

“Ready Payer One”

- A research into the effect of governmental regulation of ethical problems existing in the Chinese online game industry

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Abstract

With assorted ethical issues in the online game industry arising but poorly regulated as the industry evolves and prospers, there is an urgency to look into the how well the regulation of ethical issues existing in the online game industry works. The purpose of this research is to find out the effect brought by governmental regulation on the ethical problems existing in online game industry. Using a model of “stimulation and reaction”, namely finding out how the subjects respond to the sanctions or laws issued by the regulators to evaluate the effect of governmental regulations, the research found out that governmental regulation positively affected the status quo of ethical problems in terms of the prohibition of problematic content and gambling using virtual currencies. However, the governmental regulation may well worsen the status quo of ethical problems as well as infringe the overall welfare of the industry due to “government failure”, characterized by poor understanding of the need and development of the market, low efficiency of regulation and a crude manner of governing. The model “stimulation and response” raised in this research can be adopted by other researchers when investigating the impact of governmental intervention. Further researches are needed to qualify the reactions of game developers and players systematically.

1.1 Background knowledge

1.1.1 *The Status quo and the Past of Chinese Online Game Industry*

The definition given by the www. Chinabaogao.com, a website conducting statistics, of online games is: Sustainable multiplayer games using the internet as the medium of transmission, using the server from the game operators as a terminal of processing, using the software from the client-side as an interface interacting information in order to realize the purpose of recreation, communication and achieving virtual accomplishment (*Definition and classification of online game industry*, 2014). The definition indicates the fact that online games resemble real-life socializing in certain ways.

Online games were not introduced to China until the 1990s, which is late when compared to the situation in America, Japan or South Korea. The online game industry experienced an unfetter growth after its introduction to China, with foreign games totally dominating the market. However, the government began to regulate the industry in 2000. With the scrutiny of foreign games, the Chinese online game industry grasped the chance and has been prospering within the boundary of law: In 2002, *Sword Heroes Fate*, an online game by Seasun Co., Ltd, marked the rise of native online game industry. Nowadays, Tencent and Netease, two native online game giants, have established themselves in the industry, and by the way generated market power.

Chinese online game industry has a broad range of customers. Until Dec. 2018, the scale of Chinese online game player had reached 484 million. The great demand propels the robust power of the industry to generate revenue. According to the statistics by CNG, the actual sales revenue of Chinese online game market in 2019 is 233 billion yuan with an annual increment of 8.7 percent. (CNG, 2019)

1.1.2 *Ethics, Laws from an Economic Perspective and Their Embodiment in Game Industry*

Ethics, from a Marxist point of view, refer to a code of behaviors that individuals volunteer to follow in order to ensure that the production and exchange process of products progresses smoothly (Caplan & Jennings, 1984). Laws, however, are also a code of behaviors regulating the behaviors of people who involve in the most basic social behavior, namely production (Cai, 2008). A marked difference between laws and ethics is that the former is enforced by the organ of violence, thus being compulsory and more severe, whereas the latter is more of self-control.

Stipulated in chapter 1 article 2 in the Constitution of the People's Republic of China, “中华人民共和国的一切权力属于人民” (All power of people's republic of China belongs to the people) (National People's Congress of the People's Republic of China, 2018). Then the power of stipulating laws is no exception. Thus, laws can be regarded as a consensus reached by different individuals with respect to their view of what a proper code of behavior should be like. That is to say, laws are the embodiment of a consensus of people's ethics in certain aspects, whereas the scope it covers is fairly limited when compared to that of ethics. Therefore, laws are a component of ethics, and is usually the bottom line of ethics.

Laws, being unequivocal, tells right from wrong easily, whereas ethics (except the part regulated by law) are intangible, blurring and variable. In order to tell ethical from unethical, especially in the context of market, where production and exchanges of products are made, The Theory of Autonomous Power is raised by Wang.

According to The Theory of Autonomous Power, the ethic of economic men is the code that people should set the benchmark of not sabotaging anyone's interest or welfare while pursuing their autonomous power, namely maximizing their own profit (Wang, 2013). Thus, unethical behaviors in the context of market refer to behaviors infringing other people's interest or welfare in the pursuit of profit, which also include ones violating laws.

Mostly the market is regulated by the government according to the related laws and codes. However, as is mentioned above, the jurisdiction is still limited when compared to the scope ethic covers, which indicates that many behaviors not prohibited by laws currently but sabotaging interest of others severely cannot be prosecuted or inhibited. This especially rings true for the online game industry, a field where laws are still defective and incomprehensive. Worse still, numerous means of committing crime by taking advantage of online games, which haven't been prohibited by laws are now arising, such as using virtual currencies issued by the game developer to gamble or using the virtual currencies for money laundering. Unfortunately, such issues can only be sorted into the category of "ethical issues" with no related laws regulating them, which makes the topic "the regulation of ethical issues existing in the online game industry" worth discussing and contemplating.

1.2 The purpose of this research

First by systematically categorizing the assorted ethical problems existing in Chinese online game industry, this research will figure out why such ethical problems call for governmental regulation. On top of that, this research will evaluate the positive effect induced by governmental regulation on ethical problems, and illustrate that governmental intervention also inversely worsens the status quo of ethical problems and infringes the overall welfare of the game industry.

Literature review, method and findings

1.1 A general review on home and broad researches related to this study and inspiration from them

The number of domestic researches focusing on the ethical problems existing in the online games is fairly limited, and they are generally written 5-6years ago or even earlier, which seems to be somehow obsolete as new forms of ethical problems arise in the recent years. Among these researches, a majority of researches reckon that ethical problems existing in online games are equivalent to

problems that may distort the adolescent players' behaviors negatively, or in other words: "cause mutations in behaviors" (Niu & Song, 2013), which usually comes in the form of problematic game content. On top of that, they mostly reckon that the game industry calls for governmental regulation badly. When discussing the impact brought by governmental regulations, Liu et al.'s paper entitled "On the improvement of the supervision system of online games in China" (Liu et al., 2012) is the most typical, concentrating on the effectiveness of governmental regulations and the defects causing the inefficiency of governmental regulation. Sun (2016) shared most opinions with the aforementioned paper while mentioning the possible negative impact brought by governmental regulation in a causal and general way.

The topic "ethical problems existing in online games" has gained attention from an increasing number of foreign researchers, most of whom focus on a specific problem without systematically categorizing the ethical problems existing in the game industry. Some researchers concentrated on questionable mechanism employed by game developers to cultivate the players' adherence to the game. For instance, Xiao (2019) looked into the ethical problem existing in loot boxes (a game activity resembling gambling). Other researchers focused on the disputative mindset of the game. Lynch et al (2016) researched into the hyper-sexualization of women characters in online games. In addition, partly due to the eminent role of guilds, foreign researchers downplayed the role of government in the supervision and regulation of online games.

Inspired by the aforementioned researches, this research will systematically categorize the ethical problems existing in the Chinese game industry nowadays into different categories. In addition to finding out the positive effect of governmental regulation on improving the ethical problems, this research will illustrate the how governmental regulation of ethical problems worsens the overall welfare of the game industry and its embodiment, based on economic theories and analyses of how specific laws stipulated by the government stimulate both game developers and players to react in an unexpected way and induce unexpected consequences, which is uncommon among the similar researches.

1.2 Method

This research adopted 3 general ways of collecting or analyzing related information and a model to evaluate the impact of governmental regulation.

The way to collect data and information is by sorting and categorizing the previous researches, statistics, files and books, which is done by searching home and broad online databases or referring to materials offline.

In view of the fact that many figures regarding ethical issues in the online game industry are rather discrete and not systematic, and the fact that there is doubt in the reliability of many figures mentioned in online journals, the researchers collected such data and verified them by downloading the game themselves and checking, or joining in the third-party trading platforms of game props.

The way to analyze data and information is adopting a multidisciplinary perspective. This research involves knowledge related to ethics, economics and finance, and laws. The general logic flow of this research is established on an economic perspective, whereas the topic is one more of ethics.

The model adopted in this research, namely the model of “stimulation and response”, is aimed to evaluate the effect of governmental intervention and is carried out based on specific cases like how those regulated respond to the disputative governmental prohibition on monetization of virtual currencies and properties and the consequence of their response. The inspiration for this model is from a concept mentioned in this research, namely “government failure”. A reason why “government failure” happens is that the regulators failed to contemplate the possible reaction of those regulated and the results when they exerted “stimulation” like laws and sanctions, which leads to the failure of regulation. Thus, this research chooses to adopt the model of stimulation and response to find out the negative effect of governmental regulation.

2. A systematic categorization of the ethical problems existing in Chinese game industry

This research defines ethic as the code that people should set the benchmark of not sabotaging anyone's interest or welfare while pursuing profit, the violation of which will lead to sabotaged property and experience of people involving in the market or give rise to negative externalities, namely the infringement of the welfare of bystanders involving in neither the process of production nor exchange in the market, which usually refers to the welfare of the society or the public as a whole. Typical examples for negative externalities include increased crime rate and pollution.

On top of that, since ethic ought to be a code observed by all parties involved in the market, then both the game developers and the customers (players) should follow it.

Therefore, this research classified ethical problems existing in the Chinese online game industry into 4 categories, namely ethical issues done by game developers that infringed the property and experience of players; ethical issues done by game developers that gave rise to negative externalities; ethical issues done by players that infringed the property and experience of other players and ethical issues done by players that gave rise to negative externalities.

2.1 Ethical issues done by game developers that infringed the property and experience of players

2.1.1 Problematic marketing

2.1.1.1 Mechanism of cultivating addiction to the game One of the most important ways to lure the players to become addicted to online games is by cultivating their adherence, namely forming dependence on the games, which will be subsequently utilized by the game developers to capture value and profit from players. A common way to cultivate adherence is playing the gimmick of psychology, which mainly comprises the following strategies: First, the game developers may well take advantage of the players' desire for triumph and accomplishment and set a ranking list in the game in order to

motivate them to devote more time to the game. For instance, *Glory of Kings*, a prevailing online game by Tencent, has elaborately designed a ranking list with different hierarchies. Another strategy frequently employed is imposing the psychology of gamblers of some players. By setting activities resembling lotteries in the game, game developers may use some “rare props” as baits to lure players pursuing rare items to devote time and money in the game constantly, which may lead to irrational consumptions.

The strategy of cultivating adherence can also be intertwined with the marketing strategy of “Free to play”. By setting no threshold to play the game, the game may attract a broad scale of players, and the game developers may subsequently cultivate their adherence to the game and eventually capture value from them.

2.1.1.2 False advertisements Game developers may lure players to play games by raising false and alluring advertisements. When the players entered the game, they may well find out that the game itself does not agree with the advertisement, which wastes the time and experience of the player. A typical example of false advertisement is the case of *Blue Moon*, an online game by Tanwan Co., Ltd, whose slogan of advertising is that players can convert their props into RMB in the game, namely the real-life currency. However, it turns out that by selling their props, the players can only procure “Yuanbao”, a virtual currency in the game, which disagrees with its propaganda.

2.1.2 Unsecured virtual property in games

2.1.2.1 Deleting files / Stopping offering service Nowadays, this problem is mainly embodied in the form of “deleting files of open beta”. Before the official version of a large-scale online game is released, there will be an “open beta” version of the game, namely a version where the game developers invite a majority of players to find the bugs in the game together in order to prepare for the official version, and the “open beta” has 2 main categories, namely “delete files / not delete files”. However, the “open beta” stage also accepts the top-ups from players. Chances are that it is not until a

few weeks before some tricky game developers actually withdraw the open beta version that they declare the beta to be a “delete file” one to the public, which casts losses to the consumers who are unaware of the fact. In the statistics of complaint related to paid online games released by China Consumer Association in 2018, 12.6% of the complaints are related to the protection of virtual property rights.(The original title of the figure is “complaints related to the price paid for online game services”, the reason why this research interprets it in this way will be illustrated in the part of 6.2.1.2 in details)

2.1.2.2 Fluctuation of the value of players’ virtual assets There is a pricing system existing in the online games to measure the value of virtual items, which is usually the virtual game currency issued by the game companies. However, “Notice on Strengthening the Management of Virtual Currency of Online Games” issued in 2009 stipulates that virtual currency of online games is only a paid access to the content or services of games and is not allowed to circulate in places other than the games. Unpegged from the real-life currency, virtual currencies in the games have become complete “credit currency”, whose value depends entirely on its issuer, namely the game developers. However, game developers may damage players' rights and interests by depreciating the virtual currency, eventually charging "inflation tax" or by changing the exchange rate between different currencies in the game to capture value from the players, and for sure, by sabotaging their interests (Jiang, 2008). In World of Warcraft, the price of a "time badge" (a prop) in 2015 is 35000 "gold" (a currency in the game), whereas in 2017, the figure skyrocketed to 580000 "gold", which shows that the value of the players’ virtual property is poorly secured. (*Time Badge | World Service World of Warcraft Time Badge Price | Time Monitoring Bureau*, 2020)

2.2 Ethical issues done by game developers that gave rise to negative externalities

2.2.1 Disputative mindset of the game

The values and mindsets of online games may influence those of players as they abide by the rules of the games, namely when they are completing “missions” as instructed. With the behavior of the players in real life gradually shaped by the values of the game, the players may behave in a way against or harmful to society, such as behaving rudely and discriminating against certain groups of people. The extreme is crime. In *Excellent Sesame Official* launched by Shenzhen Chuangku Interactive Information Technology Co., Ltd., there are such settings as "players can get rewards for taking bribes" and "players can get rewards for torturing women", which distort values and materialize women.

2.3 Ethical issues done by players that infringed the property and experience of other players

2.3.1 unethical behaviors handicapping the functioning of the game

2.3.1.1 Third-party auxiliary software—Cheats in online games Out of vanity or for the purpose of "satisfying a craving", players in the game may choose a third-party auxiliary software, so as to obtain the "ability" or operation that other normal players cannot match. The third-party auxiliary software is a serious problem looming over the online game market worldwide, with China as the most problematic one. Its prevalence has greatly sabotaged the fairness of the game competition, and “squeezed” the "law-abiding" players out of the game. The most extreme situation is that the online game players will complete the conversion of bad money driving out of good” – namely the law-abiding players will totally lose ground to those cheaters, with the game glutted with cheaters.

2.3.1.2 Third-party game transactions interfering with the normal operation of the game

In order to complete the officially prohibited but profitable virtual goods transactions, players will choose a third-party game trading market (or private offline transactions) to avoid the official scrutiny

of the transaction. In order to keep the game running normally, the game officials usually forbid the trade involving some items that will accumulate in large quantities in order to avoid the hyperinflation of the game currency. However, the third-party trade will disable this method. The hyperinflation of the online game currency will rob almost all the players in the game, and even make the game manufacturers lose control of the game.

2.4 Ethical issues done by players that gave rise to negative externalities.

2.4.1 ethical issues that downgrade the ethical atmosphere of the game

2.4.1.1 problematic behaviors of individuals Part of players having an ulterior motive will take advantage of the socializing nature of online games to spread some illegal information or information that gets around the ban. Illegal information is usually spread by implication in the form of "symbol", or "slang". At present, the Chinese version of Minecraft, which is agented by NTES, is glutted with dating information of one-night-stand which is spread through symbols. The impact on the minor players in the game is severe. In addition, the ethos of insulting and discriminating against some players with poor techniques in online games is also a widely criticized aspect of the ethical environment of online games. Online game players may also take the same behavior in real life, forming discrimination or even antagonism against some special groups.

2.4.1.2 Problematic behaviors of influencers Online game streamers, as influential players in the game, is often established as a "model" among a majority of players. However, the problematic ethical behavior of the online game streamers is likely to be magnified by the frenzy of his followers, which worsens the overall ethical atmosphere of the online game. In 2018, Benwei Lu, a famous online game streamer, insulted players who doubted that he had cheated in online games in a fairly unacceptable way during the live stream, which triggered a large number of fans insulting the person who casted doubt. The negative externalities of this phenomenon are similar to the behaviors of ordinary individual players.

2.4.2 Online games being reduced to money laundering tools / platforms for gambling

2.4.2.1 Gambling in Online games As a platform that can issue virtual currency, online games are taken advantage of by some ill-intended people. Through the legal form of one-way linkage between RMB and virtual currency (that is, people are allowed to exchange RMB for virtual currencies, but the inverse side of this exchange is prohibited), the money for gambling are transferred into the game platform by means of “top-up”, and the gamblers may start gambling activities with game currency as tokens. After that, RMB will be exchanged back through third-party transactions (including private transactions and transactions through third-party trading platforms). Some online game platforms even open channels of exchanging game currency for RMB undisguisedly. This problem has seriously handicapped the control of gambling behavior in our country, revived the fashion of gambling crime, downgraded the ethical atmosphere of the society, and seriously threatened the safety of the property of the people.

2.4.2.2 Money laundering in Online games Utilizing the Online games as media of money laundering is a new way of money laundering. Illegal people may use the defects existing in the supervision and legislation of virtual currencies and properties, purchasing a considerable number of pay cards or virtual currencies of bogus online game companies of their own, then the illegal income will be "laundered". It is also possible to launder money through transactions done on third-party platforms by purchasing a considerable number of virtual currencies or props and then converting them back into real money.

3. The importance of the government as the regulator to supervise the online game market

3.1 The definition of regulation, from an economic perspective

The definition of governmental regulation by American economist Spulber is: the general rules or special behaviors that directly intervene in the mechanism of allocation in the market or indirectly alter the supply and demand of enterprises and consumers, which are formulated and enforced by government administrative agencies. (Spulber,1999) Its purpose is to solve market failure, to maintain order of the market, to promote market competition and to improve public welfare. (OMB and OIRA, 1976-2001)

3.2 The function to secure the players' property and experience

Considering the property of online games as a virtual item, the online game market is a market where the problem of Information Asymmetry prevails, namely the customers and the producers have marked difference in their understanding of the product. Consumers often have to face the "adverse selection" caused by the lack of information, and run the risk of property or experience. Since the market, as "an invisible" hand, cannot rectify such asymmetry, the aforementioned ethical problems done by game developers arise. Nonetheless, as a "visible hand", the government can protect the consumers' property and experience by forcing the game manufacturers to disclose relevant information.

3.3 The function to Eliminate / Improve negative externalities

Negative externalities, as a kind of negative impact on the society, has nothing to do with the interests of both parts of supply and demand. Thus, the invisible hand of market itself will not rectify such problem. Therefore, the elimination or improvement of negative externalities depends on the government. The elected government generally follows the Theory of Public Interests, that is, the

regulator is the representative of the public interest (Liu & Sun, 2015). Therefore, the intervention of the government is conducive to eliminating or improving the damage that negative externalities imposed to the welfare of stakeholders.

4.The Ways in which the government regulates the Game Industry

4.1 The bodies of regulation

4.1.1 General administration of press and publication of China (GAPP)

The General administration of press and publication of China is a subordinate department of the propaganda department of the CPC central committee. It was in charge of online games from 2000 to 2004, which is the period when it issued “Internet publication license”; “copyright authentication number”, “examination and approval document number” and “online game publication number”. From 2008 to 2019, its responsibilities had been limited to only two responsibilities: pre-approval of online games and issuing “online game publication number” according to the provisions of “Three Decisions” 《国务院办公厅关于印发国家新闻出版总署（国家版权局）主要职责内设机构和人员编制规定的通知》2008). On June 28, 2019, after the Ministry of Culture and tourism had released “On Abolishing ‘The Interim Measures for the Administration of Online Games’ and ‘Measures on Tourism Development’”(《文化旅游部关于废止《网络游戏暂行办法》与《旅游发展管理办法》》), the full responsibility of the regulation of online games has returned to the GAPP eventually.

4.1.2 Ministry of Culture (The Ministry of Culture and Tourism)

In 2004, after the promulgation of “The Notice on Strengthening the Censorship of Online Game Products”(《关于加强网络游戏产品内容审查工作的通知》), the Ministry of Culture was enlisted as a body to supervise the online game industry in terms of putting online games on file and giving the registration number. In 2010, the ministry of culture took the lead in regulation of online games after

“The Interim Measures for the Administration of Online Games” is released. (《网络游戏管理暂行办法》). In 2018, the Ministry of Culture and the Ministry of Tourism were merged into the Ministry of Culture and Tourism. In 2019, the Ministry of Culture and Tourism fully withdrew from supervision of online games after the promulgation of “On Abolishing ‘The Interim Measures for the Administration of Online Games’ and ‘Measures on Tourism Development’” (《文化旅游部关于废止《网络游戏暂行办法》与《旅游发展管理办法》》)

4.1.3 Online game ethics Committee

Established in December 2018, the Online game ethics Committee is subordinate to Central Propaganda Department, which resembles the General Administration of Press and Publication. It is an organization composed of experts and scholars from relevant departments and units, universities, professional institutions, news media, and guilds, who study online games and issues related to the young. Its responsibility is to assess the ethical level of online games.

4.2 An overview of the government's legislation on the regulation of online game developers/consumers

The most complete and systematic law on the regulation of online games is “The Interim Measures for the Administration of Online Games” (《网络游戏管理暂行办法》) enacted in 2010, which is a set of specific department rules regulating online games in terms of the content of online games, the bodies involved in the market and their marketing or operating activities in an unequivocal and systematic way. It also contains articles regulating specific issues, such as the applicable people of the games, the issuance of virtual currency and the provision of the game service and some other specific behavior. Nonetheless, it was repealed on June 28, 2019.

In comparison, most other laws and normative documents focus on a specific issue, such as "plug-in" and "anti-addiction". Such laws include “The notice on the implementation of the regulation

of ‘private server’ and ‘plug-in’” (《关于开展对“私服”、“外挂”专项治理的通知》), “The Notice on Starting the Real-name Authentication System for Online Game Fatigue System” (《关于启动网络游戏防沉迷实名验证工作的通知》), “A Letter about Stopping Vulgar Marketing Activities and Strengthening the Management of Online Game Market from the Department of Culture (《文化部文化市场司关于加强网络游戏市场推广管理 制止低俗营销行为的函》), “The Notice on Improving the Regulation of the Content of Online Games from the Ministry of Culture (《文化部关于改进和加强网络游戏内容管理工作的通知》) and many others.

5.The embodiment of the fact that governmental regulation improves the ethical issues

5.1 Positive government operations that eliminate/improve negative externality

5.1.1 The regulation of the content / values of online games

China's regulatory authorities have a positive impact on regulating the values and the content of the online games by denying those games that failed to meet the requirement game version numbers and by frequently re-examining the games that have been conferred the “Online game publication numbers”, commanding them to rectify the problematic content that they have newly updated.

The scope of regulation in China for online games in terms of the problematic content and values is quite large. In 2017, China's Public Security department prosecuted 3,975 online game that involved gambling or problematic content including bloody, violent, porn and vulgar scenes and mindsets. The Ministry of Cultural has transferred more than 4,000 online games to the Ministry of Public Security (*National Public Security Organs Investigate 3975 Suspected Online Gaming, Violent Porn, and Other Online Games*, 2018).

As for the strength of the crackdown, the Chinese regulators never compromised with any kinds of games because of its popularity. On December 7, 2018, the Online Games Ethics Committee, which

was newly established, required 20 games that it assessed as “involving unethical content”, which included Honor of Kings, a popular game by Tencent, to remove or to rectify such content.

5.1.2 Crackdown on the problems that cause great harm to the interest of the public

5.1.2.1 The crackdown on gambling via online games With the cooperation of the Ministry of Culture and the Ministry of Public Security, gambling in online games has been well curbed. In 2018, the Ministry of Public Security cracked a number of online gaming gambling cases, which involved hundreds of millions of Yuan including the case of Chengdu Muxi Network Technology Co., Ltd involving more than 600 million yuan; the case of "Cha Liu Ming" involving 500 million yuan, the case of "Moyu" involving 128 million yuan and several others. In 2018, the Public Security authorities in Zhejiang province cracked 127 cases , captured over 700 million yuan of funds, destroyed more than 110 gambling gangs, arrested more than 1,400 suspects and shut down 36 online gaming platforms involved in gambling.(*"Magic domain" online games are actually gambling, involving 128 million yuan*, 2018) In conclusion, governmental regulation has curbed the trend of online gaming gambling effectively.

5.1.2 Reasons for generating positive effects

5.1.2.1 The stipulation of the relevant laws and the intensity of punishment As for the regulation of the content of online games and the crackdown on online gaming gambling, both article 15 of “The Internet Service Management Measures” (《互联网信息服务管理办法》) issued in 2000 and article 9 of “The Interim Measures for Online Games Management” (《网络游戏管理暂行办法》) issued in 2010 have strict provisions. In addition, article 20 of “The Measures for the Administration of Internet Services” endows the Public Security Department the power to prosecute the illegal game developers or players. Article 30 of The Interim Measures for the Administration of Online Games” endows the Departments of Public Security and the Department of State Security aforementioned powers, as well as the power of the Ministry of Culture to suspend the license for the operation of

online service. All of these measures indicated the intensity of the punishment.

5.1.2.2 High threshold and random check for entry Through the "entry examination", which includes "online game publishing number" issued by the General Administration of Press and Publication representing the pre-approval, and "online culture operation license" issued by the Ministry of Culture (Ministry of Culture and Tourism), China's regulatory authorities have stifled a majority of problematic online games before they enter the market. For online games that have entered the market, the ministry of Culture conducts rechecks to find out whether the game developers have updated problematic content by means of randomly picking games to recheck. For instance, in September 2016, the ministry of culture conducted a random recheck involving 200 online games (13% of the games in the industry) which had been conferred the license of "online service operation permission". (*Ministry of Culture deploys random spot check on online game market 200 units will be inspected*, 2016)

6. A review and investigation on the question whether government regulation have worsened the status quo of ethical problems in online game industry or sabotaged the welfare of the market as a whole

6.1 The basis of the model "stimulation and reaction"—How the intervention of governmental regulation worsens the status quo of the market

There are two premises for the government intervention to achieve the aforementioned desirable results. The first one is that the purpose of the government is to improve the economic efficiency of the market, with market growth as a key indicator; The second is that there is no information cost (i.e., cost incurred by the government due to the poor understanding of the market), or barrier of management. Both of these two premises are necessary, otherwise the government intervention will fail (Krueger, 2001), which is also called "Government Failure" and is characterized by unmet regulation goals and

deduced economic welfare of the market (Zeng, 2007).

Resembling the negative impact of "market failure" on market supply and demand, which results in the inefficient allocation of resources, "Government failure", due to the characteristics of the government as a third party changing market rules forcibly, has resulted in distorted supply and demand as well as misallocation of resources caused by lack of information, which has worsened the welfare of businesses and consumers. In particular, it should be made clear that situations where governmental regulation failed to generate desirable positive effect should also be regarded as "government failure". Because although there is no mismatch of resources or distortion of supply and demand, the implementation of regulation requires coordination among businesses, consumers and the government institutes, which often comes at the cost of the economic welfare of businesses and consumers. Therefore, the inefficiency of government regulation also worsens the market situation, which is a counterproductivity unexpected by the regulator.

On top of that, changes (reduction) in economic welfare may stimulate the private sector (i.e. businesses and consumers) to take some measures to deal with or to influence the regulatory procedures being implemented by regulators. These reactions are often contrary to the will of the regulators and therefore may well make the regulation counterproductive.

Therefore, governmental regulation on the ethical issues of online games may also worsen the status quo of the market by damaging the economic welfare of businesses and consumers. In addition, the deterioration of economic welfare will also make businesses and players deviate from the will of regulators and worsen the status quo of the ethical issues existing in the online game industry.

6.2 The embodiment of "Government Failure" in Chinese Online Game Market

6.2.1. Stimulation 1: Disputes about the real-life based value of virtual assets

As mentioned above, if the government intervenes with the functioning of the market without deep understanding of the market it governs, it will cause “government failure”. As for the definition of the “real-life based value” of virtual assets in online games, the government's decision has deviated from the need of the market. Consequently, the economic welfare of consumers has been degraded, which has stimulated consumers to react in unexpected ways that are counterproductive to the purpose of regulators to safeguard the player's virtual property, leading to new ethical issues.

6.2.1.1 Types and scope of virtual assets “Virtual assets” refer to “virtual assets in online games” in a narrow sense. They are defined as: game resources that depend on the virtual environment of the network space and that are controlled by the player, including game accounts, game characters, and their props accumulated during the game, such as "Currency", "Real Estate", "Equipment", "Pet" and other virtual items (Wang, 2010). "Virtual currency" and "Equipment" are the virtual items usually referred to as “virtual assets”.

6.2.1.2 The definition of virtual assets, from the perspective of government Partly for the purpose of preventing and controlling ethical issues such as online game gambling and money laundering, the Chinese regulators deny the nature of "virtual assets" as currencies or commodities. According to Article 19 of the "Interim Measures for the Supervision of Online Games" revised in 2017, the scope of use of virtual currency for online games is limited to the exchange for online game products and services provided by itself, and shall not be used to purchase physical products or exchange products of other units and service. Although the provision do not directly declare the definition given by the government, the provision implies two levels of meaning: First, the virtual property of online games, including virtual currency issued in online games, is a paid access to game content and services and can be further interpreted as the price of the services and contents; Second, the connection between online game virtual property including online game virtual currency and the real world is one-way, that is, players can exchange the real world property for virtual property, but the law has stipulated that game developers must not allow for the “redemption” namely re-establishing a bond between virtual property and real-world property and exchanging it for real-world property. To summarize: the government denies the real-life based” value of virtual assets.

6.2.1.3 Judgment of the Real Value of Virtual Assets Judge Wang Shengyu (2010) of the People's Court of Bei'an City reckons that a reliable measure for judging whether virtual property has real-life based value is to verify whether there is a real-life based equivalent of it.

The existence of a real-life based equivalent indicates the existence of exchange value, namely the property of a commodity that can be exchanged with other commodities (real-life based commodities) or currency (real-life based currency), as is defined by the MBA think tank encyclopedia. According to the fifth of Ten principles of economics given by Mankiw (2015), namely the principle that trade can generate economic benefits for everyone, and the premise that economic men are profit-oriented, economic men will exchange items that have “exchange value” (namely having an equivalent). Therefore, whether the virtual property has real value can be verified by judging whether there are transactions in which virtual assets are exchanged for real-life based commodities or real-life based currencies.

This research selects the transactions derived by “loot boxes” as a representative to verify whether the virtual properties have real-life based value.

" Opening loot boxes" is a prevailing activity in the online games, where Players invested a fixed amount of virtual currency and then will be rewarded with randomly selected virtual props within a certain range. The rewards include "common items" that is easy to obtain and "rare items" whose possibility of being obtained is fairly slight. Take "Battleship Girl R" as an example, the chance of obtaining 3-star equipment (common items) is 51.15%, whereas the chance of obtaining 6-star equipment (rare items) is 0.26%. With the game authorities prohibiting players from trading such props with each other and the fact that there are no other ways to obtain these props inside the game (What Does “Real-Money Trading” Of Virtual Items Mean? [Social Games] – Kantan Games Inc. CEO Blog, 2012), both the value of 3-star props and that of 6-star props are null, for there is no equivalent of

the items whose cost of being obtained is random in the context of the game. However, when the transaction has been done outside the game, namely escaping the prohibition of trading such props, the bargaining power of buyers and sellers will reach a consensus on the equivalent of such props. Considering the bargaining power of buyers and sellers, the value of 6-star props measured in real currency will be approximately as much as 196 times higher than that of 3-star props, which indicates that exchanging virtual properties for other real-life based commodities or currencies has created extremely high economic benefits. Under the premise that economic men are profit-oriented, those who obtained “rare items” will exchange such virtual props for real-life based commodities or currencies, whereas those who do not trust in their luck may also choose to exchange real-life commodities or currencies for virtual props. Thus, the transaction where virtual props are exchanged for real-life based commodities and currencies is done.

From the example of “loot boxes”, it can be concluded that there are transactions in which virtual assets are exchanged for other goods or currencies. Therefore, virtual assets do have real-life based value, the debt of which will sabotage the economic benefits of players severely.

6.2.2 Response 1 to stimulation 1: The rise of "RMT issues" and third-party game trading platform

RMT issues, according to the Toto (What Does “Real-Money Trading” Of Virtual Items Mean? [Social Games] – Kantan Games Inc. CEO Blog, 2012), is a phenomenon under which virtual items are sold for real money in non-official trading platforms. Due to the Article 19 of the "Interim Measures for the Supervision of Online Games" revised in 2017, which stipulated that game developers must not open the "redemption" channel in the game, and the fact that players driven by huge economic benefits seek to exchange virtual props for other real-life based items or currencies, third-party game trading platforms have emerged (What Does “Real-Money Trading” Of Virtual Items Mean? [Social Games] – Kantan Games Inc. CEO Blog, 2012). Both the supply and demand sides of the trading

market on the third-party game trading platform are composed of game players holding different game accounts, with the ownership of virtual props exchanged for real-life currencies, and vice versa. At present, the prestigious third-party game trading platforms in the Chinese market include “5173.com” and “Dudu Online Game Trading Platform”. Online shopping websites such as “Xianyu” and “Taobao” also serve as third-party game trading platforms.

6.2.2.1 Ethical issues of third-party game trading platforms As the third-party game trading platform is a kind of “unofficial” platform that dilutes the will of game developers, the Chinese regulators have not responded to this reaction triggered by the regulation, which leads to the rise of ethical issues on the third-party game trading platform, which mainly include the problem that “millionaires in the game” will taking control of the economy inside the online game by short selling maliciously and that the sale of “illegal” virtual items is poorly regulated.

6.2.2.1.1 The rise of “millionaires in the game”, and their ways of making profit by sabotaging the interest of other players-malicious short selling As is mentioned above, when a majority of players notice that it is profitable to trade their virtual props for real-life based assets, players with considerable real-life based fortune can have easy access to a considerable amount of virtual currencies or props that are under no circumstances available to normal players. Subsequently, those “millionaires” will invest in one or several props with considerable sum of virtual currencies in the Exchange officially set in the game, where the props are traded in a floating price determined by the actual market trend), thus propelling the price of the props they invested to a higher point. Then other players will find out that the speculation of such props will be profitable, thus investing their virtual currencies in the speculation of such prop. When the price has reached the point satisfactory enough to the “millionaires”, they will sell off the props which they previous hold in large quantities and profit from the peak of the price. Apart from profiting considerably in the short selling, the “millionaires” will also recoup the virtual currencies they previously invested. However, those “millionaires” may well choose not to circulate the considerable amount of currency they have currently held, which may result in the shrinkage of the currency circulating in the market. With the main propeller of the price of the prop withdrawing from the speculation and the shrinkage of currencies circulating in the market, it is

inevitable to see the price of the prop plummeting. When the price has plunged to a point lower enough to the “millionaires”, they will again invest considerable amounts of virtual currency in the speculation of the prop, namely restarting the aforementioned loop. After several loops, those “millionaires” will accumulate a stunning amount of virtual currencies, which they may soon trade in the third-party trading platform for real-life based currency. A player of *EVE online*, an online game by CCP Co., Ltd, has claimed that he had profited at least 800 thousand yuan using such method in 2014, which inevitably came at a price of the severely sabotaged interest of numerous players. As is joked by the players of *World of Warcraft*, the real central bank of the game is not Blizzard, the developer of *World of Warcraft*, but some other players. Those privately-owned “central banks”, have already severely sabotaged the interest of other players as well as disrupted the functioning of the game, driven by unethical desire to pursue their own profit regardless of the cost.

6.2.1.1.2 The sales of “illegal” virtual props on the third-party trading platform While greatly facilitating the transactions promoting the economic benefits of players, the rise of the third-party trading platforms also facilitates the unethical transactions involving the “illegal” props. In view of the poorly regulated status quo of the third-party trading platforms, assorted props prohibited by the game developers or even the government are broadly traded. The third-party assistance software is among them. Searching “Footage for *World of Warcraft*” (a type of cheat) in Taobao.com, the researchers were flooded with more than a thousand of searching results, with the several links recommended by the website frequented by around 700 or even a thousand of customers monthly.(Data from Taobao.com, Feb.11th, 2020) With so many cheats plugged in the online games, the experience of other player may well be infringed.

6.2.3 Response 2 to stimulation 1: The bait of investment in online games in terms of virtual currencies and assets

In view of the Article 19 of the "Interim Measures for the Supervision of Online Games" revised in 2017, which stipulated that the game developers must not open the channel enabling the redemption process of turning the virtual assets back to real-life based ones, some game developers baited their

conspiracy with high profits to lure investors to “top-up” in the online games and sugarcoated the process as if the investors were really “investing” in a game company, usually by means of giving them securities(which is virtually the receipt of top-ups), which takes advantage of the investors’ ignorance of the fact that virtual assets in online games are not protected by the law. Then the game developers can resort to the Article 19 and declare that virtual currencies are part of the game services and content rather than “properties”, turning “investors” into “consumers” unilaterally, which enables the game developers to wield full control of the investors’ properties. Horrifying crimes may well follow up. In 2018, Shanghai UTOUU Technology. Co., Ltd baited their conspiracy with alluring slogans like “Clipping with no fund” and “ An annualized return of 96 percent of the fund”, which lured a considerable number of investors to purchase the “Tang card”(糖卡) issued by the company with real-life based currencies, which will be converted into the virtual currency of the game *The world of UTOUU*(《悠唐天下》) After capitalizing more than 3.9 billion yuan, the firm suddenly declared that the investors’ behavior of purchasing the “Tang cards” is the behavior of purchasing game services and content, and subsequently “vanished” with the money, which casted great losses to the investors. Unfortunately, the victims of UTOUU cannot prosecute the firm for the lack of related laws. Such cases pose great threats to the security of people’s properties and generate new negative externalities.

6.2.4 Stimulation 2: The fixed quotas set by the regulators to prevent over-indulgence and addiction to game

In order to prevent juveniles from over-indulging themselves in online games, a game fatigue system has been invented by the regulators and it has long been the focus of the online game regulation. However, such stimulation also triggered unexpected reactions of both game developers and players, with the former taking advantage of the law to invent new props to circumvent the enforcement and the latter, especially those aged under 18, seeking to some unethical trades in order to gain extra game hours. The status quo of the ethics of online games festers.

6.2.4.1 Laws and normative documents regarding the online game fatigue system There are 3 normative documents regarding the system, and 2 of them are representative. They are “The Notice on Starting the Real-name Authentication System for Online Game Fatigue System” (《关于启动网络游戏防沉迷实名验证工作的通知》) released in 2011 and “The Notice on Preventing the Juveniles from Over-indulging in Online Games (《关于防止未成年人沉迷网络游戏的通知》) released in 2019 respectively, with the former stipulating that “Setting the online game fatigue system is the prerequisite of passing the pre-approval of the approval for online games and that all players have to involve in real-name registration and the latter stipulating quota of the time that underaged players can spend in online games on a daily basis and the upper limit for top-ups on a monthly basis.

6.2.4.2 The mechanism and details of the game fatigue system in China The mechanism mainly works by reducing or even depriving the “experience” or props gained in the game after their accumulated game playing time has reached the quota. Since 2019, namely the time when “The Notice on Preventing the Juveniles from Over-indulging in Online Games” (《关于防止未成年人沉迷网络游戏的通知》) is released, the game developers are required to force the underaged players who have reached the quota out of the game for that day. On top of that, a real-name registration featuring the restraint that an ID number can only register one online game account theoretically disables the possibility of registering several game accounts in order to gain extra game hours.

6.2.5 Response 1 to stimulation 2: The emergence of “Energy bars”

In view of the compulsory requirements stipulated by “The Notice on Starting the real-name Authentication System for Online Game Fatigue System”, the game developers cannot avert setting such a system as may reduce the adherence of the players. Nonetheless, they invent “Energy bars”, a sort of props that can prolong the upper limit of accumulated game hours by clearing the accumulated game hours spent on that day, which can only be gained by means of top-ups. Furthermore, such props cannot be found in the “Exchange” or stores in the game, which averts the supervision of the regulators. The only time that the channel of selling such products occurs is the time when the players are at the margin of reaching the upper limit of the quota. Chances are that the players may top-up for such props

and gain extra game hours, which inversely enhance their adherence to the game with more time and money devoted into the game.

Frontline Commandos: Rivals, a game by Glu Mobile. Co., Ltd is a typical, with channels of selling “energy bars” at a price of 6 yuan for “full recovery” popping up when the player “have run out of energy”, namely clearing the accumulated game time for the day of purchasing.

6.2.6 Response 2 to stimulation 2: The rise of unethical transactions of game accounts

Despite the fact that the Chinese regulators have shown great care for the underaged players, some of those cared are not only ungrateful but feeling fettered, thus finding new ways of gaining extra game hours without violating the real-name registration system and the game fatigue system. One way of them is purchasing game accounts registered in the name of adults. According to the Report on the status quo of the teenagers’ being shortsighted and the experience of online game purchases issued by China Consumers' Association in 2018, 23.9 percent of online game players who are still in senior high school have purchased game accounts registered by adults or registered a game account in the name of an adult. Such demand for adult-registering game accounts drives the transactions of such accounts. Nonetheless, the source of such accounts traded is not clear. Chances are that such accounts are the end of the chain of the “Hacking industry”, namely the industry where the hackers hack and “steal” the game account of other players and traded the valuable props for real-life based currencies on the third-party platform with an “empty” account left eventually, which is an ethical problem out of the reach of regulators. Thus, the reaction of some underaged players worsen the status quo of the ethics of online game industry as well.

6.2.7 Stimulation 3: One-size-fits-all regulation—The suspension of the issuance of “Online game publication number”

6.2.7.1 The government suspended the issuance of “Online game publication number”

On March 29, 2018, the former State Administration of Press, Publication, Radio, Film and Television issued “Notice on Important Matters of Game Application and Approval”, and announced that they would suspend the release of new “Online game publication number” on account of the institutional reform. Subsequently, the release of “Online game publication number” started a nine-month-long "shutdown". The game industry generally held a negative attitude toward this shutdown, whereas the government insisted that the suspension is aimed to "promote the reform of the supply side ", which may eliminate the number of opportunist game companies which is irresponsible for their customers.

6.2.7.2 The purposes of the government’s suspension of “Online game publication number”

The theory behind the government’s announcement of “the reform of the supply side” is that by suspending the issuance, the government can eliminate the less competitive online game companies existing in the game industry. The suspension will force the existing online game companies in the industry to rely on their extant games to gain profit because “Online game publication number” is a license for new online games to generate legitimate profits. The suspension is expected to crack down severely on the problematic game companies that gain profits by developing a large number of one-trick-pony games which only focus on luring the players to top-up without considering how to retain them. After the screening of the suspension, the games developers surviving in the market will just be the ones of a large scale, high-quality and a large scale of stable players, thus improving the quality of the supply side of the online game industry.

6.2.8 Response 1 to Stimulation 3: Unexpectedly broad range of the strike and the unexpected slowdown of the market growth

Although the companies which the government planned to crack down on were the "opportunist companies", the "suspension" cast influence to all the game developers in the industry: No matter it is an opportunist game company, or a big company like Tencent and NetEase, it is an inevitability to be negatively affected by the suspension. During the suspension, the market value of Tencent games shrank by nearly 1.3 trillion Hong Kong dollars, more than the whole market value of Bank of China in Hong Kong due to being unable to launch new games to generate profit. The suspension also had a

negative impact on the overall situation of the game industry: On March 29, 2018, the market value of A-share game companies once shrank by nearly 10 billion yuan. If NetEase, Tencent Holdings and Jinshan Software in the US and Hong Kong stock market are taken into account, the market value of the game industry evaporated by about 180 billion yuan in a single day. (Qdaily, 2018) From the perspective of market growth rate, the year-on-year growth rate of overall revenue of Chinese mobile games from January to June 2018 was only 5.4%, far lower than the growth rate of nearly 30% in the same period of the past three years. (CNG,2018)

6.2.9 Response 2 to stimulation 3: "Matthew effect" and its results: the sprawling market power of the leading enterprises and the market homogeneity

Matthew effect refers to the sociological and economic phenomenon that the poor become poorer and the rich become richer. In the event of suspension, the government, as the role of the king in Matthew, by means of suspending the issuance of "Online game publication number", deprived the market share and dividends of many small and medium-sized game companies, as well as their prospects, and unexpectedly funded the leading companies.

Although the industry leaders suffered great losses during the period of suspension, they consolidated their leading position in return. According to the statistics of CNG at the end of 2017, NetEase and Tencent accounted for about 75% of the market share of online game industry. Nonetheless, according to the statistics of Gamma data in June 2018 (when the "suspension" had lasted for three months), the figure had jumped to more than 80%. The two leading enterprises further expanded the gap with other small-scale enterprises. However, the consolidation of leading position is only one aspect of Matthew effect—on the other hand, there is the helplessness of other small and medium-sized game developers to withdraw from the market because of their huge losses: According to the statistics of Gama data in 2018, two representatives of small and medium-sized online game companies: Great Wall Animation Co., Ltd and Hangzhou ZhangMeng Co., Ltd had gained negative profits in the first three quarters of 2018, which were minus 17 million yuan and minus 1 million yuan respectively.

Due to the sprawling growth of market share of Tencent, NetEase and other industry leaders, the market is increasingly becoming "oligopoly". Oligopoly refers to the situation where a small number of enterprises will have incomparable "market power", that is, different from the situation that all companies in the completely competitive market can only accept the "market price" under the invisible hand of market and cannot decide the price independently, but have the influence to interfere with market price as price maker. In the online game market of China, the market power is embodied as follows: The leading enterprises monopolize most share of the market, thus facing a downward sloping demand curve (that is, the higher the price, the fewer the buyers). The "price" here can be abstractly understood as the relationship between the amount of money invested by the players and the players' actual game experience. To ensure a good game experience requires a lot of investment from game developers, whereas attempts to recoup funds through players in a short period of time will sabotage the players' experience, thus reducing the number of players. Considering the fact that economic men will maximize their own profits, most of the industry leaders chose to reduce investment while ensuring the players' experience--and the fastest way to achieve it is to directly introduce foreign successful games, or to adapt successful games with unmarked adjustments, which made the market lose main drive for innovation. In 2018-2019, *King's Glory*, which ranked the first in the "Ten best mobile games" in succession, can actually be regarded as the mobile version of *League of legends*, a hit developed by the Riot Games in America; Another "masterpiece" of Tencent, *Peace elite*, is also a reproduction of the hot game *Player unknown's battle grounds* developed by Bluehole INC in South Korea. With companies as industry leaders refusing to innovate while small and medium-sized companies struggling to survive the "suspension", the market will become hegemonic. Whether it is for the future development of the domestic game market or for bargaining power of the players, the excessive market power of "leading companies" has curbed growth overall economic welfare of the online game market, which is an unexpected consequence.

6.2.10 Response 3 to stimulation 3: Scalping of "Online game publication number"

Since the suspension of "Online game publication number" in March 2018, with a large number of new games unable to go online, some game manufacturers have begun to covet to sell the version

number that had been certified in 2015-2016 with the games it conferred to at the end of their life cycle in order to make exorbitant profits. After the "suspension", an "Online game publication number" can be sold at a high price of more than 400000 yuan. In addition, reselling the version number had significantly hindered the work of regulating the content and values of online games in China, for illegal games can purchase easily "Online game publication number" to go online with the help of the exorbitant industry of reselling "Online game publication number" stimulated by the suspension. Illegal games' sneaking into the market will intensify market's negative externalities.

6.2.11 Stimulation 4: The affliction of economic welfare due to the over-complicated bodies of regulation

As mentioned above, there are mainly three bodies in charge of the supervision of online games in China: GAPP, Ministry of Culture (Ministry of Culture and Tourism) and Online Game Ethics Committee. However, the over-complicated management organization structure often leads to the overlap of power, which may lead to conflicts among the various regulatory bodies. Because of the rapid development of the game industry and the huge amount of turnover, regulators are coveting to "rent-setting" (Sun,2013), thus leading to a competition for maximizing the power of regulation between the regulatory bodies, which is essentially a competition for "rent-setting" rights. In addition, the inefficiency of regulation caused by the overlap of powers, as well as the "time and money spent by various units to coordinate" mentioned above, will damage the overall economic welfare of the market.

6.2.11.1 The overlap of regulatory power for online games in China The overlapping of the supervision right for online games in China is mainly embodied in the relationship between GAPP and the Ministry of Culture. Before 2004, GAPP was the only body in China that supervises issues related to online games. In 2004, "The Notice on Strengthening the Examination Of Online Game Product Content" (《关于加强网络游戏产品内容审查工作的通知》) added that the Ministry of Culture was responsible for filing online games and gave them registration number for filing. Until 2008, there is no power overlap or conflict between the two. Nonetheless, in 2008, the release of the "Three Decisions" marked the birth of a complex bureaucracy for the regulation of online game industry, creating overlap

of power: The power of the Ministry of Culture has been greatly strengthened, becoming the leading department of online game supervision, responsible for the vast majority of responsibilities including examination and approval. However, one of the responsibilities of the GAPP is issuing "pre-approval for online games"(namely issuing the "Online game publication number"). "Pre-approval" and "examination and approval of the Ministry of Culture" embodies an overlap of power. It was not until June 28, 2019, after the release of "On Abolishing 'The Interim Measures for the Administration of Online Games' and 'Measures on Tourism Development'", that the overlap of regulatory power ended with the full withdrawal of the Ministry of Culture and Tourism.

6.2.11.2 "Rent-setting" in online game industry in China "Setting up rent" refers to the behavior that the power owner obtains non-productive economic benefits by using power (2020), and is usually a characteristic of a complicated bureaucracy. The essence of "rent setting" is to use the power as a regulator to set obstacles and then attract "rent-seekers" to create monopoly. Its way to make profit is to capture a share from the interest of "rent seekers". In China, both the "Online game publication number" issued by the GAPP or the examination of the Ministry of Culture and Tourism are "obstacles" for game manufacturers to list their games in the market. The "rent-seekers" here refer to the agencies "helping with" the application of version number. They are often in conspiracy with some regulatory departments, thus obtaining the vast majority of the access to the licenses and creating a monopoly. The exorbitant profit will be subsequently shared with the "rent-setter". From 2009 to 2018, there were 19880 games (IFC Securities: IFC Morning News | How much does the recovery of the game version promote the market? Social finance may rebound to 10.7%, 2019) obtaining "Online game publication number" nationwide. Considering the redundant and complicated "licenses" issued by the two bodies (5 licenses in total), the turnover created by "rent-setting" and "rent-seeking" is large. Driven by the high turnover of the online game industry, both GAPP and the Ministry of Culture want to obtain more power and issue more "licenses", that is, to have more opportunities for rent-setting, which especially rings true for the regulation of online game industry, where there is a marked overlap of responsibility.

6.2.12 Response 1 to stimulation 4: Afflicted economic welfare of the industry induced by the

redundant examination and “rent-setting” The five necessary licenses for listing an online game in the market, namely “Internet publishing license”, ICP, “Copyright authentication number”, “Online game publication number” and Registration number from the Ministry of Culture(and Tourism), are intended to crack down on the unethical and problematic content of online games, are now in turn inducing affliction of economic welfare of the industry: With 5 licenses, whose time of obtaining range from 20 days to 60 days(Internet publishing license, 20 days and ICP, 60 days), there is a blank between the finish of game development and the time when the game can actually generate a revenue, which is an odyssey for many startups not well-funded to pull through. On top of that, as is mentioned above, the “rent-setting” and “rent-seeking” process will also afflict the economic welfare of the online game developers. Despite the fact that applying for approval of the licenses is free of charge, an exorbitant fee handed to the agents of applying licenses that are in conspiracy with the government are almost a necessity in order to secure that the application will be approved. The agency fee ranges from 8000 yuan to 35000 yuan, which is a burden on the startups. The conclusion can be drawn that the economic welfare afflicted by the over-complicated bureaucracy is high, thus curbing the growth of the market indirectly, which is an unexpected consequence.

6.2.13 Response 2 to stimulation 4: Afflicted economic welfare of the industry induced by the conflict of regulation bodies with overlapping responsibilities As is mentioned above, the coordination of the contradictions between the regulatory bodies often come at the cost of the loss of economic welfare of businesses and consumers by means of suspension of the permission of operating the game. A typical case is the issue conflict between GAPP and the Ministry of Culture in terms of the examination and approval of the game *World of Warcraft* in 2009. NetEase Game, the proxy of *World of Warcraft* skipped the pre-examination and pre-approval of the GAPP and handed the application materials to the Ministry of Culture directly, approved. Subsequently the game went online readily and began to generate profits. As a result, the game was stopped by GAPP. Later, GAPP and the Ministry of Culture launched a debate on the "boundary of power and responsibility". GAPP asserted that "NetEase's opening service is suspected of violation ", while the Ministry of Culture reckoned that "online games are not publications". It was not until February 8, 2010 that NetEase Game submitted application materials to the GAPP that the contradiction subsided.

In the dispute for examination and approval of the World of Warcraft, the suspension of service from June 2009 to February 2010 posed the assets that game players invested in the game at risk. At the same time, according to the statistics of 21st Century Economic News (Edition Administration terminates World of Warcraft approval: NetEase daily loss may reach 2 million yuan, 2009), the loss of NetEase probably reached 2 million yuan per day during the period of "suspension of service". The loss of service suspension for half a year may reach 360 million. It can be concluded that the low efficiency of supervision induced by the conflict between regulatory bodies afflicted economic welfare of the industry.

Conclusions

To summarize, with assorted ethical issues arising but poorly regulated as the game industry evolves and prospers, the government should assume the responsibility of supervising and regulating the game industry, whose intervention did have positive meaning for regulating the industry in terms of its prohibition of unethical content and gambling. Nevertheless, due to "government failure", the intervention of the government might well worsen the welfare of all parties involved in the game industry as well as give rise to the festering status quo of ethics in the industry, partly due to the poor understanding of the need of the market, the rent-setting and rent-seeking issues deliberately done by the regulators enabled by the overlap of responsibility of regulation as well as the crude and authoritative manners of regulating. On top of that, such counterproductivity festered due to the regulator's failure to contemplate how game developers and players respond to the stimulation induced by governmental regulation, which also inversely gives rise to "government failure".

To procure improvement in the overall welfare as well as the status quo of ethics of the game industry, possible and pragmatic recommendations are as follows:

Firstly, to tackle the sabotaged welfare of the industry brought by the government's poor understanding of the market, the significance of guilds as a supervisor and regulator should be

underlined. (Sun, 2013), which has already been adopted by Japan, with a guild named “Six party council” led by GREE, a game giant arising. In addition, as for the rent-setting and rent-seeking issues, supervision on the regulators should also be highlighted. (Sun,2013) On top of that, a dynamic system of supervision looking into the reaction of game developers and players should be refined (Zou, 2019) in order to rectify counterproductive laws or sanctions before they induce marked negative impact on the status quo.

Discussion

1. On this research

1.1 What distinguished this research

This research distinguished itself from other papers focusing on regulation of ethical problems in terms of the following aspects:

Firstly, this research systematically categorized the ethical problems existing in the online game industry, thus being comprehensive, which many researches failed to do.

In addition, this research looked into the counterproductivity and negative impact of governmental regulation, rather than focus on the effectiveness of governmental regulation alone, which is exactly many other researches did.

Most importantly, the model “stimulation and response” this research adopted when looking into the counterproductivity and negative impact of governmental regulation originates from a well-seasoned theory of economics (“government failure”), thus exactly reflecting how the governmental regulation induce impact on those regulated as well as how the unexpected reactions of

them inversely make the regulation counterproductive.

1.2 Defects of this research

Firstly, it has to be conceded that researchers involved in this research are not professionals of the online game industry, thus, chances are that many opinions raised or assertions made are subjective and with prejudice, which somehow resembles the governments' failure to really understand the industry that it is regulating.

In addition, the benchmark selected by this research to tell unethical from ethical, namely the benchmark whether one sabotages the interest of other people in their pursuit of maximizing his interest, is still a subjective one, or even one with prejudice and fallacy.

Furthermore, when discussing the reasons why the government should exert more strict regulation of the ethical problems in the game industry, the responsibility of the government to protect the interest of game developers abiding by the law is omitted, which is partly a result of the fact that ethical issues sabotaging the interest of game developers abiding by the law are not common in China, at least judging from the researches, news and governmental announcements available to us. Such ethical issues may be serious and worth-discussing, but this research didn't cover it.

When evaluating the positive effect of governmental regulation, this research didn't apply the model of "stimulation and response", partly due to the lack of relevant data and researches, which may seem incoherent.

Most importantly, most figures and statistics in this research are from other research papers, governmental announcements or even collected by the researchers manually, which is not systematic enough for the model of "stimulation and response" adopted by this research, especially the "response" part. The lack also shows a defect of this research to qualify such a subjective topic as ethical issues on

its own. Especially for the part of 6.2.1.4, where ethical issues involving monetization of virtual products and speculation of virtual properties are discussed, the research failed to support its assertions with systematically quantified data, which ought to be necessary for illustrating this part.

1.3 The efforts made by the researchers to overcome or improve the defects

Despite not being the professionals of the online game industry, the researchers have read numerous reports and analysis written by prestigious data analysts, commentators and practitioners to get themselves familiar with the subject. Summarizing, integrating viewpoints of the professionals from an economic perspective, the researches eventually formed their own point of view and tried to limit their prejudice to a minimum.

Another defect that the researchers tried to improve is being subjective when defining such blurring and vague benchmark as tells “ethical” from “unethical”. Inspired by the definition from a Marxist perspective, the researchers seek to define it from a perspective of production and exchange. Eventually, the researchers selected the Theory of Autonomous Power by Guoxiang Wang, a professor in UIBE (a prestigious business school in China) who is devoted to solving ethical problems from an economic perspective, thus making the benchmark adopted by this research more reliable and less prejudiced.

2. For other researches

2.1 results or conclusion potentially useful to other researchers

The conclusion that governmental regulation on ethical issues may well be counterproductive and even infringe the overall welfare of the online game market offers an insight that it is not enough to merely focus on the effectiveness when looking into the impact induced by governmental regulation, since whether counterproductivity exists is also a perspective worth contemplating.

2.2 Methodology potentially useful to other researchers

In terms of methodology, this research adopted a new perspective of evaluating the governmental regulation, namely the model of “stimulation and response”, which elaborated a full illustration based on real-life cases in order to explain mechanism why “governmental failure” occurs. Such methodology can also be adopted by other researches looking into the (negative) impact induced by governmental intervention of any field in terms of unexpected outcomes or reactions.

2.3 researches perspectives that may complement this research

As for the core concept, namely the ethical issues in online games, which this research failed to support its benchmark of judging with convincing data and analysis, researchers capable of conducting surveys involving a convincing number of participants can elaborate a survey on the perception of the players and game developers on the benchmark of ethic, and then analyze the data, thus reaching a more convincing benchmark of ethic accordingly.

As for the model, researchers capable of conducting surveys of large scale related to the perception of those being regulated can qualify the “response” part systemically and justify their assertions with reliable statistics involving a convincing number of participants. On top of that, as is mentioned above, this research didn’t adopt the model when discussing the positive effect of governmental regulation. Thus, researchers may try to adopt this model to the researches regarding the positive effect of governmental regulations, in terms of unexpected but helpful reactions or consequences.

As for the relevant content, in the part of 6.2.1.4, namely the part discussing the third-party trading platform and the monetization of virtual properties, this research mentioned a rather new topic, namely the financial and economic system in online games. So much resemblance does this system bear with the real-life one, in terms of the mechanism of functioning, that makes this topic well-worthy

of being looked into systematically and specifically, which this research didn't do due to worries of setting priorities incorrectly. Researchers capable of processing and analyzing data related to the speculation of virtual properties and the market trend can elaborate a well-supported research on the comparison between the finance system in the online games and that in the real world. In addition, able researchers with knowledge of laws can look into the topic how to regulate the finance and economic system in online games, which is also a problem to which this research failed to provide more constructive suggestions other than the aforementioned establishment of guilds as regulators.

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