

Enterprise Ecological Strategic Investment Under the New Situation of Global Economy

Take Xiaomi Group as an example

Ruizhao Zhang*

Baotou No.81 High School, Baotou, China

* Corresponding author: zhym@sdu.edu.cn

Abstract. In recent years, great changes have taken place in the international political and economic situation. Many enterprises are affected by the overall economic environment and face many risks and worries in enterprise operation and corporate governance. Not only that, many medium-sized and large enterprises are also facing new challenges in industrial upgrading and consumer goods manufacturing reform. This study mainly focuses on the corporate ecological strategic investment under the development and change of global economic environment in recent years. The author chooses Xiaomi as a case company, analyzes its deployment and benefits of ecological strategic investment, and summarizes the plan suitable for the current enterprise strategic investment. These programs can help enterprises improve their core competitiveness, so as to present a stable operating situation in the rapidly changing market environment.

Keywords: Ecological strategic investment; Xiaomi; CVC; IoT; ecological chain investing; business operation.

1. Introduction

Since the start of the pandemic, almost every major country in the world has faced the risk of recession. Both the employment data and the consumer consumption index reflect the great challenges facing the global economy. This has also brought serious pressure on global manufacturing enterprises in terms of business operation and corporate governance. This study takes Xiaomi, an enterprise that is still in stable operation and has achieved success in the new environment, as a case to analyze the excellence of this case company in strategic investment, hoping to use these experiences to guide enterprises facing similar problems.

Ecological strategic investment is a kind of investment scheme that has been proposed by scholars and widely welcomed by many large enterprises. The feasibility of this investment model has been preliminarily verified in the actual operation of a number of international large enterprises such as Apple, Xiaomi and Microsoft. What is worth paying attention to is the special value of this investment mode in improving the operating conditions of such companies, enhancing the value of enterprises and improving the ability of enterprises to resist risks in the current economic environment. From the case company's ecological strategic investment layout and its actual benefits, namely, the improvement of the enterprise end operation and the increase of the market value, this paper comprehensively demonstrates that this investment mode has many positive effects under the current situation. And through the study of the case company experience summed up a certain feasibility of the investment plan.

2. Literature review

Ecological strategic investment was first proposed as a part of the "business ecosystem" [1], which was once considered as a dynamic interaction between enterprises. This concept is formulated more specifically in Moore's book "The Death of Competition." [2] This concept places enterprises in a business environment similar to nature, and enterprises form an integrated and consistent business ecological network through material and information interaction with other enterprises. The social value of a large number of enterprises is reflected in this ecosystem, and this system also enables

enterprises in all links to connect with each other and jointly build a platform for value sharing. The ecological strategic investment in this study is the main means of maintaining this system.

Many scholars hold a positive attitude towards the construction of ecological business system. Especially in the current technological change, the market needs a new business model [3]. Cooperation and transactions between enterprises in the business ecosystem are very important for value output [4]. The construction of this industrial system plays a boosting role in the improvement of industrial productivity [5]. The exploration of new forms of cooperation between enterprises provides new solutions to the challenges faced in the new economic environment [6]. This has created a new inter-organizational cooperation strategy [7] and a different strategic management strategy [8]. The dynamic ability in this system is considered to be closely related to the wealth of enterprises [9]. This dynamic interaction is manifested in different aspects such as cooperation and competition [10]. Moreover, the adaptability of the enterprise to this system also reflects the value of the enterprise. The rapid development of emerging markets has increased the demand for ecological networking [11], and objective data also reflect the same trend [12]. The more intuitive demand is reflected in the creation of owner value in the business ecosystem [13] and the generation of the overall beneficial consortium [14].

This study will continue the above views and re-evaluate the value and feasibility of ecological strategic investment according to the current new economic and social environment. At the same time, using modern company cases, through the analysis of real financial data, verify and expand the views of the past academic circles.

3. Case summary and reasons for selection

Xiaomi is a consumer electronics and intelligent manufacturing company with smart phones, smart hardware and Internet of Things (IoT) platforms as its core. It officially established in April 2010 and listed on the main Board of the Hong Kong Stock Exchange on July 9, 2018.

The reason why this study chooses Xiaomi as the research object is that this company made an attempt in corporate venture capital as early as 2013. Xiaomi's investment approach of "holding shares without controlling shares" has played a pioneering role in the incubation of many start-ups. At present, the construction of ecosystems such as "Xiaomi Smart Home" and "MIUI" has been mature projects, with strong demonstration and industry guidance.

Since 2013, Xiaomi has started the initial construction of ecological industry. In the following two fiscal years, Xiaomi and the personal funds of its executives made a large number of investments, most of which were strategic investments, namely, corporate venture investments related to the construction of Xiaomi's ecological chain. Since 2016, Xiaomi has fully focused on investment in start-ups, especially Xiaomi Changjiang Industry Investment private equity fund, which was founded in 2017. The Corporate Venture Capital (CVC) fund, which was explicitly created to support the Xiaomi ecological chain, mainly invests in advanced manufacturing, artificial intelligence and automobile manufacturing. From this, this study can be seen Xiaomi's firm confidence and comprehensive deployment in ecological chain investment.

4. Case analysis

4.1. Analysis of Xiaomi's Past Ecological Strategic Investment

Data show that Xiaomi currently has 637 investment projects, and the total long-term and short-term investment in fiscal year 2023 is 139,662.96 million CNY [17], accounting for about 43.07% of the total assets. Fig. 1[16] below shows Xiaomi's main investment experience since 2013 in the form of a timeline.

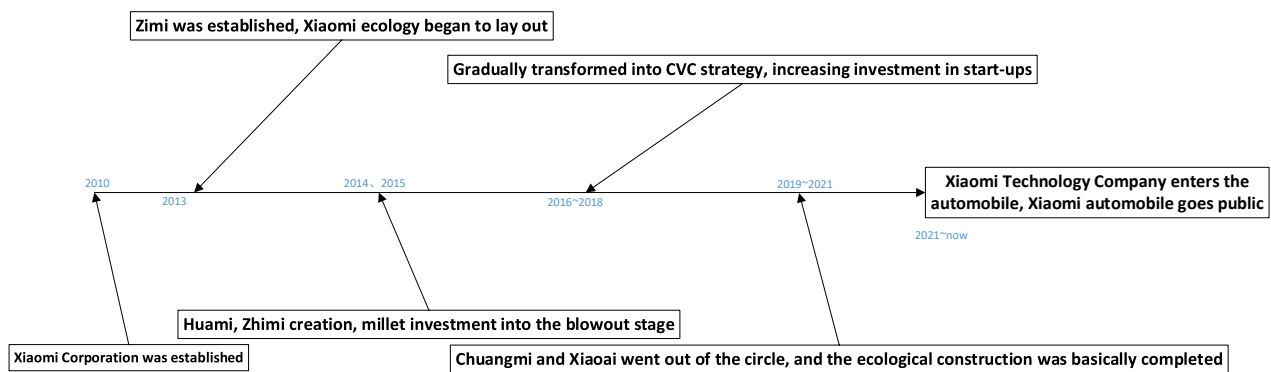


Fig. 1 Xiaomi's investment timeline

It can be seen that since 2013, Xiaomi has taken the concept of building an ecological enterprise as the blueprint and invested and expanded with its own enterprise mobile phone products as the core. From mobile phone products to mobile phone peripheral products, household goods and intelligent services, daily necessities, and constantly carry out improved industrial investment. From the raw materials in the upstream of the industry to the sales end and peripheral products in the downstream of the enterprise, Xiaomi's "investment + incubation" mode attracts many other enterprises in the industrial chain to the industrial cluster built by Xiaomi by virtue of its unique charm of "holding shares but not holding shares," and finally integrates into Xiaomi's own industrial chain, as illustrated in Fig. 2 below. In the process of investment, Xiaomi provides financial support, research and development platform sharing and brand product quality guarantee for start-ups in the ecological chain, so that the invested companies can gradually transition from the start-up stage with high risks to the more stable and mature stage. At the same time, Xiaomi often holds only a small number of shares in these start-ups, so as to ensure the autonomy of decision-making and development of enterprises, so that these companies can become mature enterprises that can exist independently from Xiaomi. In this mode, Xiaomi's product network has been expanded and a good brand image has been established through high-quality hot-selling products. For example, the Xiaomi bracelet of Huami Company, the Xiaomi Mobile Power Supply of Zimi Company and the Xiaomi Air purifier of Zhimi Company are all very successful products produced under this model. It plays an important role in improving the efficiency of production management and reducing the additional cost of products. Xiaomi Automobile, which was just listed in 2024, is also a realization of Xiaomi Lei Jun's "four-year contract", showing the strong vitality of Xiaomi investment platform.

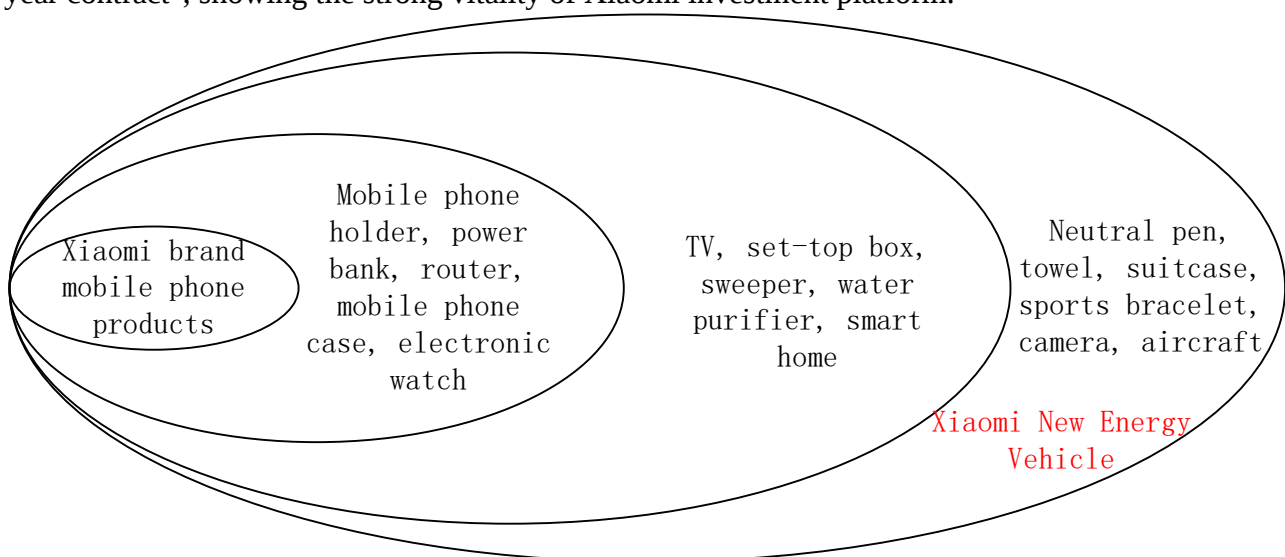


Fig. 2 Xiaomi's industrial chain

Xiaomi's ecological chain investment is carried out under the setting of its overall entity industrial deployment. Its investment enterprises involve the upstream, middle and downstream of the whole

industry, and both equity participation and acquisition provide structural support for the expansion of Xiaomi's own products and services.

It can be seen from Fig. 3[17] that Xiaomi's investment volume has been expanding since 2017. Among them, unlisted small and medium-sized start-ups are the main, which is related to the stimulus of Xiaomi's own mobile phone product profit decline. Of course, the main driving force for this rise is still the strategic investment willingness of Xiaomi Company itself, as well as the significant impact of Xiaomi ecological chain construction on the improvement of Xiaomi brand value.

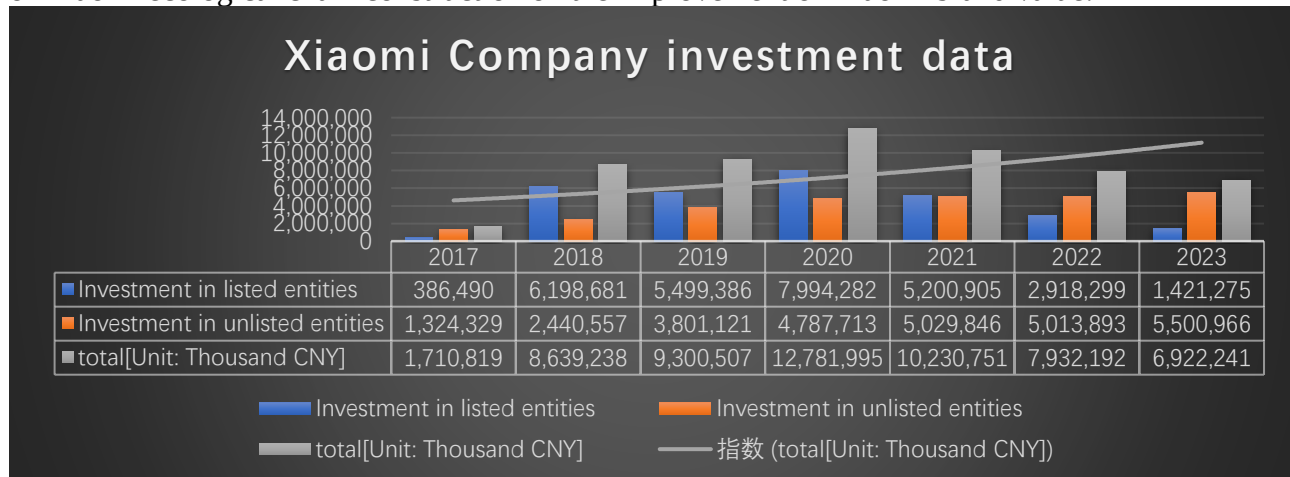


Fig. 3 Xiaomi Company investment data

4.2. The Financial Position and Shareholder Income Analysis

Fig. 4[17] shows the total revenue and gross profit statistics of Xiaomi from 2015 to 2023. It is easy to see that Xiaomi's revenue figures have continued to rise in the seven years from 2015 to 2021. Especially after Xiaomi fully launched the ecological strategic investment in 2017, the annual total revenue of Xiaomi began to increase significantly. At the same time, it is worth paying attention to Xiaomi's gross profit data, which has seen a particularly significant year-on-year increase after 2017. One of the main reasons for this phenomenon is that Xiaomi's construction of the upper, middle and lower reaches of the industrial chain in the previous five years has been constantly improved under its strategic investment model. Both the upstream raw material procurement enterprises, the midstream product production and Original Equipment Manufacturer (OEM) enterprises, as well as the downstream online and offline sales stores, have continuously injected fresh blood into Xiaomi's investment and acquisition efforts. This has greatly improved Xiaomi's control over the whole industrial chain, while reducing upstream raw material costs, midstream manufacturing costs and downstream sales costs. This is reflected in the gross profit data of Xiaomi, which has become the evidence that ecological strategic investment helps Xiaomi reduce costs and increase efficiency. Especially when the growth rate of gross profit margin is faster than the growth rate of revenue, Xiaomi can create a new "capital reservoir" for new innovation investment through cash savings.

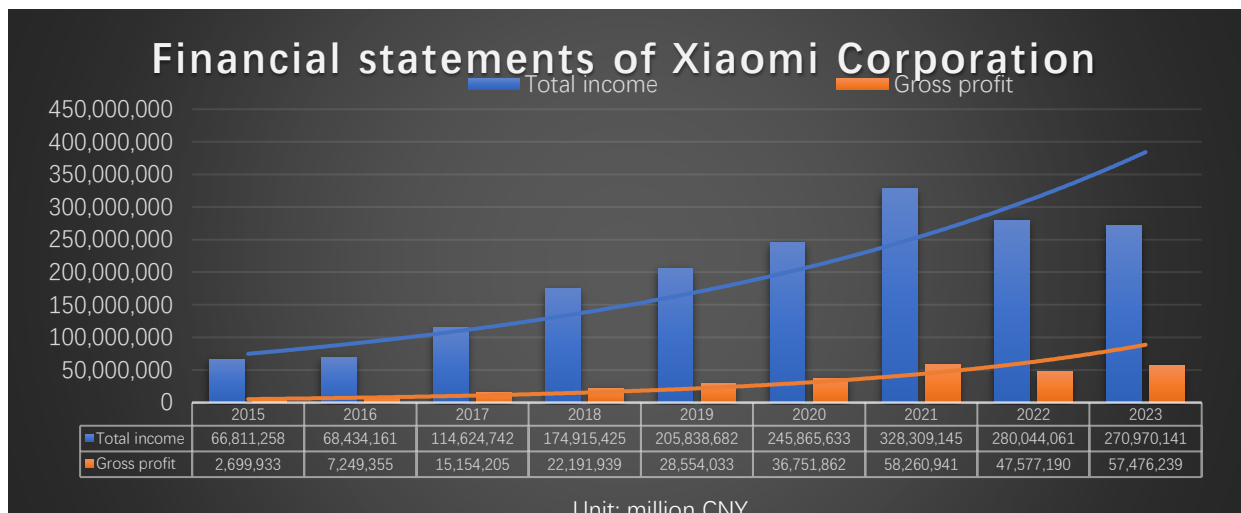


Fig. 4 Financial statements of Xiaomi Corporation

It is undeniable that the increase in total revenue and gross profit alone cannot closely link such benign data with Xiaomi's ecological strategic investment. Therefore, this study also counts the "IoT platform construction and revenue data of Xiaomi from 2018 to 2023," which best represents the revenue of Xiaomi in ecological system, and compares it with the revenue data of Xiaomi's traditional mobile phone business in the same period. The results are shown in Fig. 5[17] below. Although it can be seen that Xiaomi's smart phone profit data is still higher than its IoT and other consumer goods profit. However, with the continuous expansion of Xiaomi IoT platform, the concept of Xiaomi intelligence is more widely accepted by the public and serves all aspects of people's life, and the income gap between the old and new industries is constantly decreasing. In addition, Xiaomi's smartphone business and IoT business do not conflict with each other, and even complement and promote each other in most aspects. Therefore, with the help of Xiaomi's original customer groups, Xiaomi's ecological smart home system, intelligent office system and even intelligent industrial system can be more easily accepted by consumers. The boost to its brand value has been almost exponentially explosive. In addition, due to the increasingly harsh market environment and intensified corporate competition, Xiaomi's smartphone revenue and sales have been hit to a certain extent, resulting in a decline. However, its IoT and consumer goods only showed a weak trend for one year in 2022 due to multiple severe environmental impacts such as COVID-19 and economic downward pressure, and resumed the growth trend in the following year. However, Xiaomi's smart phone business is still facing great upward resistance, especially in the case of the overall consumption downgrade of the whole society. The price increase caused by the high-end goal of Xiaomi's mobile phone can hardly be accepted by the market and consumers. In addition, the trade blockade has also had a huge impact on the foreign trade business of Xiaomi mobile phones, which can be seen from the decrease of "Xiaomi Home" offline experience stores in European and American markets.

Under the new situation where the main business has been severely hit, the Xiaomi product ecosystem built by Xiaomi's previous ecological strategic investment has provided strong support for the rise of Xiaomi's revenue performance against the trend. Only the investment in the industrial chain makes Xiaomi's industrial cluster very resilient and has a strong ability to resist risks. This is something that other competitors with high production costs cannot do in this economy.

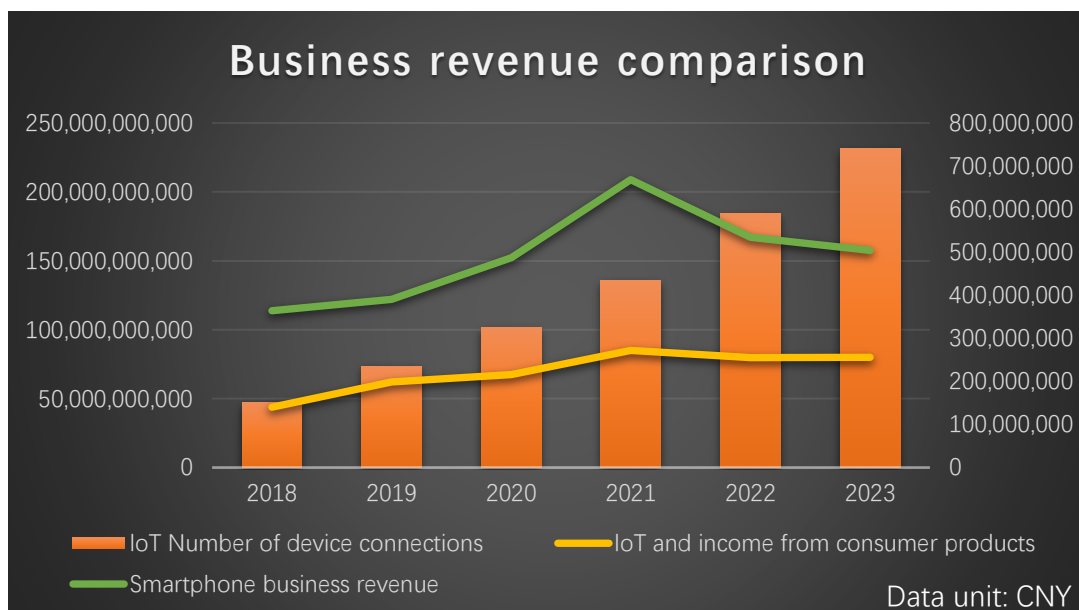


Fig. 5 Business revenue comparison

In addition to the enterprise-wide data, this study still needs to pay attention to the impact of some market-side data. In terms of the stock trading price in the secondary market, the core influence of the past brand value has not shrunk, so the stock trading price of Xiaomi can be maintained in the turbulent market environment. Although it cannot return to the peak of 2021, considering the unfavorable conditions of the overall market, the spread of panic makes Xiaomi and other enterprises whose actual value is close to the company's market value particularly outstanding in financial risk control. Ecological strategic investment diversifies Xiaomi's business risks, even though a large amount of investment capital still creates certain risks, strategic innovative investment is still a sound business strategy and investment philosophy without leverage.

Focus on the primary market and shareholder returns. Xiaomi's shareholder earnings returned to original growth in 2022 after overcoming the impact of force majeure factors in 2021. As shown in the Fig. 6[17], Xiaomi resumed the trend of increasing long-term and short-term investment in 2023, and the corresponding shareholder returns also gradually increased in the same period. The rise in shareholder returns can promote the construction of business confidence, so that corporate managers have more autonomy to use a wide range of investments.

Especially for Xiaomi, with the establishment of enterprise image under the ecological strategic investment, Xiaomi trademark products have been recognized by a large number of consumers. This can be seen from the strong support of public opinion during the sale of Xiaomi cars. Therefore, this study has reason to believe that the significant benefits brought by Xiaomi's ecological strategic investment for shareholders will also react to the expansion of this investment.

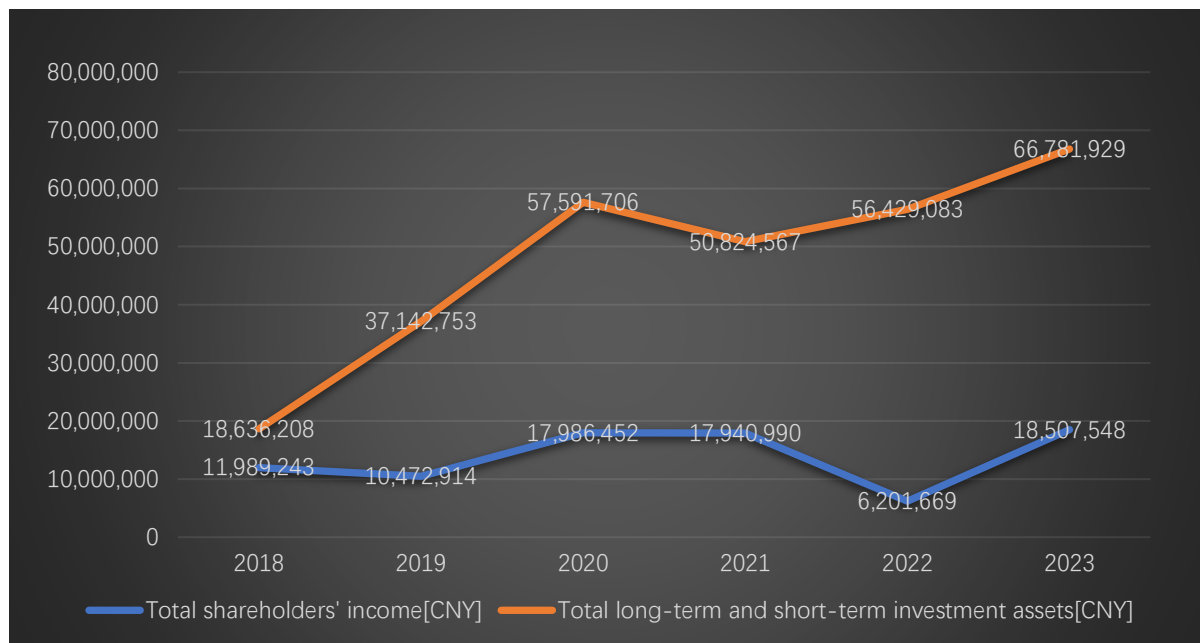


Fig. 6 shareholder's income vs investment

4.3. Analysis of Ecological Strategic Investment

In the above financial data, whether it is the uptrend of gross profit margin and the positive revenue data of IoT, or the positive attitude of the market towards Xiaomi's operating results, it is impossible to decoupling the reasons from Xiaomi's ecological strategic investment. This study believes that this healthy and orderly investment model has played a very core role in promoting Xiaomi's management and governance. From an overall perspective, the ecological investment strategy that Xiaomi has been striving to build since 2013 has first expanded the product coverage in terms of diversified operation, and continuously improved the actual market value of the enterprise by establishing Xiaomi's unique business image, thus making up for the manufacturing vacuum under the ecological network formed by product linkage. In particular, the business orientation of building product ecology in an all-round way since 2015 has enabled Xiaomi to gradually develop from an ordinary smartphone manufacturer with great limitations and severe market domination into an all-round innovative industrial group covering consumer goods, industrial platforms and advanced technology research and development. As a result, Xiaomi not only achieved great success in its own profits, but also produced many positive effects in maintaining the stability of the industrial chain structure and fulfilling the responsibility of social common governance. It is now mentioned that Xiaomi will not only be a manufacturer of products for consumers, but also an industry standard and a collective spiritual label for consumers.

5. Research results

5.1. The Direct Impact of Ecological Strategic Investment

From the above analysis of the case company, Xiaomi, it can be clearly seen that the key point of Xiaomi's investment strategy, which is different from other companies, is the ecological strategic investment, which enables Xiaomi to obtain higher returns and increase efficiency. In terms of corporate value, the diversification of products gives consumers more impressions of the brand, and the large output of consumer goods and IoT products enables Xiaomi to gain higher brand recognition. At the same time, the experience stores of Xiaomi life products such as Xiaomi Home enable more consumers to choose Xiaomi as the provider of almost all their daily necessities, which undoubtedly makes Xiaomi provide consumers with more reliable choices and also strengthens the brand bond between consumers and enterprises. In terms of product production and manufacturing, Xiaomi's ecological strategic investment enables it to inject funds into the overall industrial chain, which not

only reduces production costs and improves product quality control, but also contributes to the strengthening of the overall industry's ability to resist risks. The centralized control and management of the industry avoids many adverse effects of vicious competition on the industry, improves the confidence of production enterprises at all levels of the overall industrial chain, and promotes more efficient product update and iteration. In addition, due to the intensified impact of uncertain factors in the market in recent years, such as the serious threat of force majeure factors such as COVID-19 and trade games, the income of Xiaomi's original smartphone manufacturing business has declined significantly. Therefore, Xiaomi can expand through the previous ecological development, develop more new products that directly hit consumers' pain points to make up for the losses on the rest of the production line. This highlights Xiaomi's stability in the new global economic situation. In terms of the market and the income of the company's owners, Xiaomi's ecological strategic investment can continuously introduce more capital support that is interested in new technologies and new technology products, thus raising the market's high expectations for Xiaomi and increasing the overall market value of the company. The injection of new funds and the improvement of market expectations, as well as the returns of new products or ecological product groups, also make shareholders' returns continue to improve. Shareholders' confidence in the company also positively promotes the development of the enterprise, thus forming a virtuous cycle between action and reaction, and improving the stability and quality of corporate decision-making.

5.2. Path Analysis and Risk Assessment of Ecological Strategic Investment

This study also summarizes the feasible ways of ecological strategic investment and finds some possible risks and challenges. First of all, it needs to be clear that ecological strategic investment is not achieved overnight, which requires long-term deployment and rational consideration of enterprises at the strategic decision-making level. The managers of the company need to first sort out the existing industrial chain of the enterprise. If the development prospect and market demand of the industry itself are still at a high level, it is advisable to guide the net assets of the company to the key enterprises in the upstream and downstream industrial chain of the industry, expand the industrial cluster, and improve the quality and efficiency of production. However, if the current development of the main industry of an enterprise is not at a historical high level, it needs to provide more convenient solutions to problems within the ecosystem from the perspective of consumers through the extension of the ecological network of products. This final product presentation effect requires enterprises to find their own clear product positioning and further invest in CVC in the strategic extension related to the product.

However, this investment model still faces some urgent problems and risks that need to be resolved. First of all, from the perspective of the internal governance of the company itself, a large number of investable directions means a large number of hidden dangers of investment failure. If the investee company itself does not manage well and goes bankrupt, this will cause a IoT of waste of funds. At the same time, the diversification of investment direction also increases the risk of capital circulation environment in the operation of enterprises, making the parent company easy to receive the threat of potential crisis in the invested industry. At the same time, if the investment process is too aggressive, the complementary benefits between the products of the invested enterprises and the original products of the company will not be high, and the ecological strategic investment will also fall into the risk of diversified operation. In addition, if the product production quality of the invested enterprise cannot be regulated favorably, the inferior products produced will also cause a large number of public opinion crises, thus affecting the whole ecological product marketing, and even causing a serious blow to the value of the company. As mentioned above, ecological strategic investment is not a radical conventional venture capital, but a new strategic investment model for enterprises with investment and supervision capabilities based on the original industrial chain. The presentation of its effect requires fine product network construction and sufficient financial support behind it.

5.3. The Contemporary Significance of Ecological Strategic Investment

Through this study, it can be seen that even large mature enterprises such as Xiaomi will be severely hit when facing unpredictable crises. The difference between ecological strategic investment and previous enterprise investment is that it is an investment strategy with strong logical connotation starting from the original industrial chain of enterprises. Shrinking incumbents, like Xiaomi's declining smartphone sales, have plagued many mature companies in recent years. These enterprises are the leaders in the original industry, but in the increasingly competitive and deteriorating market environment, they have to sell part of their profits in exchange for the stability of the industry. However, waiting passively is not an effective business strategy, and new investment will bring new capital sources to enterprises, thus increasing industrial activity without harming the allocation of original industrial resources. This study hopes that mature enterprises can face the changes of market environment more rationally and contribute their due strength to the construction of new market order. At the same time, malicious competition can be reduced, so that the competition within the same industry can become a product competition beneficial to consumers themselves, and jointly promote the optimization of the current economic market environment to deal with the possible economic crisis and industrial risks in the future [15].

6. Conclusion

While previous academic discussions on ecological strategic investment tend to focus on the description of definitions and the analysis of generalized patterns, this study focuses on the practical verification of the feasibility of ecological strategic investment and the output of revenue effects. Through the analysis of Xiaomi's investment path and the change of financial data, the author finds the connection between ecological strategic investment and some financial data, and analyzes the various positive effects brought by this investment mode from a comprehensive perspective. In terms of business operation, the positive effects of ecological strategic investment on reducing production costs, improving decision-making efficiency, improving the ability of industrial clusters to resist risks and enhancing the core value of enterprises have enhanced the confidence of other qualified enterprises to make relevant attempts or adhere to similar strategies. In terms of market returns, objective direct returns and the increase in corporate market value also encourage corporate decision makers and business owners to have confidence in governance. This is also the significance of this study to emphasize the ecological strategic investment in the current special environment to promote more enterprises to restore the confidence of stable operation and proper governance.

This study still has regrets and deficiencies in broader data collection and empirical research on relevant data. The author hopes that subsequent research can collect more effective data from a broader perspective to more comprehensively verify the feasibility of ecological strategic investment, and find out more potential risks. At the same time, this study only provides a relatively limited research method for relevant research, and subsequent research can use empirical research to carry out more in-depth exploration, and put forward more plans and suggestions with contemporary significance.

References

- [1] Moore J F. Predators and prey: a new ecology of competition[J]. Harvard business review,1993,71(3):75-86.
- [2] Moore, James F. (1996): The death of competition: leadership and strategy in the age of business ecosystems, Wiley & Sons, Chichester.
- [3] Culot, G., Orzes, G., Sartor, M., & Nassimbeni, G. (2020). The future of manufacturing: A Delphi-based scenario analysis on Industry 4.0. Technological Forecasting and Social Change, 157, 120092.

- [4] Ruiz-Alba, J., Soares, A., Rodríguez-Molina, M., & Frías, D. (2016). Servitization and co-creation: Customers' perspective. In Center for Business & Industrial Marketing (Eds.), CBIM 2016 Academic workshop: Extending value through product, service and platform Innovations.
- [5] Iansiti, M; Levien,R.The Keystone Advantage: What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability; Harvard Business School Press:Boston,MA,USA,2004;pp.68–72,221–224.
- [6] Paasi, J., Wiman, H., Apilo, T., Valkokari, K., 2023. Modeling the dynamics of innovation ecosystems. *Int. J. Innov. Stud.* 7 (2), 142–158. <https://doi.org/10.1016/j.ijis.2022.12.002>.
- [7] Lin, X., Liu, B., Han, J., Chen, X., 2018. Industrial upgrading based on global innovation chains: a case study of Huawei technologies Co., Ltd. Shenzhen. *Int. J. Innov. Stud.* 2 (3), 81–90.
- [8] Neumeyer, X., Santos, S.C., 2018. Sustainable business models, venture typologies, and entrepreneurial ecosystems: a social network perspective. *J. Clean. Prod.* 172, 4565–4579.
- [9] Teece, D. J.; Pisano, G.; Shuen, A. Dynamic capabilities and strategic Management.*Strateg.Manag.J.*1997,18,509–533.
- [10] Ritala, P., & Almpantopoulou, A. (2017). In defense of 'eco' in innovation ecosystem. *Technovation*, 60, 39–42.
- [11] Barabasi, A. L. (2002). *Linked: The new science of networks*. Cambridge, MA, Perseus Publishing.
- [12] Borgatti, S. P. and P. C. Foster (2003). "The network paradigm in organizational research: A review and typology." *Journal of Management* 29(6): 991-1013.
- [13] Altman, E.J., Nagle, F., Tushman, M.L., 2022. The translucent hand of managed ecosystems: engaging communities for value creation and capture. *Acad. Manag. Ann.* 16 (1), 70–101.
- [14] Couzineau-Zegwaard, E., Meier, O., Barabel, M., 2012. Business ecosystem model applied to the electric vehicle market. In: 26th Electric Vehicle Symposium, vol. 2, pp. 938–945, 2012.
- [15] Demir F.,2009: Financial Liberalization, Private Investment and Portfolio Choice: Financialization of Real Sectors in Emerging Markets, *Journal of Development Economics*, Vol.88,No.2.
- [16] [16] <https://ir.mi.com/zh-hans>
- [17] [17] <https://ir.mi.com/zh-hans/financial-information/annual-interim-reports>