

Comparison of Business Investment Value in Real Estate Industry

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Abstract: The global economy is in a downward trend due to the COVID-19 pandemic, the current war between regions, and worsening relations between countries. In 2023, China's leading real estate company, a pillar industry, will be unable to repay its debts. In the context of economic globalization, this paper will explore the impact of the real estate industry in the United States, analyze the investment value through several indicators, and analyze the data of four leading real estate enterprises in the United States, namely D.R.Horton, Lennar Corporation, LGI Homes and NVR. Through the calculation of EPS, P/E ratio, PEG ratio, revenue and EPS growth rate and GP/A ratio, these indicators are used to determine which company is the most valuable investment company among the leading enterprises in the US real estate industry. The research in this paper can not only identify the companies with the highest investment value, but also provide ideas for future research on other companies in other industries.

Keywords: Investment value analysis, Real estate industry, COVID-19 pandemic

1. Introduction

1.1. Research Background and Significance

In 2024, the global economy will experience a downward trend due to conflicts between countries and regions that began in 2023, and the COVID-19 pandemic that has lasted for several years. The real estate industry is already a sunset industry, affected by the increasingly saturated market, the overall downward trend, coupled with the downward trend of the global economy, the real estate industry is in a disadvantageous position.

In 2023, China's leading real estate companies Country Garden and Evergrande Group are collective thunderstorms, causing a great impact on China's economy. In the context of economic globalization, the economy of the United States has also been deeply affected, resulting in the bankruptcy of such banks as First Union Bank and Silicon Valley Bank and cryptocurrency Bank in 2023. The trade war waged by the United States has also unsettled international trade for several years. All these factors indicate that the complexity, severity and uncertainty of the international economic environment are on the rise in recent years.

In this case, this paper would like to explore which of the leading real estate companies in the United States has higher investment value and lower risk.

Through searching the leading real estate companies in the United States, this paper selects the top ten real estate companies whose P/E ratio is greater than 10 and less than 25, and selects four companies, namely NVR, D.R. Horton, Lennar corporation and LGI Homes. Use their data as the basis for investment value analysis. To explore which American real estate is more investment value at the moment.

The value of this paper lies in identifying the American real estate investment companies with more investment value among these four companies.

1.2. Literature Review

At present, there have been many analyses on the investment value of enterprises, most of which are based on various indexes commonly used in the financial industry. The index cited in this paper contains A special indicator, GP/A index, that is, the ratio of gross profit to total assets, which was proposed by Novy-Marx in 2013. The higher the better [1]. First of all, gross profit represents the most real economic production capacity and is the result of the efforts of all the investors (creditors and shareholders) of the whole enterprise. Second, gross profit includes research and development investment and advertising investment and other expenses, these expenses are actually conducive to the future profit of the enterprise, so it should not be deducted. Third, gross profits are generally cleaner and purer - the further down the income statement, the more manipulated accounts are likely to be and the more likely they are to be untrue. Although Ray Ball claimed in his paper that the ratio of net profit to total assets can better reflect the value of an enterprise, this paper still adopts the Novy-Marx view and uses the GP/A ratio as an indicator [1,2].

At the same time, the year-on-year growth of income is also very important for enterprises to maintain investment value, which is also cited in the papers of Feng Kai, Hu Zhangyi, etc [3,4]. The increase of the index will guarantee the upward trend of the stock price of enterprises, and the positive trend of the year-on-year growth of corporate income will give investors' confidence and keep the stock price rising.

Wang Chaofa et al. pointed out that traditional enterprise investment value refers to the value of enterprise assets for specific investors or a certain type of investors with clear investment objectives [5]. The intrinsic investment value of the enterprise is usually evaluated by the stock value of the enterprise. Therefore, stock value is also included in the data used in this paper as one of the evaluation indicators.

Yuan Hongli proposed in her research on BYD Auto Company that the common methods of relative valuation include price-earnings ratio and price-book ratio [6]. Nathan pointed out in his article that the price-earnings ratio is more commonly used than the price-book ratio [7]. Lajevardi also pointed out in his article that the coefficient of determination of P/E ratio is high [8]. Therefore, this paper adopts the P/E ratio method, the P/E ratio is included as the evaluation index, the P/E ratio calculation is relatively simple, and can reflect the value of the enterprise. In addition, Meng Kaiyue also pointed out that the price-earnings ratio method is suitable for conditions with relatively mature, comparable listed companies, and reasonable pricing of the above assets at an average level, and China's asset market is not mature and suitable for use [9]. Therefore, it is suitable for the analysis of mature companies in the US asset market.

PEG ratio is always a ratio commonly used by financial practitioners such as Wall Street, which is used to judge whether a stock is correctly evaluated. Generally speaking, the PEG ratio should be between 0.5 and 1, and the closer it is to 1, the closer its value is to the real value. Estrada pointed out in the article, PEG ratio can evaluate whether the growth of P/E ratio is normal [10]. Therefore, PEG ratio is also used as one of the evaluation indicators in this paper.

1.3. Research Contents

The research idea of this paper is to analyze the investment value based on the enterprise data from Nazdaq and Estimilze, and then determine the most valuable enterprises among them.

2. Company Information

2.1. D.R. Horton

D.R. Horton Corporation is one of the largest home builders in the United States, founded in 1978 and headquartered in Texas. D.R. Horton has enjoyed consistent growth and profitability since its inception. The company has expanded rapidly through acquisitions and alliances and now operates in several states and cities across the United States. The success of Horton Company is largely due to its creation of market segmentation strategy, as well as the accurate positioning of middle-income consumer groups and active and effective cost control.

In addition to its residential construction business, D.R. Horton develops multi-family condominiums and rental properties, and provides diversified services to customers including mortgage financing, title services, and insurance agency services. The company's products and services are designed to face the needs of different customers, providing a high-quality living environment and a comprehensive home purchase experience.

D.R. Horton also focuses on sustainability and environmental protection, and is committed to reducing the environmental impact of real estate development. The company has adopted a number of environmental measures, such as the use of renewable energy and the promotion of green buildings, to improve the environmental performance and sustainability of construction projects.

In summary, D.R. Horton is one of the leaders in the residential construction sector in the United States, recognized for its continued growth, innovative products and services, and environmental philosophy.

2.2. Lennar Corporation

Lennar Corporation (LEN) is an American real estate company founded in 1954 and headquartered in Miami, Florida. Lennar Corporation and its subsidiaries operate primarily under the Lennar Corporation brand in the United States and provide services through multiple market segments. These include Homebuilding East, Homebuilding Central, Homebuilding Texas, Homebuilding West, Financial Services, Multifamily, and more.

Lennar's residential construction business covers the construction and sale of single family and detached homes, the purchase, development and sale of residential land, and the development, construction and management of multi-family rental properties. In addition to its home construction business, Lennar also provides residential mortgage financing, title insurance and transfer services to home buyers and others, as well as originating and selling securitized commercial mortgages. In addition, the company also participates in fund investment activities.

Lennar Corporation's customers include first-time home buyers, moving and active adults, and buyers seeking luxury homes. The company's mission is to build better homes that Lennar Corporation's customers can cherish for a lifetime. They focus on being "better," and do not confuse the difference between prosperity and activity, or between size and quality.

Since being listed on the New York Stock Exchange in 1971, Lennar Corporation has grown into a national company with operations throughout the United States. With its outstanding construction quality, comprehensive service and continuous innovation, Lennar Corporation is one of the leaders in the real estate industry in the United States.

2.3. LGI Homes

LGI Homes, Inc. is an American company specializing in basic home design and construction, founded on July 9, 2013 and headquartered in Delaware. The company has a broad market presence in Texas, Arizona, Florida and Georgia and is one of the fastest growing real estate companies in the United States.

LGI Homes' business model is to cleverly build and sell high quality base units in the right locations. These units include carefully designed floor plans that show the full face of the house and are very attractive to consumers. By providing affordable homes in affordable locations, combined with sophisticated marketing, excellent customer service and an efficient construction process, the company is committed to converting apartment and house renters into homeowners.

In addition to traditional detached Homes and townhouses, LGI Homes sells mobile Homes under the LGI Homes brand, as well as a luxury line of homes sold under the Terrata Homes brand. In each community, LGI Homes offers a selection of units and offers options including upgraded features such as granite countertops, fixtures and tiled floors to meet the needs of different customers.

LGI Homes has seven operating segments, including the Central, Midwest, Southeast, Mid-Atlantic, Northwest, West, and Florida segments, which are aggregated into five qualified segments. Most of the company's revenue comes from the central sector.

In short, LGI Homes is one of the leaders in the U.S. real estate industry with its unique business model, extensive product line and efficient service.

2.4. NVR

NVR, Inc. (NVR, Inc.) is a Virginia corporation founded in 1980 as NVHomes LLC. The company is one of the largest real estate company in the United States, specializing in the construction and sale of villas, townhouses, apartments, and other buildings built on a pre-sale basis.

In addition to its residential construction business, NVR also operates a bank mortgage business and a logo design business to better serve its clients engaged in real estate development business. The company directly leads the housing construction business, while the bank's mortgage business is primarily operated through its wholly-owned subsidiary, NVR Mortgage Corporation.

NVR operates primarily in the eastern United States, including the nation's capital, Washington, D.C., and 14 states. With its outstanding performance in the residential construction sector, NVR has been included in the Fortune 500 list several times, demonstrating its strong strength and continued growth potential.

Overall, NVR is a leading real estate company recognized for its high-quality residential products, diversified services, and strong market competitiveness.

3. Comparative analysis

3.1. The Financial Information of Enterprises

The data of these enterprises come from Nasdaq and Estimize. And the calculated results are shown in Table 1.

Table 1: Enterprise financial data

	D.R. Horton	Lennar Corporation	LGI Homes	NVR
Ticker symbol	DHI	LEN	LGIH	NVR
Industry type	Real estate industry	Real estate industry	Real estate industry	Real estate industry
price	151.71	\$159.90	\$98.36	\$7,817.98
TTM EPS	13.84	13.76	8.42	463.25
NTM EPS	14.05	14.24	9.32	494.49
EPS growth rate	1.52%	3.49%	10.69%	6.74%
Revenue growth rate	1.12%	3.46%	13.07%	7.77%
TTM P/E	10.96	11.62	11.68	16.88
NTM P/E	10.80	11.23	10.55	15.81
PEG	7.22	3.33	1.09	2.50
GP/A	28.70%	16.7%	20.7%	50.6%

As the Table1 shows, NVR has the best numbers in TTM EPS, NTM EPS, TTM P/E ratio, NTM P/E ratio, and GP/A Index, while Lennar corporation has the best numbers in EPS and Revenue growth rates. NVR has the second best data in terms of growth rate.

EPS stands for Earnings Per Share, TTM and NTM stands for Trailing Twelve Months and Next Twelve Months. The higher the EPS, the better, and the P/E ratio should be between 10-25. PEG stands for Price/Earnings to Growth ratio, the PEG ratio should be between 0.5-1. The closer it is to 1, the closer it is to the true value of the stock, and the more than 1, the overvalued stock. GP/A stands for Gross profit/Total asset. the higher the better. NVR has advantages in many aspects, but among all four companies, there are still other companies that have advantages over NVR, so more analysis is needed in this paper.

3.2. Compare the NVR with D.R. Horton

This article needs to include additional information when comparing the data of the two companies. The Annual gross profit margin and the Annual net profit margin. They are presented in Table 2 and Table 3.

Table 2: Annual gross profit margin of D.R. Horton and NVR

Annual gross profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
D.R. Horton	26.37%	31.37%	28.35%	24.31%
NVR	25.92%	27.21%	24.44%	21.22%

Table 3: Annual net profit margin of D.R. Horton and NVR

Annual net profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
D.R. Horton	13.38%	17.50%	15.03%	11.69%
NVR	16.72%	16.39%	13.82%	11.96%

According to the data in Tables 1-3, it can be found that D.R. Horton is stronger than NVR in the growth rate of net interest rate and gross profit rate, but weaker than NVR in other aspects. Therefore, NVR is undoubtedly more worth investing than D.R. Horton. D.R. Horton's revenue growth rate and EPS growth rate are too low, which makes its PEG ratio too high, 7.22. It should strengthen its

operating ability to give investors confidence that the company's stock can maintain growth. So, there is no doubt that the NVR will be preferred than D.R. Horton.

3.3. Compare the NVR with Lennar Corporation

According to the data in table1 and tables 4-5, it can be found that Lennar corporation is weaker than NVR in any aspect. Therefore, NVR is undoubtedly more worthwhile investment than Lennar corporation. Lennar corporation's primary problem is that its GP/A ratio is too low, at 16.7%, which will make investors doubt its profitability and should increase its investment in real estate. So, there is no doubt that the NVR will be preferred than Lennar Corporation.

Table 4: Annual gross profit margin of Lennar Corporation and NVR

Annual gross profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
Lennar	19.11%	24.01%	22.93%	18.04%
NVR	25.92%	27.21%	24.44%	21.22%

Table 5: Annual net profit margin of Lennar Corporation and NVR

Annual net profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
lennar	11.50%	13.70%	16.33%	10.96%
NVR	16.72%	16.39%	13.82%	11.96%

3.4. Compare the NVR with LGI Homes

Compare to the LGI Homes, LGI Homes has better growth rate in both EPS and Revenue. And its PEG is close to 1, which means its information is closer to the truth, that's the greatest advantage of LGI Homes. But NVR have 30% points higher GP/A ratio compared to LGI Homes, which is much better. What's more, in recent 4 years the real estate industry is heavily affected by the Covid-19, but for gross or net profit margin, NVR is stronger than the data before. Yet the LGI Homes is going down. Which means NVR have more ability to face the challenge and make profit for its inventors. LGI Homes has A very good PEG ratio, but its EPS and GP/A are at a low level. Low EPS will lead to lower returns for investors, which is extremely unfavorable. Pay more attention to this. So, the NVR will be preferred than LGI Homes.

Table 6: Annual gross profit margin of LGI Homes and NVR

Annual gross profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
LGI Homes	22.99%	28.06%	26.82%	25.47%
NVR	25.92%	27.21%	24.44%	21.22%

Table 7: Annual net profit margin of LGI Homes and NVR

Annual net profit margin	2024/1/31	2023/1/31	2022/1/31	2021/1/31
LGI Homes	8.45%	14.17%	14.09%	13.68%
NVR	16.72%	16.39%	13.82%	11.96%

4. Conclusion

NVR has the best EPS and P/E ratio among the four companies, which proves that its stock will bring higher value to its investors; In addition, its GP/A index is also the best of the four companies, and NVR's net profit and gross profit have been growing, even during the four years of the new Pavilion

epidemic, which has hit the real estate industry hard. This proves that the company has considerable experience and resilience to deal with crisis times, and can still provide benefits to its investors even in bad years, so NVR is undoubtedly the best investment choice.

However, NVR is still a particular problem. First of all, its PEG ratio is too high, which is 2.5, much higher than 1. NVR should increase EPS growth rate and make its growth rate correspond to P/E ratio, so as to reduce PEG ratio to normal level. Secondly, due to the influence of current international relations and the inference of NVR's 10k documents, the company is currently facing supply chain and labor costs, both of which lead to the increase of its costs, because cheap materials and workers used to come from China, but the current policy of the US government is making it difficult for both to flow to the United States. The index used in this study can also be applied to the investment value research of other industries, such as construction industry, which is closely related to real estate industry.

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