

Investment Analysis of the Chinese Game Industry – A Case Study of miHoYo

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Abstract. China's economy has experienced significant growth, presenting abundant opportunities in various sectors. Among these, the game industry has emerged as a promising investment avenue. This paper examines the application of value investment theory in the context of the Chinese game industry, with a detailed case study of miHoYo. The study employs established value assessment and risk management methods to analyze the development, competitive advantages, and potential risks associated with game companies. It reviews historical industry trends, current business models, profit structures, investment conditions, and the legal environment that shape market dynamics in China. By scrutinizing miHoYo's evolution from a startup to a global enterprise, the research highlights key success factors, including technological innovation, robust intellectual property, and effective market expansion strategies. Moreover, the paper identifies challenges such as fierce market competition, technological bottlenecks, and regulatory uncertainties. In addition, this research emphasizes the importance of integrating policy guidance with strategic investments, suggesting that investors consider both established industry giants and promising emerging firms. This paper aims to contribute to academic discussions on value investment and industry analysis in the digital economy. These insights serve as a foundation for future research and informed investment decision-making.

1 Introduction

The digital economy has transformed traditional business models and investment strategies across various sectors, and the game industry stands out as one of the most dynamic and rapidly evolving segments. Over the past few decades, advancements in technology, increased internet penetration, and the widespread adoption of smartphones have accelerated the growth of the gaming market. In China, the game industry has not only expanded in size but has also experienced qualitative changes in its structure and innovation capabilities. This evolution has led to new investment opportunities that are attracting both domestic and international investors. As the Chinese market continues to mature, understanding the mechanisms behind the growth of the game industry has become essential for scholars, policymakers, and investors alike.

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This study adopts the value investment theory as the primary analytical framework for assessing the investment potential of companies within the Chinese game industry. Value investment theory, a tested approach in financial analysis, emphasizes the importance of evaluating a company's intrinsic value by carefully examining its financial statements, growth prospects, and underlying risks. Although traditionally applied to mature industries, its use in the context of the rapidly changing game industry offers unique insights into the sustainability and future prospects of game companies.

Historically, the game industry in China has undergone several distinct phases. In its early years, the market was dominated by foreign arcade games and basic gaming consoles. As the industry matured, domestic developers began to produce self-developed games, marking a transition toward indigenous innovation. The subsequent phases saw the rise of online gaming and, later, mobile gaming. Each transition reflects technological advancements and shifts in consumer behavior. These evolutionary steps have expanded the market size while introducing challenges such as regulatory changes and intensified competition.

Among the numerous companies operating in this industry, miHoYo has emerged as a prime example of rapid growth and innovation. Founded in the early 2010s, miHoYo transformed from a small startup into an internationally recognized developer with a diversified portfolio. Its journey is marked by a strong commitment to technological research, creative content development, and strategic market expansion. This paper uses miHoYo as a case study to provide insights into the broader trends shaping the Chinese game industry.

A central theme of this research is the integration of traditional value investment methods with modern market analysis techniques. While conventional financial metrics remain important, the unique characteristics of the game industry necessitate the inclusion of factors such as technological innovation, intellectual property development, and user engagement. Moreover, the influence of legal and regulatory frameworks is considered, given their significant role in shaping market dynamics. By combining quantitative and qualitative approaches, the study offers a more nuanced assessment of both the opportunities and risks inherent in investing in game companies. Investors and analysts must consider the historical context alongside current trends to make informed decisions.

2 An overview of investment value evaluation

An assets-and-earnings based valuation method is for valuing stocks, emphasizing the determination of a company's intrinsic value through analysis of its balance sheet and income statement [1]. A firm's value is independent of its capital structure, which provides a theoretical basis for later valuation models [2]. Several models are introduced as tools for investors, including the discounted cash flow, relative valuation, and real option methods [3].

Valuing a company essentially means estimating its stock value. The commonly used methods include the discounted cash flow model, the price multiple models, and the asset-based model. The three main methods are the Discounted Cash Flow (DCF) model, the Price Multiple models, and the Asset-Based model. The DCF model is based on fundamental analysis and uses present value discounting, a core financial theory concept. It is the most widely accepted model. However, its valuation depends on forecasts, which may not always match reality, and small changes in assumptions can lead to significant variations. The Price Multiple model (Comparable Method) is easy to use, widely accepted, and allows comparisons across different periods and companies. It can also be used when earnings per share are negative. However, it relies on past data, making it less useful for future predictions. It does not work well for companies of different sizes or industries and is influenced by economic cycles. International comparisons can be difficult due to accounting differences, and negative denominators make results meaningless. The Price Multiple model (Fundamental Analysis Method) has a strong financial theory base. However, it is highly

sensitive to parameter changes, making results uncertain. The Asset-Based model is simple and suitable for companies with minimal intangible assets, especially in liquidation or non-listed firms. However, fair values may differ from book values, and it is not suitable for companies with high intangible assets. Inflation can also make valuations harder. Each model has its use case, and the right choice depends on the company's nature and the purpose of valuation.

Risk assessment is essential in value investing. Modern Portfolio Theory uses variance and covariance to quantify risk [4]. Based on this, Capital Asset Pricing Model is built to link systematic risk with expected return [5]. Further developed the Value at Risk method assesses potential losses at a given confidence level [6]. A risk assessment approach incorporating scenario analysis and stress testing is introduced to identify and respond to various risks [7]. ALL these methods together allow investors to evaluate potential returns and the likelihood of adverse events. In the fast-changing game industry, understanding both internal financial stability and external market volatility is crucial for effective risk management.

3 An overview of Chinese game industry

3.1 Development of Chinese game industry

The Germination Stage (late 1980s–early 1990s) began with China's economic reform and the entry of arcade games and Nintendo consoles like the Family Computer. Arcade halls dominated, with hits like Street Fighter and The King of Fighters. At this stage, China mainly imitated foreign games due to weak development capabilities, talent shortages, and unclear industry policies. Despite technical limitations, this phase laid the foundation for future growth.

The Start-up Stage (mid-1990s–2000) saw China's first self-developed games. In 1994, Yang Nanzheng and Beijing Golden Disc Electronics launched Eagle Commando, marking the birth of China's game industry. In 1996, Qiu Bojun developed The Revelation of Zhongguancun, the first domestic commercial game. These early projects proved that original game development was possible in China.

The Online Game Stage (2000–2012) emerged with the rise of the internet. Companies like Shanda, NetEase, and Tencent launched games such as Legend, Fantasy Westward Journey, CrossFire, and League of Legends. Domestic companies shifted from agency operations to independent development. New business models, like prepaid cards, fueled industry growth.

The Mobile Game Stage (2013–present) began with the rise of smartphones, marking 2013 as the first year of mobile games. The market grew from 12.82 billion yuan in 2013 to 81.92 billion yuan in 2016, a 539% increase. Mobile games overtook client-side games, leading to a Tencent-NetEase duopoly. The 2015 launch of Honor of Kings revolutionized mobile gaming, followed by nationwide hits like Fantasy Westward Journey Mobile, Onmyoji, and Peace Elite. International successes such as Genshin Impact and Rise of Kingdoms further cemented China's role in the global market.

3.2 Business and profit models

There are several business models in the Chinese game industry. The agency operation model refers to a business model where a game company obtains the rights to a game from a developer through investment-based agency or revenue sharing. It then leverages its market sales and expansion capabilities to promote the game. The self-development plus agency model involves both in-house game development and introducing games from other

companies. By utilizing different resources within the company, this model seeks to maximize profits. Many major domestic companies, such as Tencent Games and NetEase Games, have adopted it as they shift toward independent development. The independent intellectual property model is used by companies that develop or acquire game IP and operate games themselves or collaborate through technology transfer and joint operations. Many long-established enterprises aim for this model, while most emerging companies own and operate their IP. A notable example is miHoYo, whose Genshin Impact and Honkai series have achieved global success. Other models, like the platform portal and telecom operation models, have faded due to a lack of technical or talent advantages. The ability of a company to adjust its business model can be an important indicator of its future growth [8].

Game companies mainly use the following profit models. The in-app purchase model is the most common, allowing players to buy virtual items, character skins, or season passes. Most free-to-play games rely on this model to attract a large player base while monetizing engaged users. The direct purchase model is a traditional approach where players pay a one-time fee to own a game. From physical discs to digital downloads, many independent studios use this model. Its advantage is a one-time payment without ongoing operational costs, but revenue potential is capped. The advertising placement model generates revenue by embedding ads in games, often in casual games like Candy Crush Saga. Although free to play, players encounter non-skippable ads at certain points. The IP derivatives model monetizes popular game content through related physical products. For example, collaboration between Black Myth: Wukong and Shanxi Cultural and Tourism has boosted tourism revenue in Shanxi, China.

3.3 Investment in Chinese game industry

According to the 2024 China Game Industry Report disclosed at the 2024 Game Industry Conference, the actual sales revenue of the Chinese game market was 325.783 billion yuan, and the number of game users in China was 674 million [9]. Mobile games in the domestic market accounted for 73.12% of the total market, maintaining the lead. Due to the birth of hit products, the console market increased significantly, reaching 4.48 billion yuan. The mini-game market has soared for two consecutive years [9]. In 2024, its revenue was 39.836 billion yuan, a year-on-year increase of 99.18% [9]. Among them, in-game purchases generated 27.364 billion yuan in revenue, accounting for 68.7%, while advertising monetization generated 12.472 billion yuan in revenue, accounting for 31.3% [9]. The report pointed out that the game market is still in a stage of rapid development. According to the incomplete statistics of reporters from China Business Journal, as of February 13, 2025, at least 29 listed game companies disclosed their 2024 performance forecasts [10]. Among the 10 companies that predicted profits, 5 had an upward profit growth rate. In addition, 19 companies predicted losses, and 11 of them turned from profit to loss [10]. The specific reason is likely that the market pattern of the game industry is still dominated by Tencent and NetEase, and the remaining listed game companies lack sufficient competitiveness. Moreover, emerging game enterprises that have emerged suddenly are not inclined to raise funds through listing.

This research finds that the strong growth in certain segments of the industry makes it an attractive area for investment. Even though large companies dominate the market, the high growth rates in mobile and mini games show that there are many opportunities for companies with innovative products and effective business models. The rapid expansion of the user base and the increasing sophistication of game technology both contribute to the positive investment environment. Investors should pay close attention to market trends, as the growth of user numbers and revenue streams are important indicators of a company's future value. This study considers that the investment status of the game industry is influenced not only by current performance but also by future potential. The ability to capture new market

segments, innovate continuously, and adapt to regulatory changes will be key factors in assessing long-term investment value.

3.4 Laws and regulations

Domestic game enterprises in China must navigate various legal and regulatory challenges. One key issue is the publication and operation of online games. Online games must obtain publication licenses from authorities before release to ensure legitimacy and prevent harmful content. Operators also need qualifications, such as the Network Culture Business License, to run online games.

Game content review is another major concern. Game content must comply with social ethics and legal requirements, avoiding elements like violence, pornography, and gambling. Authorities conduct strict reviews, and developers must ensure originality while preventing copyright infringement. Operators also need to monitor user-generated content to avoid legal risks.

Protecting minors is a regulatory priority. To prevent gaming addiction, authorities have imposed restrictions on playtime for minors. Operators must comply to safeguard their well-being. Regulations also mandate protections for in-game spending, such as setting consumption limits and offering refunds to protect minors' rights.

Laws and regulations shape the game industry by maintaining fairness and protecting consumers. However, strict rules can also slow innovation and market growth. Legal and regulatory issues are key factors in assessing game companies' value and risks. Investors must consider regulatory uncertainties when evaluating potential. As policies change rapidly, monitoring government updates is essential.

Moreover, legal compliance impacts company operations. The need to secure licenses, adhere to content guidelines, and implement consumer protections means that companies must invest in compliance. This additional cost is a factor that value investors need to consider when assessing overall profitability and future growth. The balance between regulation and innovation is a continuing challenge in the Chinese game industry.

4 Case study of miHoYo

4.1 Development of miHoYo

MiHoYo was founded in 2011 and subsequently launched the Honkai Impact series of games. After the launch of Honkai Impact 3rd, it applied for listing but failed due to the insufficient risk-resistance ability of a single IP. In 2020, it launched the product Tears of Themis. Although Genshin Impact, launched in the second half of 2020, faced large-scale criticism before and in the initial stage of its launch, it achieved remarkable commercial results and became the first self-developed all-platform game in China. Six months after its launch, it earned 1 billion US dollars only on the mobile side. In 2024, its revenue reached 5 billion US dollars. Both the client-side and console-side versions have won awards that prove high sales, such as the Sony PlayStation Excellent Award and the Epic Legendary Evaluation. The Honkai: Star Rail launched in 2023 and the product Zenless Zone Zero launched in 2024 have also achieved brilliant commercial results, enabling miHoYo to firmly rank third in terms of mobile-side revenue among Chinese game companies.

The growth of miHoYo from a small company to a major player in the game industry is impressive. This research finds that miHoYo has shown strong innovation and risk-taking ability in launching multiple successful game titles. The company has adapted well to market changes and met the evolving demands of players. Its ability to consistently produce high-

quality game content and invest in new technologies has been a key factor in its rapid growth. This case study demonstrates that strong technical capability and creative vision are essential for success in the competitive game industry. In addition, miHoYo has managed to expand its market beyond China. With more than 50% of its revenue coming from overseas markets, the company shows that it can compete on a global scale. This international expansion has been achieved through the development of games that appeal to a wide range of cultures and languages. The success of Genshin Impact has proved that a Chinese game can become a worldwide phenomenon. Such international achievements add significant weight to the company's value assessment and investment appeal.

4.2 Competitors and core competitiveness

As a game enterprise that has grown in recent years, miHoYo mainly faces competition from established game enterprises such as Tencent and NetEase in the game industry. These companies also control their own publicity channels and many resources in other industries, which is a challenge for all enterprises with games as their main business. Secondly, other game companies such as Century Huatong, Perfect World, and 37 Interactive Entertainment, which have established themselves in the game industry, as well as emerging game companies and game studios, any product - based game company may become miHoYo's competitor.

The core competitiveness of miHoYo lies in several areas. One of the most important is its technical research and development capability. The global popularity of miHoYo's Genshin Impact is inseparable from its excellent engine optimization capabilities. Cai Haoyu, one of the founders, mentioned in 2013 when answering netizens' questions "Using an engine that a game company is not familiar with is the cause of failure for many games. The Unity engine has extremely strong cross-platform capabilities, but its underlying code needs to be rewritten." MiHoYo's investment in the Unity engine shows that its technical capabilities have always been at the forefront of the industry. In 2020, it achieved the feat of the first all-platform launch of a Chinese game. At the same time, it also vigorously develops new technologies such as cloud gaming. Since the launch of Cloud Genshin Impact, miHoYo's new games will all have cloud versions, allowing players to experience console-level graphics at a very low price and in a convenient way on low-performance devices. Its shareholding in the well-known cloud gaming service provider WeLink Era has laid a solid foundation for the future development of its cloud gaming.

Another key area of strength of miHoYo is game content. After the great success of miHoYo's product Genshin Impact, founder Liu Wei once said, "We don't think what we are making is an animated game. We prefer to call it content-based game, similar to American TV dramas." From this and the subsequent operation ideas of miHoYo's products, its product's business logic is different from that of other games on the market. It aims to tell a good story rather than achieve higher commercial performance. At the same time, it also supports various derivative creations of games, such as holding game concerts and miHoYo exhibitions, and pays attention to IP development. From the latest three products Genshin Impact, Honkai: Star Rail, and Zenless Zone Zero, although they are open-world, turn-based, and action games respectively, each product has its own game style and has received praise from the player community.

The strong IP construction has helped miHoYo to build a loyal fan base and create additional revenue streams. MiHoYo's products have many officially produced peripheral products, ranging from small badges to large scale figures. Each game also has an official bonus mechanism for highly praised game derivative works. After years of cultivation, the game IPs of miHoYo have considerable value. During the Double Eleven shopping event in 2024, miHoYo's flagship store ranked first in the trendy toys category, with revenue

exceeding 100 million yuan. A collaboration between Genshin Impact and Wanda Cinemas also generated tens of millions of yuan in revenue. These are the benefits of its IP construction and the recognition of its IP by consumers. These achievements show that miHoYo has built a unique competitive position in the market.

In summary, miHoYo's core competitiveness comes from its technical R&D capability, its focus on creating engaging game content, and its strong IP construction. These strengths allow the company to compete effectively against larger competitors. This research finds that the ability to innovate and build valuable intellectual property is a key factor for sustained growth in the game industry.

4.3 Value assessment

Evaluating the value of miHoYo is challenging because the company is not listed on the stock market. Since it is an unlisted company, this paper collects some insights from various reports and third-party data from statistical agencies. The official media *Guangming Daily* once reported that miHoYo's main business revenue and net profit in 2022 were 27.34 billion yuan and 16.145 billion yuan respectively, with overseas revenue accounting for more than 50%. By multiplying the net profit of miHoYo by the price-earnings ratios of some currently listed game companies, this study can obtain a rough valuation. For example, the price-earnings ratio of 37 Interactive Entertainment, a game company listed on the A share market, is around 15, and that of Gibit Networks is around 18. Based on these figures, the valuation of miHoYo is estimated to be between 242.175 billion yuan and 290.61 billion yuan.

In addition to financial figures, miHoYo has built significant intangible assets. For the value of game related companies, it is difficult to evaluate their technological value and the value of intangible assets. MiHoYo has nearly 500 patents, has composed hundreds of pieces of music and songs for its games, has developed and put into use the Glosa large language model, and has the IP value of its games. These intangible assets contribute greatly to the company's overall value. The strength of its game IP and the potential for market expansion through related physical products further increase its value. Investors who follow value investment theories should consider both the current financial performance and the future growth potential that comes from technological innovation and strong brand recognition.

4.4 Risk assessment

For emerging companies like miHoYo, several risks must be considered. One major risk is the intense competition from large, well-established companies. The Chinese game industry has been developing since the 1990s. By the 2020s, the leading positions in the industry have been basically stabilized. Tencent and NetEase control channels other than games and have other businesses. Any emerging game company will inevitably face competition from them. At the same time, many peers will also produce products to compete for market share. To deal with this kind of competition, one can only continuously deepen the advantages of one's own products to avoid the competition of large companies.

Another risk comes from rapid changes in market trends. In the Internet era, game products, with the spread of new media, will form a wave. The formation of this wave is almost unpredictable. Some events happen to come together to form an effect similar to the Swiss cheese model, making a certain type of game a highly sought-after product. In the era of the Internet, consumer preferences can change very quickly. The unpredictable nature of trends means that even a successful game can lose its appeal. For enterprises that do not control the publicity channels, it is very difficult to influence the public opinion field, especially for companies like miHoYo, which main business is shipping game content.

Competition from other entertainment industries is also a risk. Since 2020, the rise of short videos has greatly affected the amount of time people spend on traditional games. Short videos and mini games offer quick, stimulating experiences that can draw users away from longer, more involved games. In an era where entertainment options are many, competition is fierce.

5 Conclusion

The Chinese game industry has experienced a remarkable transformation since the reform and opening-up policy, evolving from a slow start into a vibrant and rapidly developing sector. This study has provided an in-depth analysis of the industry, focusing on the application of value investment theory and using miHoYo as a representative case. Through a comprehensive examination of the historical evolution, business models, profit models, investment status, and regulatory environment, this research has shed light on the critical factors that determine the investment value of game companies in China.

The analysis indicates that the success of a game company is not solely determined by its current financial performance, but also by its ability to innovate, adapt to technological advancements, and manage regulatory risks. The case of miHoYo illustrates how a company can leverage strong technical research and development capabilities, effective content creation, and strategic market expansion to achieve both domestic and international success. The study highlights that robust risk assessment, combined with thorough value evaluation, is essential for identifying companies with sustainable growth potential in a competitive market.

Investors seeking to enter the game industry should consider a diversified approach. Leading enterprises such as Tencent and NetEase offer stability, yet opportunities also exist in smaller and emerging firms that are well positioned to capitalize on market trends. It is important that investment decisions are guided by an understanding of both quantitative financial metrics and qualitative factors, such as innovation capability, market positioning, and regulatory compliance. Integrating policy guidance and cultural elements into game development can further enhance a company's competitive advantage, as demonstrated by the increasing emphasis on promoting Chinese cultural values in game content.

Furthermore, this study emphasizes that the rapid changes in technology and consumer behavior require continuous monitoring and adaptation. The convergence of gaming with emerging technologies, such as artificial intelligence and cloud computing, as well as integration with other entertainment sectors, is creating new avenues for revenue generation and market expansion. As such, investors must remain vigilant to shifts in the industry landscape and be prepared to adjust their strategies accordingly.

In summary, the findings of this research contribute to a better understanding of the investment dynamics in the Chinese game industry. By combining traditional value investment theory with a detailed case study of miHoYo, this paper provides a balanced perspective on the opportunities and challenges in this sector. The future success of game companies will depend on their ability to innovate, adapt to regulatory changes, and effectively manage risks. In conclusion, strategic investment in the game industry requires a multifaceted approach, integrating rigorous financial analysis with a deep understanding of industry specific factors. As the market continues to evolve, the lessons drawn from the case of miHoYo will remain relevant for guiding future investment decisions and fostering sustainable growth in the digital economy. These findings underscore the importance of adopting a balanced investment strategy which weighs rewards against inherent risks. Future research should continue to explore trends and refine investment approaches in this industry.

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