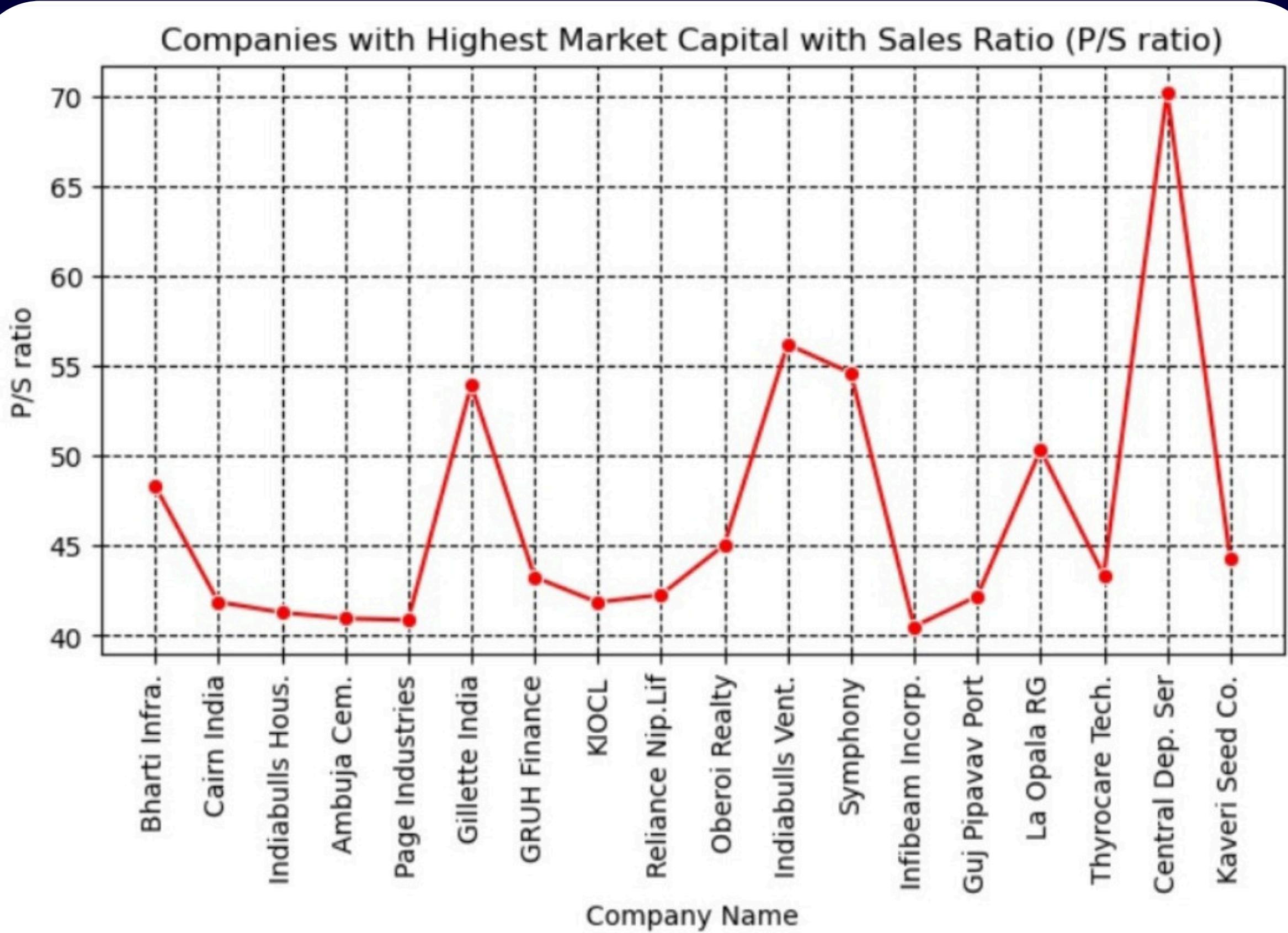
OBSERVATIONS:

- Relience Indus, Vedanta, Orient Cement, Future Retails etc.

- These Companies with a moderate sales ratio tend to have stable revenue streams and consistent performance in the market. They are likely maintaining a healthy balance between their market value and sales revenue.

- These companies are generally less risky compared to those with very high or very low sales ratios,

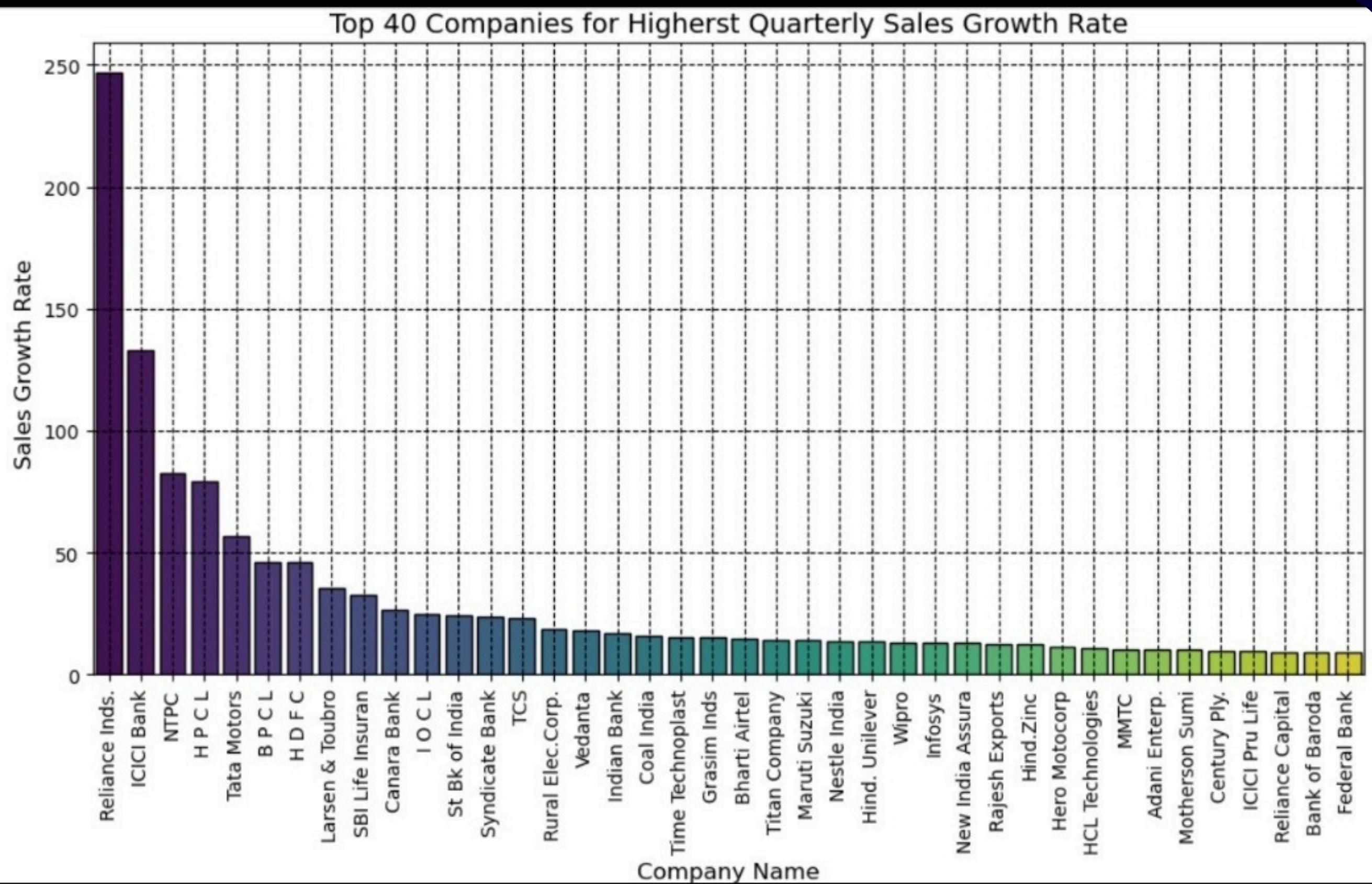
Companies Having Highest Sales Ratio



OBSERVATIONS:

- Bharti Infra, Claim India, Ambuja cements, Oberoi Realty etc.
- These Companies with the highest sales ratios are key players in their respective industries, and understanding the factors driving their sales efficiency can provide valuable insights for future investment and strategic decisions.

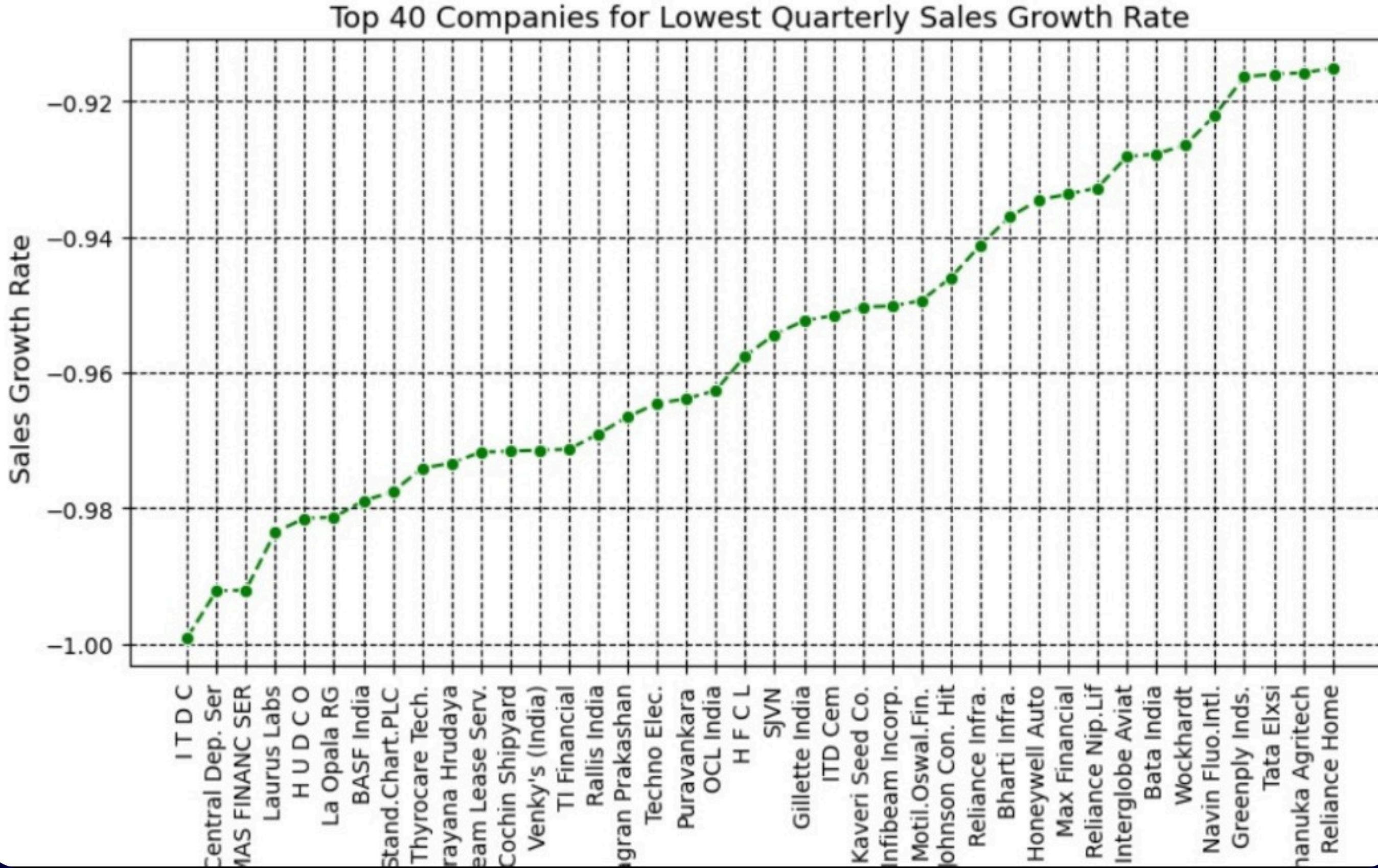
Companies Having Highest Sales Growth Rate



Observations:

- Reliance Indus, ICICI Bank, NTPC, TATA motors, HDFC etc. Companies Having Highest Sales Growth Rate.
 - Their ability to achieve and sustain high growth rates often reflects strong consumer demand, successful market penetration, and effective utilization of resources.
- Their exceptional performance in expanding market share and increasing revenue over the analyzed period.

Companies Having Lowest Sales Growth Rate



Observations:
The analysis reveals that companies with the lowest Sales Growth Rates often face challenges in expanding their market presence and increasing revenue streams. This could be attributed to various factors such as market saturation, competitive pressures, or internal operational inefficiencies.

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model=RandomForestRegressor(n_estimators=100,random_state=42)

model.fit(x_test,y_test)

RandomForestRegressor
RandomForestRegressor(random_state=42)

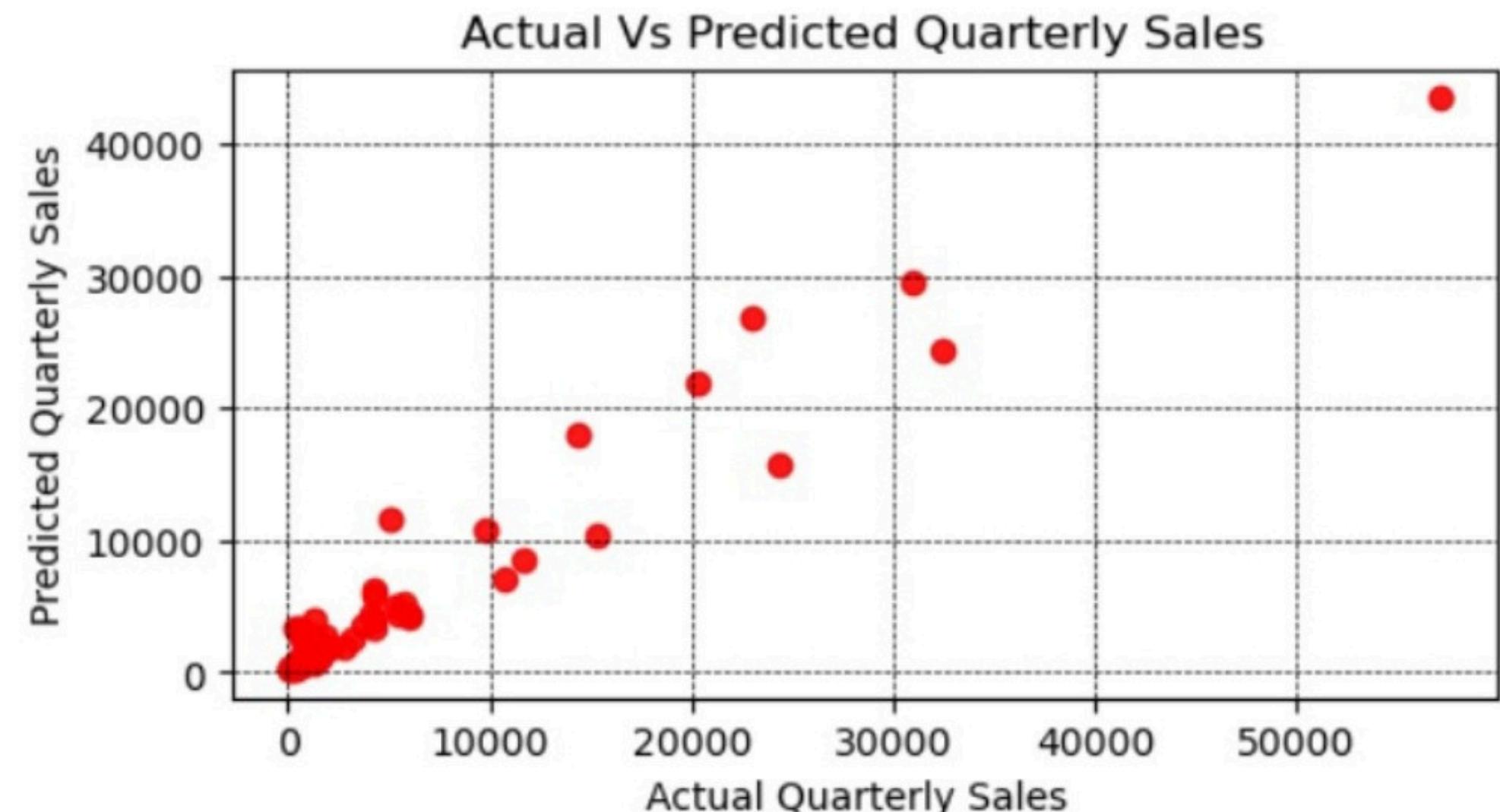
model.score(x_test,y_test)
0.9217412550445301

```

	Market Capital	Actual Quarterly Sales	Predicted Quarterly Sales
344	5151.85	1516.08	1196.0234
259	8539.88	6086.20	4453.7785
382	4401.66	1278.30	1278.3000
372	4600.73	1278.30	1278.3000
341	5224.11	691.90	933.6366
...
362	4885.75	1213.08	1004.0768
28	97379.96	4286.78	5897.4730
8	239981.50	22995.88	26836.9830
428	3804.58	1278.30	1279.3788
98	29327.64	1278.30	1700.3150

Model For The Prediction of Future Quarterly Sales of The Companies

This predictive model capability will serve as a valuable tool in strategic planning and decision-making, driving more informed and effective business strategies.



Positive Sales Growth Rate:

Reliance Indus, ICICI Bank, NTPC, TATA moters, HDFC etc.

Conversely, companies with negative sales growth rates need to re-evaluate their strategies to reverse the decline and regain investor confidence.

A strong correlation between market capitalization and quarterly sales indicates that these companies with larger market caps tend to generate higher sales. This is expected as larger companies often have more resources and market reach.

High Capital and Quarterly Sales:

RelienceIndus, TCS, HDFC Bank, Infosys, Tata motors, ICICI, Wipro, Infosys etc.

CONCLUSION

Companies with high P/S ratios exhibit a high market value relative to their sales. This could imply strong market confidence and growth potential but may also indicate overvaluation. Investors should consider other financial metrics and market conditions to assess these companies comprehensively.

High Market Capital and Sales Ratio:
Bharti Infra, Claim India, Ambuja cements, Oberoi Realty etc.

Negative Sales Growth Rate:

ITDC , Relience Home, Central Department Ser, TI Financial, Techno Electric etc.

Prediction:

Using machine learning models like the Random Linear Regressor, future quarterly sales were predicted based on market capitalization. The predictions, although not perfectly linear, provide a framework for anticipating future performance and making informed decisions

Thank You



Conclusion

