

Yuxin Wang

Business, Chengdu university of Technology, Chengdu, Sichuan, 610000, China *Corresponding author's e-mail: 1610397723@qq.com

Abstract. In terms of the matter that Meta verse information disclosure should not be too virtual pointed by Securities Daily, the case of IMS Group is taken as a sample and use event study method to analyze the influence of voluntary information disclosure and receiving supervision letter after information disclosure violation on market share price fluctuation in relevant industries of Meta verse, and brief analysis is carried out for causes and consequences of IMS Group information violation. Relevant contents of Meta verse information disclosure is enriched in the paper, and experiential suggestions are provided on how to improve Meta verse information disclosure quality. This paper also aims at reminding listed companies to move forward along their own development plan in a down-to-earth manner with clear and sufficient information disclosure

Keywords: Meta verse; Voluntary Information Disclosure; Information Disclosure Violation; Supervision Letter; Share Price Fluctuation

1 Introduction

Meta verse is a newborn object in frontier scientific and technological fields of mankind. Currently, the development path of Meta verse is still groping forward. Meanwhile, although each country maintains various attitudes on Meta verse, it has become a new development of global economic development, ushering in explosive growth, and large enterprises at home and abroad have entered the field of Meta verse. However, some enterprises are suspected of hype under the background of explosive growth and receive supervision letters and other warnings. By and large, the era of Meta verse has not really arrived yet, thus, enterprises should be more down-to-earth in the development of Meta verse.

As the first country to put forward the concept of Meta verse, America is still in a wait-and-see state at present without the proposed clear and constructive outline article focusing on supervision of data security and other aspects, while some government agencies are also actively embracing the Meta verse. For example, Japan Finance Agency cooperated with FXcoin, CoinBest and other virtual currency exchange platforms to conduct market structure upholding the target to make Japan a developed

country in the Meta verse, and the Seoul government of South Korea has clearly launched the Five-Year Plan for Meta Verse. As far as foreign countries are concerned, various countries have different attitudes towards the development policy of Meta verse. In China, the concept of "strengthening the prospective research and development of the basic ability of the core technology at the bottom of the Meta verse, and promoting the development of new terminals that deepen perceptual interaction and the construction of systematic virtual content" was put forward in the 14th-Five-Year Plan in Shanghai, so as to explore industry applications. We shall support the independent innovation of market players, adhere to the overall development of safety, and guide the healthy development of the market with industry safety as the bottomline.

2 Literature Review

Meta verse is a virtual world mapping and interacting with the real world linked and created by scientific and technological means, equipped with digital living space of new social system. And Meta verse ushered in explosive growth after Zuckerberg officially announced that Facebook was renamed meta. The concept of Meta verse is sought after by large Internet enterprises at home and abroad. Nevertheless, Meta verse is still the newborn industries in the embryonic exploration stage with immature technology. While some enterprises took advantage of the popularity of Meta verse to drive up their share prices and since November 2021, multiply listed companies received inquiry letters from Stock Exchange for information disclosure.

Securities Daily pointed out that vision and tentacles of science and technology in the Meta verse can indeed extend infinitely to the future, but the information disclosure cannot travel through space-time. The expectation of A-share market investment should be real and predictable, but not be too virtual. Information disclosure can cause the relevant reaction of the market. Companies involved in the Meta verse industry should be true and reliable in their own disclosure of information, and should not disclose illegal information in order to earn dividends. The relevant literature on voluntary information disclosure and information disclosure violations is expounded in the paper based on this.

2.1 Motivation and Actuality of Voluntary Information Disclosure

The information disclosure of listed companies is related to the effectiveness of the capital market, divided into voluntary information disclosure and mandatory information disclosure. Voluntary information disclosure is the selective information provided by the management of listed companies to the information users of the company and the endogenous decisions produced by the game between the company's management and other stakeholders, thus attracting more attention from researchers. The motivation of voluntary information disclosure mainly aims at decreasing principal agent problems among company managers, shareholders or other stakeholders, or more signals are provided to achieve more favorable capital supply, both of which are conducive to improving the allocation efficiency of the capital market ^[2](Healy and Palepu, 2001).

In terms of motivation, accounting information disclosure is instrumental in enhancing market value of enterprises, reducing capital cost of the enterprise, and increasing corporate reputation in the aspects of social responsibility and social contribution ^[8] (Zhang Yalian, 2008). At present, the overall level of voluntary information disclosure in China is low, but after the promulgation of the Code of Corporate Governance for Listed Company, the situation has been improved obviously; The social responsibility information disclosure of Shanghai Stock Exchange is significantly better than that of listed companies of Shenzhen Stock Exchange from the perspective of market distribution; Meanwhile, information disclosure has great randomness and inconsistency from quality of information disclosure. While the quantity of information disclosure has increased, the quality of disclosure has not been improved accordingly ^[3] (Jin Tingting, 2006).

2.2 Definition and Actuality of Information Disclosure Violation

Jia Nan^[4](2021) pointed out that information disclosure is an important information transmission mechanism in modern financial market, aiming to deliver true and effective information to the public and provide reference for investment and relevant activities with managers. Information disclosure violation of listed company refers that the company violates the national laws, departmental systems or normative documents during the process of preparing regular reports and interim reports to release misleading and untrue information to the public, including publishing false information, concealing important information, financial fraud, etc, which can not only disturb the normal operation order of securities market and damage the interests of investors, but also lead that market cannot complete the optimal allocation of resources.

On the whole, the illegal means of information disclosure can be divided into false procedures and delayed disclosure, where delayed disclosure refers that subject undertaking disclosure obligation fails to complete the disclosure of information within the specified time with a certain delay in time, and false disclosure refers that the subject did not comply with the requirements of relevant legal systems or normative documents in the process of information disclosure, especially the disclosed information of major events inconsistent with the real situation, false records, misleading statements and major omissions belonging to the scope of false disclosure ^[1] (Zhang Chengrui, 2011). In the process of false records, the obligatory subject often makes false records of profits, assets and statements for its own economic benefits, and uses accounting knowledge to cheat, so as to achieve the purpose of tax evasion and increasing after-tax income. Zhang Yong (2009)^[9] pointed out that misleading statement pointed out that the subject has different understandings due to improper expression when the information disclosure scannot have an accurate understanding of accounting information.

As far as the actuality is concerned, information disclosure of some listed companies in China has been prohibited repeatedly, seriously violating the code of integrity, which not only poses a great threat on the stability and healthy development of China's securities market, but also is easy to cause the loss of the market's function of optimizing resource allocation to generate and accumulate large financial risks ^[10] (Cai Zhiyue, 2007).

3 Case Content

3.1 Case Overview

IMS Group (Stock code: 600556) is the leading enterprise of domestic Meta verse concept stock, locating at the hot spot and position of the meta verse. At the same time, IMS Group announced that the enterprise will soon release the Honnverse series products under the concept of meta verse, arousing once heated discussion with stock price rising by the limit continuously. The chairman also disclosed an announcement letter announcing that the product would soon be available to the public, which is inconsistent with the real situation. Therefore, the matter aroused the attention from Shanghai Stock Exchange, and IMS received the punishment of the supervision letter at next night, which once again caused the fluctuation of the stock price. MS Group as leading enterprise of Meta verse is considered to be typical and representative because IMS Group involves both voluntary information disclosure and too virtual information disclosure violations, which is suitable for being selected as case analysis.

The official blog of Honnverse announced on the evening of November 2 that its concept product "Honnverse" was about to start making an appointment with the open of Meta verse at next day. Before receiving the supervision letter from Shanghai Stock Exchange on November 19, the 17 day 7-day limit was completed. On November 18th, the chairman Li Meng issued an open letter that Honnverse social products will meet users soon, and all employees will also work in Honnverse for one day. Its shares rose limit again in the morning trading on November 19th by more than 10%, with the market value soaring by nearly 5.4 billion yuan. However, from the perspective of the open letter, there is a difference between the statement of "meeting the user formally soon" and the aforementioned information disclosure. On the evening of November 18th, IMS Group once again made it clear that the "Honnverse" social product developed by the company has been officially released, which was still in the testing stage with uncertain official online operation time. Technical support comes from R & D reserves at the company level to achieve 3D-based scene social networking. The company has not participated in the research and development of AR, VR, MR and related hardware technologies without relevant hardware technology reserves or patents. Currently, "Honnverse" products have not been connected to the aforementioned hardware technology. The product has not yet generated revenue and will not affect the company's performance at present. Thus, the Shanghai Stock Exchange gave a regulatory warning to IMS Group and relevant responsible persons. The company releases important information related to the company's business and future development through non statutory information disclosure channels, and the relevant released information may mislead investors, causing that share price fell sharply on the 25th, hitting the limit. The influence of information disclosure on the fluctuation of company stock price is analyzed based on the fact that IMS Group company disclosed the share opening information of Meta

verse and the time receiving the punishment supervision letter from Shanghai Stock Exchange.

3.2 Development history of IMS Group

IMS Group was established in 2009. It is one of the domestic popular data platfom enterprises, relying on the rapid development of Internet fan economy. Li Meng, the founder, served as the chairman and CEO of IMS Group. "Honnverse" is the first 3D virtual social platform based on block chain technology in China published by IMS block chain value lab in October 2021. This product combines the application of cutting-edge technologies such as celebrity new economy, virtual social networking and block chain technology and takes 3D virtual planet in Z Era as background to build virtual identity, virtual image, virtual space, virtual props and virtual social networking and create an immersive virtual social experience for users

2009	2011	2014	2015	2017	2019
Establishment	IMS has de-	IMS has be-	IMS brand	IMS has ob-	IMS launched
ofIMS	veloped the	come a sup-	upgraded to	tained a total	the first we-
	first industry	plier of	IMS new me-	of 600 million	media startup
	socialized e-	Alibaba's so-	dia business	yuan of fi-	accelerator
	commerce	cial network-	group	nancingin	
	system in	ingcase		round C and	
	China			round C+	
2010	2012	2013	2016	2018	2020
IMS has de-	IMS cooper-	WEIQ mar-	IMS officially	IMS ranks	IMS backdoor
veloped the	ates with	keting plat-	became P &	first in both	Huiqiu com-
first big data	small and me-	form offi-	G's social	revenue scale	pleted its list-
monitoring	dium-sized	cially	marketing	and market	ing and be-
system in	merchants on	launched	cloud service	share in the	came the first
China	Taobao		network	social market-	popular eco-
				ingindustry	nomic enter-
					prise in A-
					share mar-
					ketA

Fig. 1. Development History of IMS Group (made by myself)

Fig. 2 shows the major events of IMS Group in December 2021, including that IMS Group disclosed that the appointment of relevant products of Meta verse will begin soon. It also contains the Meta verse concept stocks rising at the share opening and IMS Group receiving the supervision letter from Shanghai Stock Exchange in violation of information disclosure with the analysis on the corresponding short-term market reaction of both events.

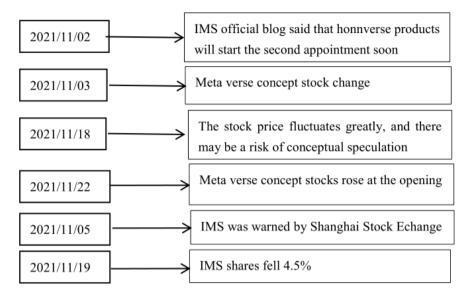


Fig. 2. Timeline of major events of IMS in November (made by myself)

3.3 Analysis on the Causes of IMS Group Information Disclosure Violations

As the leading industry of the domestic Meta verse, IMS causes the violation of information disclosure, events on misleading consumers. There are two main reasons for information disclosure violations. On one hand, Meta verse is a new concept with immature related technology, and the information disclosure is easy to be virtual and lacks reality; On the other hand, IMS is under the pressure of market competition, so as to disclose favorable information to obtain capital supply for the better development of enterprises.

3.3.1. Difficulties to Find Real Performance Support for the Information Disclosure Content.

Meta universe related information disclosure is too virtual, referring to the fact that Meta universe is a burgeoning hot concept with immature and complex related technology. Most areas are undeveloped, and the development prospect has some room for imagination and innovation, so that the description of related products is easy to be imaginative, not practical and does not conform to the real situation. From the reality of industrial development, Meta verse industry is still in the foundation stage of "social +" game scenario application, which is far from realizing the ideal state of full industry coverage. The conceptual layout of Meta verse still focuses on XR and game social fields with immature technical content. There is still a long process of DE-foam in the real development space with relevant concept proposed, while these concepts are difficult to find support in real performance. For example, the Honnverse proposed by IMS is just a concept, which has not been connected to the development of AR, VR and other related technologies, so that it is difficult to find technical support and relevant performance support in reality. Its information disclosure is easy to be too virtual and difficult to settle in reality, which is suspected of following hot spots.

3.3.2. Market Competition Pressure.

IMS Group is the first celebrity new economy enterprise listed on A-share market, relying on the innovative development potential of celebrity new economy, and the company has accumulated certain technological, innovation and scale advantages in its field. However, the average growth rate of workers' new economy market in recent three years has exceeded 150% with high competitive pressure of the industry and tends to be saturated. For the purpose of promoting the development of enterprises and seeking new opportunities for development, IMS Group has entered the new blue ocean of Meta verse. However, the development of Meta verse related technology is still in its infancy without products for practical technical support. Surprisingly, IMS announced in the chairman's publicity that the product would be available soon. According to the research by Xie Jiaqi (2019)^[5], information disclosure is taken as a way for enterprises to transmit information, information disclosure, but in order to maintain their advantages in product competition, enterprises will choose not to disclose information or disclose false information to ensure their development advantages. It can be inferred that in order to provide more signals to the market and obtain more favorable capital supply, IMS Group chose to issue an open letter that was inconsistent with the actual information.

3.3.3. Imperfect Relevant Policies and Insufficient Supervision.

As an emerging industry, the policy for Meta verse is not perfect enough. IMS Group released an open letter that is inconsistent with the actual situation, stating that 'Honnverse products will be launched soon and all staff will work in Honnverse for one day' when the technology is not mature. The received punishment was only a regulatory warning to IMS Group and its chairman, Li Meng, and the secretary of the board of directors, Yu Yue with insufficient regulatory penalties and weak binding force on enterprises.

3.4 Analysis of Consequences of IMS Group Information Disclosure Violations

After IMS Group information disclosure violation was found, it not only received the supervision letter from the Shanghai Stock Exchange, resulting in fluctuations in the stock price, but also hurt the stability of the Meta verse industry.

The information disclosure of IMS in the Meta verse is too virtual, easily misleading consumers, causing the receiving of a supervision letter from Shanghai stock exchange for violation of regulations for warning and punishment. Li Meng, the timely chaiman of IMS Group, and Yu Yue, the secretary of the board of directors, were given regulatory warnings. Meanwhile, after the warning letter was issued, the market also reacted negatively to the regulatory letter, including that IMS Group integrity and reputation were damaged, and its share price also received a sharp correction, hitting the limit.

In terms of the expectation and description of the development of the Meta verse, the expectation focused by A-share market investment should be really predictable. It is the listed companies that actually move forward along their own development plans, rather than relying on too virtual beautiful descriptions to create hot spots and win the favor of investors. Simultaneously, if we only rely on too virtual descriptions, listed companies such as IMS Group are likely to be abandoned by the market after experiencing speculation, leading it difficult for investors to achieve a sense of wealth in the real world and become skeptical Meta verse business of IMS Group and other enterprises, so as to make investors dare not invest in relevant industries of Meta verse again, which hurts the steady development of the industry.

4 Short-Term Market Reaction and Event analysis

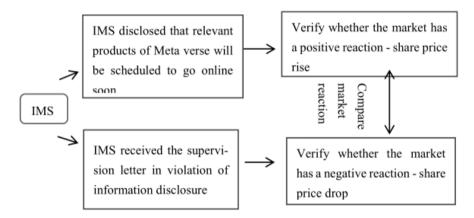


Fig. 3. Research Framework Diagram of Two Events (made by myself)

4.1 The Impact of IMS Group Disclosure of Meta Verse Products Information on the Meta verse Opening Quotation

Within the event window period of 21 trading days in total within the previous 10 trading days, and the average value of CAR is 34.578%, so the market reaction is positive. t value is 7.2957, p value is 0.0000, less than 0.01, indicating that it is statistically significant at the level of 1%. Therefore, the information disclosed by IMS Group has a significant positive reaction to the market after the share opening of Meta verse shares, and the share price has increased significantly.

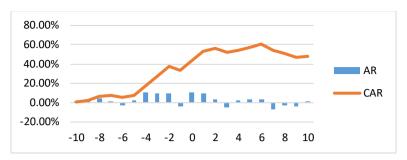


Fig. 4. Event I Market Reaction Line Chart (made by myself)

4.2 IMS Group Received the Supervision Letter from Shanghai Stock Exchange

The chairman of IMS issued an open letter at -1, and the supervision letter was received in the evening on the date of the incident, so we considered that the previous stock price fluctuations before 1 were caused by another thing, the open letter. At the same time, Davidson and Worell $(1988)^{[6]}$ conducted an empirical test on the excess return (CAR value) of listed companies before and after the punishment announcement date, which found that the negative utility of listed companies has hysteresis, so that there was no significant negative effect on the day of the punishment announcement, but there was a negative effect in the market the day after tomorrow. Therefore, it is regarded that the window period should start from 1 as [1, 10]. From the line chart, we can see that the market has a significant negative performance after the release of the supervision letter, and the stocks of IMS fell sharply.



Fig. 5. Event II Line Chart of Market Reaction (made by myself)

4.3 Analysis

It can be seen from the market reaction of the event study method on two events that the market has indeed made a significant positive response to the information voluntarily disclosed by IMS, and the share price rose significantly, which also attracted the attention of many investors; On the other hand, for IMS illegal information disclosure with receiving the supervision letter from Shanghai Stock Exchange, it is also obvious that the market has made a significant negative response, and the stock price has significantly corrected. In the meantime, two market comparisons can show that voluntary information disclosure can indeed help enhance the market value of enterprises and attract more capital investment, but enterprises should be true and effective in disclosing information, but not to be too virtual to mislead consumers, which may be subject to regulatory penalties. The market will react immediately. Investors lose trust in enterprises and even lose confidence in the industry, which is not worth the loss.

5 Suggestions

5.1 Improve and Enrich the Quality of Information Disclosure

The corporate governance and earnings quality are improved to internally resolve the root causes of false information disclosure and disclosure violations. In addition, listed companies should also consider their attention direction and needs from the perspective of investors, so as to improve the quality of information disclosure. Concurrently, Zhao Liming (2013) ^[6] pointed out that regulators shall strengthen the supervision of information disclosure and need to formulate and improve relevant systems of information disclosure to combine mandatory disclosure with voluntary disclosure, mobilize the enthusiasm of listed companies, and encourage them to disclose diversified high-quality and high-level financial and non-financial information. In addition, a feedback system for users on the use of information disclosure should also be established to comprehensively evaluate the information disclosure of listed companies

5.2 Improvement and Willpower of Relevant Policies

At present, the relevant regulatory policies for Meta verse are not perfect, and few domestic policies clearly point out the detection standards and relevant penalties for virtual violations of information disclosure in the Meta verse industry. Meanwhile, Correlational Research has pointed out that promulgation and implementation of laws and regulations related to information disclosure do not significantly reduce the harm oif information opacity to the market. Therefore, the punishment of laws and regulations shall be strengthened to restrict the behavior of enterprises and improve the quality of information disclosure.

6 Deficiencies

First of all, due to the lack of relevant information of Meta verse, the information disclosure direction of IMS Group is only expounds in the analysis, but the information disclosure status of the entire Meta verse industry does not outlined, and the overall description is not complete. Secondly, the stock price fluctuation of IMS Group will also be affected by major events of other leading enterprises or new announcements. Due to the limited personal ability, the article does not take other factors in the Meta verse industry environment into account with a certain limitations.

7 Conclusions

Meta verse is an emerging hot concept with immature technology development, so it will experience a lengthy path. However, some enterprises improve their competitiveness in order to seek more corporate interests. The description of the future development prospect of meta universe is too virtual and beautiful, but it is difficult to find support in real performance. The description of the future development prospect of meta universe is too virtual and glorious, but it is difficult to find support in real performance, which exists the behavior that enterprises follow heat for the benefit of the company and disclosure illegal information. Some disclosed information cannot find the support of relevant information technology, which is easy to mislead investors that relevant actual products have been launched. Thus, the enterprise did not fulfill its due responsibility to ensure the authenticity and reliability of information, which not only cause losses to the interests of investors, but also harm the steady development of the company and Meta verse. Therefore, all parties should work together to strengthen the supervision of Meta verse information to improve Meta verse information disclosure quality, so as to ensure the authenticity and reliability of information disclosure, avoid to be too virtual, and promote steady development of Meta verse industry.

References

- Chengrui Zhang and Jinying Lan. (2011) Information Quality and Investor Protection— —Based on the Comparative Analysis of Illegal Disclosure Companies and Their Matched Samples[J]. Journal of South China Normal University (Social Science Edition). (06): 79-85.
- Healy, P. and Palepu, K. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. Journal of Accounting and Economics, 31, pp. 404-440.
- Hongtao Shen and Tingting Jin. (2006) Analysis on the Current Situation of Social Responsibility Information Disclosure of Listed Companies in China[J]. Audit & Economy Research. (03): 84-87.
- 4. Jia Nan. (2021) Discussion on the Information Disclosure Violation of Listed Companies[J]. China Circulation Economy. (29): 136-138.
- 5. Jiaqi Xie. (2019) Research on the Causes and Economic Consequences of Information Disclosure Violations of Listed Companies[D]. University of South China.
- Liming Zhao. (2013) Research Status and Suggestions on Information Disclosure of Listed Companies in China[J]. Journal of Sichuan University (Social Science Edition). (05): 119-126.
- Wallace N. Davidson and Dan L. Worrell. (1988) The Impact of Announcements of Corporate Illegalities on Shareholder Returns[J]. The Academy of Management Journal. 31(1): 195-200.
- 8. Yalian Zhang. (2008) Voluntary Information Disclosure: Motivation and Ideas[J]. Friends of Accounting. (01): 88-89.
- Yong Zhang and Chao Ying. (2009) Can the Audit Committee System Effectively Prevent Listed Companies from Violating Information Disclosure Rules -- Empirical Evidence from Shanghai and Shenzhen A Shares From 2003 to 2007 [J]. Macroeconomic. (05): 49-57

 Zhou Qu and Zhiyue Cai. (2007) An Empirical Study on the Causes of Information Disclosure Violations of Listed Companies in China[J]. China Industrial Economics., (04): 96-103.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

