DOI: 10.54254/2754-1169/155/20242054

Analysis of Financial Performances for LI Company: Comparison with Ford, Toyota and General Motors

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Abstract: As a matter of fact, vehicle industry has changed a lot due to the rapid development of new energy vehicle. This study presents an analysis of the financial performance of Li Auto in comparison to industry leaders Ford, Toyota and General Motors, with a particular focus on their investment value. The utilisation of key financial metrics, including EPS, P/E, and PEG ratios, enables the revelation of Li Auto's robust growth, as evidenced by a 69% EPS increase and a PEG ratio of 0.316. According to the analysis, it is suggested that the stock is undervalued and possesses high potential. In contrast, the negative growth and high PEG ratio observed in Ford indicate that the market is expressing concerns about the company's future prospects. Meanwhile, despite displaying stable performances, GM and Toyota have demonstrated lower growth rates. The analysis presents Li Auto as a promising investment in the electric vehicle market, emphasising the necessity for prudent investment decisions based on comprehensive financial insights.

Keywords: Vehicle industry, Li Auto, Investment Value, financial performances.

1. Introduction

The evolution of the automotive industry is giving rise to a multitude of significant challenges, including environmental concerns, traffic congestion, and the depletion of energy resources. The growing number of vehicles powered by fossil fuels represents a significant proportion of global energy consumption and is a primary contributor to greenhouse gas (GHG) emissions [1, 2]. Consequently, the electric vehicle market has great market prospects with government support [3, 4]. In today's competitive automotive market, analyses of financial position are critical to understanding the operational efficiency and market competitiveness of a company. The main propose of this study is to examine the similarities and differences in the financial position of Ideal, Ford, Toyota and General Motors, with a view to comparing their financial position and ultimately determining their investment value.

As a prominent figure in China's emerging electric vehicle sector, Li Auto has demonstrated a notable trajectory of financial expansion in recent years. As evidenced by the 2023 financial report, Li Auto attained its most successful financial performance to date, with revenue reaching 123.85 billion yuan, representing a year-on-year increase of 173.5%, and net profit reaching 11.81 billion yuan, marking the inaugural full-year profitability. Since its initial delivery, the primary model, the Li ONE, has been delivered to customers a total of 184,491 times. In comparison to other new car manufacturers, the number of deliveries of the Ideal ONE in the second quarter was surpassed only

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by NIO, and the Ideal ONE was the top-selling single model. The annual production capacity of the Ideal ONE is 100,000 units. Following an increase in production capacity, the company's sales target is expected to reach 1.6 million units by 2025 [5]. The performance was driven by the company's sustained investment in research and development, as well as product innovation and market expansion, particularly in the electric vehicle sector. Ideal Motors has been able to gain market share by launching competitive products, which has contributed to its growth and profitability.

Since its establishment on 16 September 1908 by William C. Durant, General Motors (GM) has been involved in a succession of acquisitions and mergers with a range of other automotive brands, including Buick, Cadillac, Chevrolet, Oldsmobile, Pontiac, and Corvette. Since 1927, it has been the largest automobile manufacturer in the world. GM has established automobile manufacturing operations in thirty-five countries and regions worldwide [6].

Toyota Motor Corporation is a multinational company with a significant presence in the automotive industry and financial services. It is headquartered in Japan and is currently the largest automobile manufacturer in the world. Toyota has a strong presence in the Nagoya and Toyota provinces of Aichi and Tokyo, with 522 branches in total. The company's product line includes trucks, buses, automobiles, and a range of industrial vehicles [7].

General Motors Company (GM) was established on 16 September 1908 and has generated revenues of $171.8 billion in the 2023 financial year. Since its inception in the United States by William Durant, GM has been engaged in the production, marketing and servicing of a diverse range of branded vehicles on a global scale. These include the Buick, Chevrolet, Cadillac, GMC and Holden brands. In 2014, GM's comprehensive range of multi-brand vehicles was available for purchase in 120 countries worldwide [8]. In 2014, General Motors (GM) sold its full line of multi-brand vehicles in more than 120 countries worldwide. These included electric cars, minivans and convertibles.

2. Data and Method

In this study, the price-to-earnings ratio (P/E), earnings per share (EPS) and price-to- earnings-to-growth (PEG) ratio represent the three primary multiple valuation tools used to analyze Li Company and its primary competitors, with a view to exploring the stock performance and enterprise value of Li Company. The following section will delineate the significance, advantages, and disadvantages of these three indicators.

Earnings per share (EPS) represents a pivotal metric for gauging a company's financial performance, encapsulating the proportion of profits apportioned to each common share. Consequently, a higher EPS value indicates a more profitable company [9]:

$$\text{Earnings per Share} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{End}-\text{of}-\text{Period Common Shares Outstanding}} \tag{1}$$

Net Income refers to a company's net profit for a designated timeframe, calculated as the company's total revenue minus all expenses, costs, and taxes. In the event that a company issue preferred shares, the holders of such shares are typically entitled to receive dividends in a preferential manner. This component of the dividend is subtracted from net income when calculating earnings per share (EPS) because it represents earnings for preferred shareholders, not common shareholders. The term "End-of-Period Common Shares Outstanding" is used to denote the total number of common shares that have been issued and remain outstanding at the conclusion of an accounting period. This figure serves to determine the denominator of EPS, which represents the basis for calculating EPS.

Beaver and Morse have proposed that the price-to-earnings ratio, commonly referred to as the P/E ratio, serves as a financial gauge designed to quantify the cost of a stock in relation to its earnings per share (EPS). This metric is of great importance in gauging the market valuation of a firm's equity and

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is a prevalent analytical instrument among investors. It facilitates the identification of whether a stock is priced above or below its intrinsic value [10]. The formula for calculating the price-earnings ratio is as follows:

$$\text{Price earnings ratio} = \frac{\text{Earnings per share (EPS)}}{\text{Stock Price}} \tag{2}$$

or

$$\text{Price earnings ratio} = \frac{Market\ Capitalization}{Annual\ Net\ Profit} \tag{3}$$

In the aforementioned equation, the term "stock price" is used to denote the prevailing market value. Earnings per share (EPS) are calculated by dividing a company's total net profit by the total number of common shares that are publicly traded over a specified period of time.

The Trailing Twelve Months Price to Earnings Ratio (TTM PE) and the Next Twelve Months Price to Earnings Ratio (NTM PE) represent two distinct forms of the Price-to-Earnings Ratio (PE Ratio) [11]. The TTM PE, also referred to as the trailing twelve months price-to-earnings ratio, represents a static measure, reflecting the company's actual earnings over the preceding twelve-month period. In contrast, the NTM PE, or the forward 12 months P/E ratio, is a more dynamic measure based on the projected earnings estimates provided by financial analysts for the forthcoming 12 months. A price-to-earnings ratio that is at the lower end of the spectrum may indicate that the market is undervaluing the stock, whereas a ratio that is higher than average could suggest that the stock is overvalued stock.

The Price-to-Earnings Growth (PEG) metric serves as a financial tool for assessing the fairness of a stock's valuation. This assessment is based on the anticipated earnings expansion of the firm. The PEG is derived by juxtaposing the firm's market price with its earnings. To achieve a fuller grasp of the PEG's significance, the Price-to-Earnings (P/E) ratio is then contrasted with the projected earnings growth. This comparative approach provides a deeper insight into the investment merit of the stock. The P/E ratio itself is determined by evaluating the ratio of a company's market price to its earnings, further aiding in the evaluation of the stock's potential as an investment.

$$\text{PEG Ratio} = \frac{PE\ Ratio}{Earnings\ Growth\ Rate} \tag{4}$$

According to Dean Hodgskiss, stocks with relatively high price-to-earnings ratios are classified as growth stocks, which typically refer to stocks of companies that are anticipated to demonstrate superior earnings growth compared to the market average in the future. Growth stocks are relatively risky because they rely on sustained growth to justify their high valuations. Value stocks are those that the market considers to be undervalued, usually with a low price-to-earnings ratio. Companies in value stocks may have mature businesses with slower growth rates, but their relatively low stock prices offer higher income potential or dividend returns [12].

3. Results and Discussion

The archival information spanning the period from the final quarter of the year 2022 through the third quarter of 2023, along with the predictive figures for the same duration in 2024, was culled from the authoritative Nasdaq online portal for the purpose of examination within this scholarly work. The data provided in Table 1 and Table 2 indicated that LI's earnings per share (EPS) exhibited a notable growth trajectory, with a trailing twelve-month (TTM) EPS of 0.9042 and an estimated next twelve-month (NTM) EPS of 1.5247. This represents an earnings growth rate of 69%. Such a growth rate is uncommon in the automotive industry, reflecting LI's competitiveness and capacity for market

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expansion. Furthermore, LI's price-to-earnings (PE) ratio, currently at 21.83 for the trailing twelve-month period, is projected to decline to 12.95 for the next twelve months, a combination that, when considered alongside the company's high growth rate, suggests a positive outlook for its future performance. The price/earnings to growth ratio of 0.316, approaching one, indicates that the current share price aligns with the projected growth potential, making it a relatively prudent investment option.

Table 1: Comparison of EPS of four companies

Li	EPS	GM	EPS	TM	EPS	Ford	EPS
Most recent 4 quarters	0.037	Most recent 4 quarters	1.4171	Most recent 4 quarters	3.3255	Most recent 4 quarters	0.3219
	0.1388		1.697		4.1325		0.4404
	0.3332		1.8339		2.2936		0.4789
	0.3952		2.2143		3.7759		0.2994
Next 4 quarters	0.7907	Next 4 quarters	1.5945	Next 4 quarters	3.0718	Next 4 quarters	-0.1316
	0.083		2.5714		7.0339		0.3348
	0.238		2.5695		6.5379		0.4595
	0.413		3.06		6.8034		0.483
TTM EPS	0.9042	TTM EPS	7.1623	TTM EPS	13.5275	TTM EPS	1.5406
NTM EPS	1.5247	NTM EPS	9.7954	NTM EPS	23.447	NTM EPS	1.1457
Growth rate	69%	Growth rate	37%	Growth rate	73%	Growth rate	-26%

Table 2: EPS, PEG, PE Comparison of Four Companies

	Li Xiang	General Motors	Toyota	Ford
Stock price	19.74	44.32	193.55	10.82
TTM EPS	0.9042	7.1623	13.5275	1.5406
NTM EPS	1.5247	9.7954	23.447	1.1457
TTM PE	21.83145	6.187956383	14.30789	7.023238
NTM PE	12.94681	4.524572759	8.254787	9.444008
EPS growth	69%	37%	73%	-26%
PEG	0.316398	0.167242064	0.195999	-0.27012

The remaining three companies each face a distinct set of challenges in comparison to LI. Despite its low valuation, with a TTM PE of 6.19 and NTM PE of 4.52, General Motors (GM) is subject to market concerns regarding its long-term growth potential, as reflected in its low PEG ratio of 0.167. The speed of transformation and market acceptance of General Motors (GM) in the new energy vehicle sector will be key factors in determining the company's future success.

Toyota Motor Corporation (TM) is renowned for its robust profitability and elevated trailing twelve-month earnings per share (EPS) of 13.5275. However, its projected next twelve-month (NTM)

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EPS growth rate of 73% is marginally lower than that of LI, while its NTM price-to-earnings (PE) ratio of 8.25 is slightly higher than that of General Motors (GM). This may suggest that the market is adopting a cautious stance regarding the long-term sustainability of its impressive growth trajectory. As one of the largest automotive manufacturers in the world, Toyota must respond to intensifying market competition and industry-wide changes while maintaining the efficiency of its extensive operations.

The situation is similarly problematic for Ford Motor (Ford), whose TTM EPS is 1.5406, but NTM EPS is projected to be -1.1457, indicating the potential for future losses. Its TTM PE is 7.02, which could suggest that its stock is overvalued in light of its negative NTM EPS. Furthermore, Ford has a PEG ratio of -0.270, which is typically indicative of an unfavorable discrepancy between the company's stock price and its projected earnings performance. This may suggest that the company is confronted with more significant challenges.

The comparative analysis demonstrates that Li Auto exhibits the greatest potential for growth, evidenced by a notable EPS growth rate and an appealing PEG ratio. General Motors and Toyota demonstrate consistent financial performance with comparatively lower growth rates, offering investors a degree of stability and value, respectively. In contrast, the financial indicators of Ford signal potential challenges ahead, which may warrant caution among potential investors.

The results suggest that Li Auto could be a promising investment for those seeking high growth opportunities in the electric vehicle sector. The lower valuation of GM and the market stability of Toyota may appeal to investors with a lower risk appetite. However, the negative growth projection and high PEG ratio of Ford indicate that investors may need to reassess their positions or seek more information before making investment decisions.

4. Conclusion

To sum up, LI's key strengths can be identified in its strategic positioning within the fast-growing new energy vehicle market, as well as in the company's demonstrated strong growth momentum and reasonable market valuation. Investors' optimistic expectations for LI can be attributed, in part, to the Chinese government's robust support for the new energy vehicle industry and the growing consumer concern for environmental protection and technological innovation. LI's sustained investment in technological innovation and product design will assist it in maintaining its competitive advantage in a highly competitive market. Nevertheless, those considering an investment in Ideal Auto would be well advised to acquaint themselves with the potential risks and challenges that the company may face. While the new energy vehicle market is experiencing rapid growth, competition is intense, with international brands such as Tesla and other local brands vying for market share.

References

[1] *Khan, M.A., Khan, M.Z., Zaman, K. and Naz, L. (2014). Global estimates of energy consumption and greenhouse gas emissions. Renewable and Sustainable Energy Reviews, 29, 336-344.*

[2] *Çalık, H. and Fortz, B. (2019). A Benders decomposition method for locating stations in a one-way electric car sharing system under demand uncertainty. Transportation Research Part B: Methodological, 125, 121-150.*

[3] *Zeng, B., Duan, H. and Zhou, Y. (2019). A new multivariable grey prediction model with structure compatibility. Applied Mathematical Modelling, 75, 385-397.*

[4] *Wilberforce, T., El-Hassan, Z., Khatib, F.N., Al Makky, A., Baroutaji, A., Carton, J.G. and Olabi, A.G. (2017). Developments of electric cars and fuel cell hydrogen electric cars. International Journal of Hydrogen Energy, 42(40), 25695-25734.*

[5] *Xin, Y. (2023). Analysis of marketing strategy of new energy vehicles: taking Ideal Vehicle as an example. China Management Information Technology, 26(16), 140-142.*

[6] *Yang, J. (2010). A Case Study of Global Corporate Bankruptcy from the Perspective of Cost Management--The Case of General Motors Corporation in the United States. Frontier, 14, 109-112.*

DOI: 10.54254/2754-1169/155/20242054

[7] *Madoh, A., Alenazi, J., Alkhamees, L. and Panwar, A. (2019). Case study on market mix strategies of Toyota Motor Corporation. Asia Pacific Journal of Management and Education, 2(3), 70-78.*
[8] *Dines, P.A. (2016). General Motors case study. Economics and Business Administration Roskilde University, 136, 29.*
[9] *Islam, M.R., Khan, T.R., Choudhury, T.T. and Adnan, A.M. (2014). How earning per share (EPS) affects on share price and firm value. European Journal of Business and management, 97-108.*
[10] *Beaver, W. and Morse, D. (1978). What determines price-earnings ratios. Financial Analysts Journal, 34(4), 65-76.*
[11] *He, Y. (2012). Relationship between firm's PE ratio and earnings growth rate. University of Cincinnati.*
[12] *Hodgskiss, D.L. (2012). Does the PEG ratio add value?. University of Pretoria (South Africa).*