

Virtual currency trading: friend or foe?

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Abstract

This research paper investigates how virtual currency trading can affect the real world economy, with the final purpose of establishing whether it is beneficial for the economy or it is harmful. Departing from the presentation of some theoretical concepts and facts, the paper analyzes the impacts that virtual currency trading has upon the real world from an economic, legal and social point of view. The conclusions drawn upon the analysis include some brief observations regarding quality as a possible cause of the uncontrollable emergence of this practice and the future direction of humankind with regard to the evolution of technology and virtual worlds.

Keywords: virtual economy, real money trading, virtual currency trading, gold farming.

JEL classification: E42, E44

I. Introduction

Call it Information Age, Computer Age or Technology Era; it's just the world we live in today. Personal computer, laptops or any other kind of technological devices meant to help us have become our best and most reliable friends. It's no wonder then that the video game industry was an estimated \$60.4 billion business in 2009 and is expected to reach \$70.1 billion by 2015. Around this multibillion dollar industry the *virtual economy* has emerged. In the virtual economy real money is traded for virtual goods, services and currencies in the context of internet games, usually Massive Multi Player Online Role-Playing Games (MMORPGs) such as World of Warcraft. This whole new type of economy has an obscure border between the real and the virtual, but whether this border begins to shade more and more it is a question that has caused a lot of controversy.

The virtual economy is already worth billions of dollars annually, with *virtual currency trading* alone supposedly reaching the staggering amount of \$8 billion dollars in 2009. In fact, several small countries around the world have smaller GDPs than the total worth of the virtual economy. Given the scale of this practice, the effects upon the real economy are not at all negligible so the goal of this research paper is to assess the impact that the virtual economy in general and virtual currency trading in particular, have upon the real world from an economic, legal, and social point of view. It aims at determining whether trading in virtual currencies has a positive or a negative impact upon the real world, with the final purpose of answering the research question: *Virtual currency trading: is it a friend or a foe?*

II. Background

In the context of the virtual economy, the trading of virtual world currency, items, and services for real money is known as *real money trading* (RMT). RMT can be traced back to at least 1987 and the first cash payments between players for items or for improving characters within text and basic graphics-based multi-user dungeons (Hunter, 2006). It can be divided into two elements: primary RMT that takes place in-game or beside game as incorporated into the game's structure, and secondary RMT that takes place partly out-game and is not approved by the game companies (Lehtiniemi, 2007). "*Gold farming*" is a more recent sub-component of the longer-standing activity of real money trading and it describes the illicit practice of trading virtual currencies, items, and services for real world money, being thus synonymous to the secondary RMT. "Gold farming" is the quintessential illicit activity related to MMORPG (Keegan, 2010). As any other illicit activity, it has proved to be very profitable so that many companies have set up virtual sweatshops where many young people called gold farmers play online games 12 hours a day for the sole purpose of earning virtual in-game resources, which the companies later sell for real money all over the world. The practice of gold farming employs hundreds of thousands of people worldwide of which approximately 80% to 85% are estimated to be based in China. As in almost all fields China has also become the world factory of virtual goods.

As previously mentioned, in the context of real money trading in general, and "gold farming" in particular, there can be traded currencies, goods (equipments, weapons, clothing) and services (help given in surmounting certain obstacles, killing bosses, leveling or acquiring certain titles). Out of these, the most popular form of trade is *virtual currency trading*: the exchange between virtual currencies and real world currencies. The reason for this is that in such games, as in real life money means power. There had actually been reported the emergence of gangs and mafia in some MMORPGs, where powerful players threaten beginners to give money for their protection, and even steal or rob. There are countless website platforms especially designed for virtual currency exchange, where real currencies can be converted into virtual currencies at certain exchange rates which are established based on the supply and demand. The situation is very similar as in case of foreign currency exchange, only that in

this case the currencies to be exchanged do not belong to different countries, but to different worlds: the real and the virtual.

This research will be focused only upon virtual currency trading in the context of secondary RMT or “gold farming”, namely the illicit exchange of real money for virtual money.

In China alone trading in virtual currencies has reached unimaginable heights and it is supposed to have totaled nearly \$2 billion in 2008, according to the China Internet Network Information Center; however, a much larger underground economy is supposed to exist. In June 2009 the Chinese government has banned virtual currency trading. The rule according to which virtual no conversion between virtual and real currencies could be made was issued by the Ministry of Commerce and Ministry of Culture, for fear that virtual currencies could affect the real financial system. As opposed to the situation in China, the South Korean Supreme Court ruled in January 2010 that virtual currencies can be legally exchanged for real world currencies, and the transactions will be taxable.

Therefore, there is no doubt that virtual currency trading does have both a positive and a negative impact upon the real world in general and its financial system in particular, but which outweighs the other is rather difficult to say. I will further try to analyze the positive and negative implications of virtual currency trading from the economic, legal and social point of view.

III. Economic impact

By far the most important problem raised by virtual currency trading is the fact that as virtual currencies gain more and more purchasing power, control over the effective money supply can shift from the central bank to the game developers. (Castronova, 2009) This poses great problems to a country’s ability to control its money supply, which in its turn can lead to real world inflation. According to Kroszner (2009), virtual currency trading could also have an impact on currency demand and the so-called velocity of money, because it complicates the central bank’s task of anticipating what the currency demand will be. Moreover, real currencies can actually depreciate against virtual ones. In China, the so-called QQ coin - a form of virtual currency produced by the Chinese Internet giant Tencent - has sometimes risen sharply in value against China’s official currency, the renminbi, causing much alarm among the officials at the nation’s Central Bank. It appeared also the concern that virtual worlds can challenge the government control of society. In China people were actually buying real food, clothes, cosmetics and other goods with virtual currencies, thus beginning to replace the national currency with the virtual ones. On the other hand, real world cash inflows into a country’s economy positively influence its balance of payments and can have a beneficial effect upon the national economy, as long as they are controlled.

An important positive impact that gold farming and virtual currency trading have upon the real world is that it offers employment to an imprecise but definitely large number of people. According to Heeks (2008) this practice employs approximately 400.000 people, of whom perhaps 85% are based in China, in a market worth in excess of US\$1 billion. But the true figures could be much more; Ryan (2009) for example cites one million people working on a global trade worth more than US\$10 billion. This activity has been for more than a decade an ingenious, yet controversial, method for poorer nations to earn money from the technological and informational evolution. Not only that, but this has also been an opportunity for many unskilled men to build digital capabilities that will surely be of some use to them in the future in some other information technology related jobs. A Chinese gold farmer engaged in virtual currency trading can earn the same income and sometimes even more than might be paid for working in a factory for 12 hours a day. However beneficial this may sound, it is still a sweatshop practice, universally known as being unethical and controversial.

China’s move to prohibit virtual currency trading will definitely hurt the country’s economy at least in the short term and put many gold farmers and other virtual employees out of work.

All things considered, it must be clearly noted that virtual currency trading in the context of secondary RMT represents a black market, thus having the same negative impacts upon a country's economy as any other black market. This newly emergent uncontrollable black market that operates in parallel with a country's economy subtracts from the national budget a considerable amount of money in the form of unpaid taxes. A way to deal with this problem would be to regulate virtual currency trading by making it an integral part of the official economy and by making the transactions taxable, as in the case of South Korea. This move would represent a step in eliminating the black market of virtual currencies and it would definitely influence positively the country's economy since it represents a considerable source of revenue for the government. The financial and economic benefits would be significant especially in case of China where the practice is based. However, China chose to outlaw virtual currency trading instead of taking advantage of what seemed to be an opportunity of increasing the national budget and boost the economy. The reasons behind this are multiple and rather complex but it may all come down to the fact that the drawbacks of this move outweigh the benefits.

IV. Legal impact

From a legal point of view, in the absence of real ownership no real trade can possibly occur. In virtual worlds no real ownership exists because the game developers can change at any time the virtual world, ban players, delete items, diminish their utility or simply put an end to the world. Moreover, most game companies make it a clear point to say players do not own any virtual property no matter what amount of effort or money is invested and anything generated in a virtual game, including virtual currencies is still the game's property. Richard Bartle (2004) argued that these aspects negate the whole idea of ownership in virtual worlds so virtual currency trading cannot even be considered a real trade in the first place. But things are not as simple as that because such trades do occur and have reached considerable proportions, fact that has draw attention upon the tax non-compliance issue they raise.

Taxation in respect to virtual currency trading and secondary RMT is in fact a very delicate, complex and long debated subject which has been first brought into question by American writer Julian Dibbell who in 2004, went to the IRS and reported a rough \$36.000 yearly income from the sale of imaginary goods. He had been engaged for a full year in virtual currency trading, in the name of research, and he reportedly earned from it an amount which only qualified him in the lower-middle class of the virtual businessmen but in the same time it was more than he ever earned as a professional writer. The IRS considered very plausible the idea of taxing virtual commerce, but they just did not know how to proceed. South Korea is the first country regulating virtual currency trading as a response to the increasing awareness of the tax non-compliance issue that virtual economies raise.

Even though virtual currency trading may seem to be an unquestionable taxable event because converting virtual currencies into real world money would clearly constitute taxable gross income, things are not as simple as they appear to be. It is very difficult if not even impossible to keep track of transactions, so this would not only be very burdensome to enforce and control but it could also facilitate money laundering. For example, a person involved in an illegal activity, could create an account in one of these games and ask his fellow criminals to send on that account the equivalent in virtual currencies of the "black" money they make in that real world illegal activity. The criminal could then legitimately cash out the virtual currencies by selling it for real world currencies and could even establish decoy virtual businesses as support.

However, bigger and more complex controversy may arise if virtual currency exchange is considered a taxable event. Departing from the premise that income from virtual worlds is taxable, it has also been raised the question whether in-game transactions and assets should be taxable even before they are converted into real world money. Since almost all virtual assets can be assigned a value in virtual currency, which in its turn can be assigned a value in real world currency, it has been argued that

a virtual tax on items bought and sold solely within the virtual world should also be applied, as in case of barter. This would make it impossible for any player to avoid taxation since all items have fair market values and it would most probably cause MMORPGs to perish since playing just for fun would be impossible and the whole concept of game would be lost. Virtual taxation has been a long debated topic within the Joint Economic Committee of the U.S. Congress which has ultimately recognized the complexity of the issue, by stating that clearly, virtual economies represent an area where technology has outpaced the law.

Regulating virtual currency trading is still very difficult and a rather farfetched idea to be put into practice which leads me to think that maybe South Korea has taken a hasty decision without fully grasping all its implications and possible consequences.

V. Social impact

With regard to the practice of virtual currency trading, while some gamers happily buy gold as a way to enhance their virtual experience, other gamers are strongly against it since this could enable online theft and fraud and they also think that the game world should be a level playing field, free of the corruption and interests of the real world. On the other hand it seems only natural to match one player's need for virtual money with other player's need for real money. It reunites two categories of people, those that have no time to earn money in game because they are involved in real world money generating activities and those that have the time to engage in virtual money generating activities but have no real world money. It can be simply seen as division of labor, which makes the trade necessary or it can only be the inevitable reproduction of global capitalism into the virtual worlds. According to Bernstein (1983) the production for virtual worlds has already followed the standard capitalist chronology: from subsistence production for personal use, to informal barter between players, to "monetization" (exchange for real money), to small-scale commodity production. Not only that, but during the first years of the 21st century, real money trading adopted the final features that are typical of late-phase capitalism (Porter, 1980): wage labor, off shoring and automation. Wage labor refers to the fact that the activity takes place in a formal, organized arrangement in which entrepreneurs employ workers that do not own the means of production (PC, software and account) to farm gold on their behalf and later sell the virtual commodities for real world profit. Off shoring means that the practice migrated to low-wage locations in East Asia – and China in particular – due to the obvious reason that labor cost represents by far the largest cost component of gold farming. And finally, automation refers to the cutting of time and financial costs by use of bots that can imitate the actions of real players and can be used for gathering of some in-game items and currency (Kushner, 2007). At least in theory, the virtual economy seems to be capitalist but whether this makes it normal, moral or at least acceptable is rather subjective.

Concerning the game companies, their response to real money trading has also been ambivalent and there are two types of game developers: the ones that strongly oppose real money trading and prohibit it through their games EULA (End User License Agreement) and the ones that incorporated virtual commerce into their game's structure, realizing that not only the efforts to ban this practice are useless, time and money consuming but the practice is actually profitable. There is no doubt it is a profitable practice but whether it is a good, sound business practice, it is rather difficult to say in my opinion because I do not know if it is really ethical to sell "nothing", regardless whether people are willing to buy it or not.

All things considered, the most worrying aspect related to the virtual economy as a whole is that people nowadays fail to tell the difference between the real and the virtual. They engage in a trade already worth several billions of dollars in which they are giving up real, earned money for basically

nothing: pixels on a screen. Regardless of people's financial possibilities or welfare state, they are still buying things that do not actually exist and this fact that cannot be considered normal.

VI. Conclusions

The control and power seem to be shifting more and more towards computers and virtual worlds and I just cannot help but wonder: Is humankind going to be led by computers? I know I am not the first one raising this question and this is precisely what worries me the most. Even though it is a fact that we are becoming increasingly dependent on computers, the natural response to this question would be to say no because it is precisely humankind the one that creates and programs the computers. But we might be creating something that is on the verge of going out of control, something we just cannot keep pace with, nor fully understand. An overwhelming piece of proof is precisely the thing that humankind is not yet prepared to handle and regulate the virtual economy and all the issues that come along with the evolution of virtual worlds. However, I think it may all come down to quality management because the main problem in this case is the fact that these games severely lack the quality of preventing a "side effect" their developers or producers do not approve, namely secondary RMT. The game developers did not actually consider all the consequences, possible impacts or opportunities their products created, and this is how an uncontrollable black market and sweatshop industry have emerged.

Although this subject has only been tackled with and there remains further research to be undertaken, my conclusion and the response to the stated research question is that virtual currency trading is a foe. Not only that it seems to me some kind of evolution towards science fiction, but the negative aspects related to it outweigh the positive aspects and it can seriously affect the real world financial system. It raises too much problems and unforeseen implications so that it cannot be fully understood nor controlled at the present time.

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