

Research on the Investment Value of PulteGroup based on Multiple Methods

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Abstract. This paper carefully evaluates the investment potential of PulteGroup Inc. (PHM) in the U.S. homebuilding industry and compares it with LENNAR Corporation and D.R. Horton Inc. And other important companies in the industry, such as Toll Brothers Inc., were compared. The analysis of this paper focuses on PHM's financial stability, market growth rate, profitability and strategic positioning. Despite external threats such as macroeconomic fluctuations, rising interest rates, and supply chain uncertainties, PHM has demonstrated strong market competitiveness and high investment value thanks to its low price-to-earnings Ratio (P/E) and expected market growth rate (PEG Ratio), as well as high gross profit margin in the competition. The comprehensive analysis points out that PHM, as a leader in the industry, is a high-quality investment choice worthy of consideration for investors in the current market environment.

Keywords: SWOT Analysis, Investment Analysis, Financial Metrics, Market Growth, Investment Value.

1. Introduction

With the development of the economy, many enterprises have begun to enter the residential construction industry. For the current residential construction industry, there are some leading enterprises, among which several companies have unique business strategies, which makes them stand out in the entire industry and occupy a certain market position. Therefore, this paper will select several representative companies in the residential construction industry for analysis, aiming to explore investment opportunities in this industry in depth by analyzing these companies. The selected companies are LENNAR Corporation (LEN) and D R. Horton Inc. (DHI), PulteGroup Inc. (PHM), and Toll Brothers Inc. (TOL) are four companies. These companies have already occupied a certain position in the residential construction market in the United States, and each has its unique advantages. Of course, due to the different strategies of each company, they also face different challenges. Among them, LENNAR Corporation has a diversified business operation strategy and a wide market coverage. The company's business scope not only involves the construction of family housing, but also provides other real estate investments and related financial services. And D R. Horton Inc.'s business mainly focuses on single family residential construction. The company has more professional capabilities and market penetration in single family residential construction and has covered multiple states throughout the United States in this business field, meeting different needs in different regions. PulteGroup Inc. is known for its diverse construction business and extensive coverage of the needs of the residential market. The company offers different types of homes ranging from entry-level homes to high-end custom homes to cover the needs of different consumer groups. Its business structure revolves around the design, construction and sale of single-family homes, and specializes in community housing services for seniors over the age of 55. Finally, Toll Brothers Inc. is more focused on pursuing the refinement and luxury of the homes it builds, better defining the high-end luxury standards of the residential construction industry [1]. This paper will also take PulteGroup Inc. as the main analysis of the investment object and select another three companies in the same industry as the analysis reference to complete the paper.

Faced with the diversity and complex competitive environment of the residential construction industry, this paper will conduct a detailed analysis of these companies, attempting to reveal the development prospects and potential investment opportunities of the industry through these analyses.

By analyzing the market strategies, risk factors, and financial conditions of these companies, we aim to provide investors with a comprehensive investment perspective.

2. Literature Review

In the past decade, the residential construction industry in the United States has undergone significant changes. These changes are caused by a combination of economic, technological, and various social factors. Therefore, this review aims to illustrate the key factors affecting investment in the residential construction industry and their impact on the future development trends of the industry by analyzing existing research and literature.

Before the 2008 financial crisis, Buffett's Berkshire Hathaway company spent \$800 million to buy three of the top four real estate developers in the United States: DR Horton, NVR, and Lennar. According to the land option strategy, the option fee is usually only 10% of the land price, which greatly reduces the outflow of funds [3]. If the company believes that the land is not suitable for development, it only loses the option fee. According to this strategy, the company was still profitable during the 2008 subprime crisis. Buffett's decision to buy three real estate companies at once indicates that he discovered systematic investment opportunities in the US real estate industry at that time.

Nowadays, the residential construction industry in the United States has undergone tremendous changes, facing a shortage of available homes and a shortage of new homes. According to Freddie Mac's forecast, the housing shortage in the United States is about 3.8 million units, and the shortage of available housing has led to a continuous rise in housing prices in the United States in recent years, with residential prices in many regions reaching historic highs. The Federal Reserve has been continuously raising interest rates since March 2022, attempting to curb inflation through tightening policies, which has also brought some side effects. The commonly used 30-year fixed mortgage interest rate for housing loans in the United States has risen to over 7% [4]. An increase in interest rates will increase the loan burden on homebuyers and suppress some demand for home purchases. But at the beginning of the epidemic, some sellers had already locked in mortgage interest rates of 3% or lower, and they were unwilling to sell their homes. Therefore, according to statistics, the number of available properties on the market has decreased by more than 9%, a decrease of 45% compared to the beginning of the epidemic. And this situation stimulates the demand for new homes among homebuyers. In this situation, the large demand for rigid housing has greatly increased the volume of new home transactions in the United States, leading to a shortage of housing supply.

According to a paper by Goldman Sachs on the residential construction industry, when a country is in a period of high inflation, the best performance is achieved after risk adjustment with assets with similar weights, namely real estate, infrastructure, gold, and commodities, each accounting for 25%. Currently, the Federal Reserve may further raise interest rates [5]. Therefore, it is expected that the residential construction industry in the United States will continue to be a promising industry in the coming years.

3. SWOT Analysis of PHM

Table 1 shows the result of SWOT analysis of PHM.

3.1. Strengths

The United States, one of the world's largest residential construction markets, has enjoyed steady economic growth and a rising population. Even in the face of challenges such as the pandemic, demand remains strong and shows the resilience of the industry. At the same time, rapidly advancing construction technologies have increased efficiency and profit potential, while the diversification of the market has provided investors with a wide range of options.

3.1.1. Driven by Economic and Population Growth

The United States is also one of the largest residential construction markets in the world, and increasing net inflows have also helped stabilize the U.S. real estate construction market. For example, even in the face of the COVID-19 pandemic, its residential construction sector has not experienced much volatility. [6].

3.1.2. Dividends of Scientific and Technological Progress

In addition, rapid technological updates, and most importantly, updates in building materials, can help the industry quickly reduce costs. And the addition of digital intelligent furniture system has also made many construction-related industries have better development. This also provides investors with more flexible choice of investment objects and better returns.

3.1.3. Industry Diversification to Open up Investment Opportunities

Speaking of diversification, in fact, the products taking PHM as an example, from single-family homes to multi-family homes to villa real estate projects, are the investment targets of investors. And they can choose their own investment targets according to different investment budgets and risk appetite.

Table 1. SWOT Analysis

S	W
Driven by Economic and Population Growth	Macroeconomic Dependence
The Dividends of Scientific and Technological Progress	Initial Cost and Approval Complexity
Industry Diversification to Open up Investment Opportunities	
O	T
Opportunities Brought about by Technological Innovation	Interest Rate Fluctuations Increase Costs
Policy Support to Boost Investment Confidence	Supply Chain Risk

3.2. Weaknesses

The impact of the macroeconomic market on the residential construction industry cannot be ignored, and the vulnerability of this investment is most affected by the economic cycle and interest rate fluctuations. Moreover, many construction projects have high start-up capital, which means that they need to borrow, and the interest rate determines the financing cost. Once the project cannot be implemented as scheduled, it is likely to affect the return on investment of the project.

3.2.1. Macroeconomic Dependence

A macroeconomic downturn or rising interest rates in any country, not just the United States, could slow down activity in the region's housing market. Most typically, during the 2008 financial crisis, new home sales in the United States plummeted from a peak of 1.4 million units in 2005 to about 374,000 units in 2009, which also highlights the significant impact of the macroeconomic cycle on corporate investment in the housing construction industry [2].

3.2.2. Initial Cost and Approval Complexity

In addition, the high start-up costs and complex approval procedures for many projects of residential construction companies also pose investment difficulties. Any part of a company from land acquisition, planning and design to construction needs a lot of capital investment and time cost, and it is also subject to the strict policies and regulations of the United States. Once some aspects of the problem, it is likely to seriously affect the completion date of the entire project, and affect the return of investors.

3.3. Opportunities

The development opportunity of the U.S. residential construction industry lies in technological innovation and policy support. The application of emerging technologies, such as BIM and 3D printing, is also improving building efficiency and reducing costs. At the same time, the government's fiscal stimulus and preferential tax policies have brought investors clearer development prospects and growth confidence.

3.3.1. Opportunities Brought about by Technological Innovation

Technological innovations, especially in building information modeling (BIM), 3D printing, and smart home systems, can bring significant efficiency gains and cost savings to residential construction projects, making investors more optimistic about the sector's prospects. According to Statista, the projected cost reduction for the construction industry because of global technological reform could reach \$15 billion by 2025, reflecting the growing adoption and demand for the technology in the construction industry [7].

3.3.2. Policy Support to Boost Investment Confidence

In addition, the U.S. government has increased its support for residential construction and renovation projects in recent years, and many state governments offer loan assistance to low-income families. In addition, to encourage the concept of low-carbon and environmentally friendly building, the government also provides some tax incentives for green building projects. These policy measures also make our investment prospects in the sector clearer.

3.4. Threats

The US residential construction industry is also facing multiple threats, such as increased financing costs caused by rising interest rates, raw material shortages and price increases caused by disruptions in the logistics supply chain [8].

3.4.1. Interest Rate Fluctuations Increase Costs

Interest rates in the U.S. residential construction market have been very low, and this is one of the reasons for the rapid development of the U.S. residential construction market. However, recently, due to the Federal Reserve's interest rate hikes, many companies in the industry have seen an increase in costs [12]. On the other hand, the residential construction industry is also easily affected by the macro environment, so when the economy is in a downturn, the industry will also face challenges.

3.4.2. Supply Chain Risk

In addition, raw material supply chain disruptions may also be a new threat to investment in the industry in recent years. The COVID-19 pandemic in 2021-2022 caused disruptions to global supply chains, with sharply rising costs and delivery delays for construction materials becoming common. For example, U.S. lumber prices surged to all-time highs between spring 2020 and spring 2021, increasing the cost of construction projects.

4. Financial Analysis

According to the analysis of the Annual Gross Margin of these four companies, it was found that the overall annual gross profit margin of PulteGroup Co., Ltd. showed a trend of first increasing and then decreasing, slightly decreasing from 30.2% to 29.4% in 2023 (figure 1). This trend suggests that PHM may encounter some minor challenges in maintaining pricing power and managing costs in 2023 [9]. In addition, the decrease in gross profit margin is also since many supply chains costs that have just opened in 2023 have not fully recovered, and commodity prices, including steel and other products, have risen. In addition, due to the impact of rising interest rates, the decline in the company's profit margin may also be slightly affected by the overall weakening of demand in the housing market.

Compared to the Annual Gross Margin of the other three companies, PMH's Annual Gross Margin performs even better. Firstly, LENNAR's annual gross profit margin has fluctuated between 18% and 24% over the past four years. However, this still indicates that the company is facing certain challenges in terms of operational efficiency. This indicates that its cost control is unstable every year. For example, companies face uncertainty in selecting raw materials and constantly changing market demands. Therefore, as a diversified company, the volatility of LEN's gross profit margin also reflects the different performance requirements of each segmented market in the housing construction market. In some niche markets, higher costs are not required, while in others, higher costs and greater pressure are required.

Secondly, DHI's annual gross profit margin has shown a downward trend in 2023, although this indicates that DHI is more effective in purchasing construction raw materials, thereby saving some costs. On the other hand, the increase in the company's gross profit margin also means that DHI can sell its properties at a higher price, which is unfavorable in the fierce market competition.

Finally, Toll Brothers Limited (TOL) has shown an upward trend in its annual gross profit margin over the past four years. This is because in recent years, TOL's total revenue has decreased, but its costs have been continuously decreasing. This upward trend indicates that TOL has achieved certain success in controlling costs in recent years, effectively controlling costs has enabled it to gain greater profit margins. However, compared to PMH, although TOL effectively controls costs, its market expansion is relatively weak.

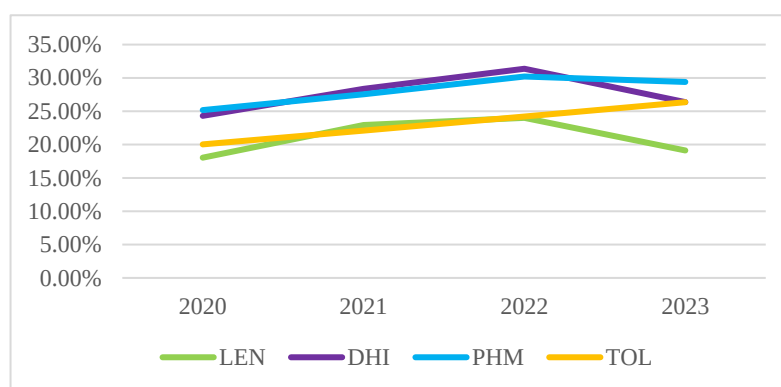


Figure 1. Annual Gross Margin

5. Valuation

For PHM, its financial performance shows that the company has shown certain advantages compared to other countries. Although it can be seen from the table 2, that Toll Brothers Inc.'s Current and Forward P/E Ratio is more advantageous compared to these companies, in terms of stock price, TOL's stock price is relatively cheaper compared to profitability. However, PHM's performance is more outstanding in terms of EPS Growth Rate and PEG Ratios. Especially for the PEG ratio, this indicator mainly reflects the valuation level of a company's stock price relative to its profit growth, while PHM's PEG is relatively low, indicating that the company has more investment value in the market [11].

Secondly, PHM also performs better in terms of gross profit margin compared to other companies, indicating that the company is more effective in controlling costs and generating revenue. Its higher gross profit margin than its competitors also indicates that PHM can retain more profits, thereby bringing more profits to investors and shareholders.

Therefore, based on these financial indicators, PHM is more competitive compared to its competitors, and its excellent performance can also attract more investors.

Table 2. Valuation Analysis

Company	Current P/E Ratio (TTM)	Forward P/E Ratio (NTM)	EPS Growth Rates	Gross Revenue Growth Rates	PEG Ratios
LENNAR (LEN)	12	11.4	5.10%	4.20%	2.36
D.R. Horton (DHI)	11.2	10.9	2.90%	1.30%	3.89
PulteGroup (PHM)	10.1	9.6	5.30%	5%	1.91
Toll Brothers (TOL)	9.3	8.9	4.80%	-0.80%	1.95

6. Conclusion

This paper provides investors with relevant investment advice by analyzing several representative companies in the residential construction industry in the United States. The analysis includes SWOT analysis, multi-dimensional financial indicator analysis, and the growth trend of the entire industry. According to financial analysis, PHM's earnings per share growth rate and revenue growth rate have maintained a high level in the industry, far exceeding its competitors. This indicates that the market demand and profitability of PMH company are high in the industry, which to some extent reflects the success and effectiveness of the company's strategy. The PEG ratio of PMH is relatively low, which also indicates that the market is relatively conservative about PHM's future growth potential and may underestimate its stock price. From this perspective, PMH company is a company with potential investment capabilities. Secondly, PHM's gross profit margin is also higher than the industry average, which indicates that the company has a high profit margin in fierce market competition and strong cost control ability, which is also a good guarantee for investors. Finally, PMH can actively respond to market changes, continuously innovate technology, and develop sustainable buildings. This also aligns its products with the overall trend of the future development of the residential construction market. This further enhances PHM's competitiveness and brings more growth opportunities.

Therefore, according to the analysis, although the residential construction industry in the United States is easily affected by global economic conditions and policy changes, PHM can maintain a good financial level and growth potential in complex market environments and competitive pressures. This paper suggests that investors choose PulteGroup Inc. (PHM) when investing in this industry. Of course, this paper also suggests that investors conduct further in-depth analysis of PHM, combining qualitative and quantitative indicator analysis, to construct a more balanced investment portfolio.

Although this report provides a relatively comprehensive fundamental analysis of PulteGroup Inc., it also has certain limitations. The report mainly focuses on the company's micro-financial indicators, and the analysis of macroeconomic trends, policy changes and industry technology developments are not in-depth enough. Secondly, the report does not provide a detailed technical analysis of the competitive situation of the market. Therefore, in the subsequent relevant studies, it is suggested that researchers expand the scope of analysis and combine more macroeconomic and technical trend data to obtain more comprehensive investment decision support.

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