

# Metaverse and It's Efforts on Auditing

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**Abstract:** Not only become metaverse increasing important since it appeared in 2021, but studies about how challenge financial accounting and auditing have become one of the most active controversies in financial field. This paper will comprehensively discuss the above problems, and provide some clues for future research. The impact is a deviation from the desired goal, which can be positive or negative. Therefore, we will discuss the impact of meta-universe on audit from the perspective of risk. We come up with that there are challenges to the fair value test mode of asset value in auditing, and metaverse company auditing risk, which may come from the revenue recognition risk, security or technical vulnerability risk, and transaction risk caused by the decentralized characteristics of the center.

## 1. Introduction

There is inevitability of the existence of the meta-universe from the perspective of market economy. As market economies emerge because of transactions, any economy depends on three factors: consumers, producers and regulators. The metaverse is simply a virtual world created by human beings (Gong Caichun et al., 2022) as the human imagination gets its greatest satisfaction from the virtual world. Therefore, the basis and motivation of meta-cosmic consumption originated by satisfaction, from an economic perspective.

Not only the metaverse was created not just by consumption, but also by supply. Supply comes from two sources: capital and technology. First, capital has always sought to maximize profits to grow faster. The history of video games, closely related to the meta-universe, is a manifestation of the use of capital. With the rise of the Internet in the 2000s, players of Tencent in China, for example, could purchase Q coins and use the coins in all games on Tencent's platform. This gives players a new feel for themselves, and at the same time it accumulates huge amounts of capital for Tencent.

"Second Life" is an online game that resembles the physical world, developed by the American company Linden. Following everyone have a strong independent creativity in this game, and the assets created by the players are protected

by property rights, these things become tradable, and the players get a lot of satisfaction from the game. Most importantly, Second Life made the concept of "virtual assets" widely accepted. (Gong Caichun et al., 2022)

Although capital is the source of supply, it is ultimately the development of science and technology that can finally realize the metaverse. The development of cloud computing, the upgrade of 5G network technology, the popularization of intelligent terminals, as well as the emergence of block chain and virtual currency encryption technology, these innovative technologies have gradually led human society to the stage where various virtual worlds can be connected, and the emergence of the metauniverse has brought a solid technical foundation.

There are three essential players in the model of a physical market economy (as shown in Figure 1): physical consumers, producers, and regulators. Physical consumers spend the legal money issued by regulators to buy the products of the producers, and the producers decide the consumers' intentions through the sales of the products, while the other side produces more products that consumers are willing to buy. On the other hand, regulators, usually government agencies, collect the costs of running the country legally from consumers and producers through taxes, and cover those parts of the country where market mechanisms do not work. For example, the operation of non-profit organizations such as police, fire, military, hospitals and courts is completed through government financial allocation.

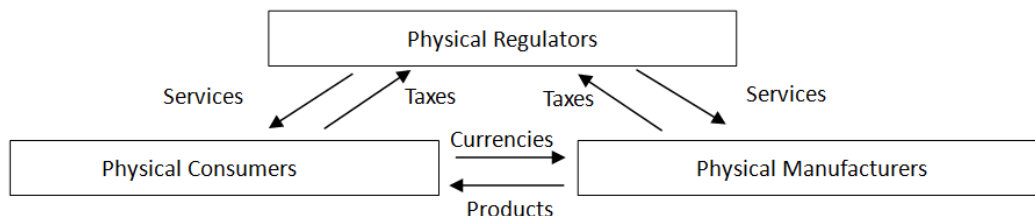


Figure 1. Physical Economy

Similar to the real economy, there are also three important players in the virtual economy model (as shown in Figure 2): virtual consumers, producers, and regulators. The above participants were linked by a decentralized virtual currency,

which can circulate in various metaverses because of the centralization. Robux, for example, is a virtual currency launched by Roblox, who works with games on the Roblox platform, but not the Tencent Arcade, so it's not centralized.

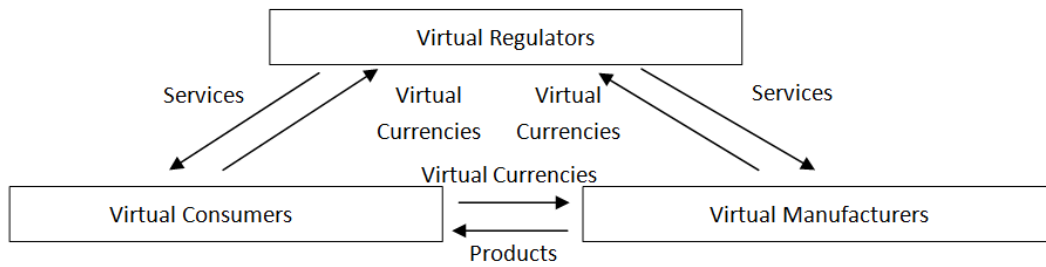


Figure 2. Virtual Economy

## 2. Mechanism of Metaverse Effects on Auditing

Virtual consumers use virtual money to buy the products of virtual producers, while virtual producers produce more products and services that consumers are willing to buy according to the response of consumers. On the other hand, virtual regulators collect virtual currency from consumers and producers to maintain the operation of the meta-universe and provide related public services, such as system upgrades and

maintenance.

As shown in Figure 3, the red dotted line is the relationship between the physical regulator and the virtual regulator. Virtual managers obtain services from real regulators by paying taxes. Tencent, for example, pays taxes to the government, which allows it to pass copyright laws to protect the use of various games in its arcades. How to evaluate the services and income of virtual managers, accounting and auditing should follow up the corresponding matching new rules.

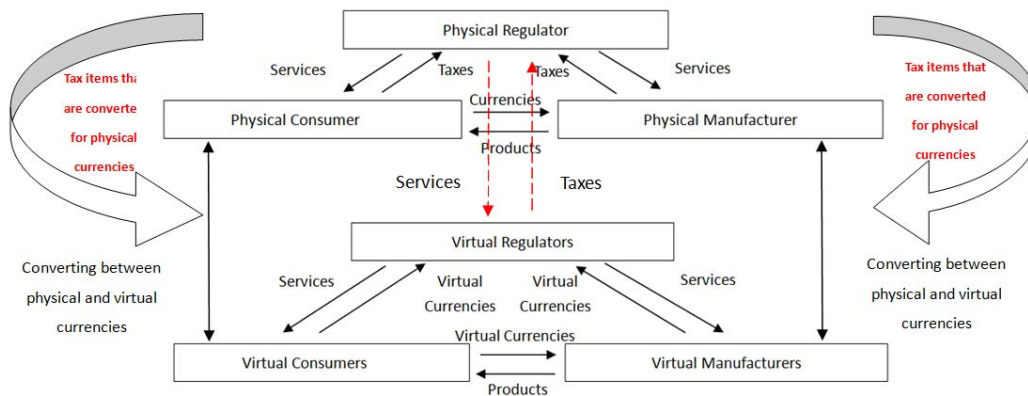


Figure 3. New accounting and audit functions of entity regulators

## 3. Metaverse Impacts on Auditing

The impact is a deviation from the desired goal, which can be positive or negative. Therefore, we will discuss the impact of meta-universe on audit from the perspective of risk.

Jiao Ruijin (2022) believes that the fission path of the new economy of the metauniverse follows "digital twin technology → twin cities → twin societies". This kind of virtual world of meta-space is not illusory, but the combination of the digital and virtual world of the real world.

The said path bring the following changes and risks:

### 3.1. Changes in the fair value test mode of asset value in auditing because of mataverse.

The emergence of a new business form, which is a comprehensive way of integrating technical logic, financial logic and industrial logic, not only brings a new business model, but also challenges the traditional valuation method. As all known, the financial performance of a company is an important basis for the valuation of a company, which Auditing institutions need to adopt to test the asset value, and make provision for asset impairment or determine the profit and loss of fair value changes. However, Traditional valuation

models are no longer suitable for valuing metaverse companies, which brings huge challenges to the auditing.

### 3.2. Audit risks to Metaverse Virtual company

a. Due to the decentralization of the meta-universe and the different rules for determining consumption timing and income, the determination timing and income of the meta-universe virtual income of various enterprises are different. The switching of virtual assets between different platforms, the switching of virtual assets in the meta-universe and real assets in the real world, may easily lead to late or misstatement of the morning news, resulting in the possibility of material misstatement due to the timing of revenue recognition.

b. Although the metaverse is a new business form, it still operates on the basis of network technology. Network security vulnerabilities or technical loopholes may lead to major information to be deleted or tampered with, resulting in medium misstatement;

c. Decalized metacosmic assets lack fair prices, leaving a back door for related party transactions. Metaverse production enterprises or service-providing enterprises in the metaverse may have inflated prices, thereby related enterprises may buy virtual products or services at high prices,

which brings difficulties to auditing. Liu Xuejing and other scholars (2004) analyzed the implementation of different stages of virtual company marketing, and suggested that the performance of enterprise electronic contracts, marketing plan, sales performance, sales revenue should be reviewed in the process of revenue audit. Since the operation of virtual companies in the metaverse is different from that in the real world, it is worth paying attention to how to audit the fair price, market share and marketing profit of virtual products in the metaverse.

d. Audit risks arise from transaction risks. Li Changqing and Wang Qin et al. (2007) pointed out that the requirements for credit rating in business activities are relatively high under the background of network economy because the business of virtual enterprises has the characteristics of virtualization and electronic payment, so that the transaction risks are increased. Such transaction risks are reflected in the meta-universe as virtual asset commercial fraud, virtual currency theft, virtual payment errors and other risks. Wang Jiabao (2014) analyzed the environment of e-commerce and pointed out that the reliability of transactions may not be guaranteed under the virtual background. Since certain information cannot be properly configured in a decentralized metaverse, there is also the possibility that transactions will be recorded multiple times, thus the reliability of the transactions cannot be guaranteed.

#### 4. Conclusion

The meta-universe is a completely new social form, not only because it is a new social form beyond the real world, but also it is inextricably linked with the real world, and the new features in the form, content, and structure. (Wang Zhuo, Liu Xiaowan, 2022)

a. The integration of the metaverse world and the real world has changed the way that people participate in economic activities, and it has also triggered new economic growth

points. In metavers economy models, there are three main roles: virtual consumers, producers, and regulators. Virtual consumers pay for goods with virtual currency. The virtual manager, on the other hand, charges virtual currency from users and manufacturers to maintain the meta-world and provide related public services such as system updates and maintenance.

b. Metaverse challenges the traditional model of company valuation and auditing.

The rise of new forms of business challenges the traditional methods of value evaluation and auditing. Accounting and auditing should adopt new systems to track how meta-universe services and revenues are valued.

c. Metaverse cause metaverse company auditing risk, which may come from the revenue recognition risk, recognition timing risk, security or technical vulnerability risk, and transaction risk caused by the decentralized characteristics of the center.

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