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How virtual are virtual economies? An exploration into the legal, social and economic nature of virtual world economies

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ABSTRACT

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Second life
Linden monetary policy
Ginko financial
Eve online

Virtual world economies are undoubtedly increasing in growth, participation and importance. Their macroeconomic impact has already been seen as important in the real world economies; however its governance and jurisdiction is unclear. This paper will argue that virtual economies are not actually as virtual as they first appear to be. Secondly the paper argues that because of the real world effects and impacts virtual world economies can have, they should be applicable to real world jurisdictions and regulations. The question that is therefore posed is in which jurisdiction should the legal backbone be placed? The paper will be divided into several parts. Firstly, a background of what virtual worlds are, and what they mean in linguistic definition. Secondly, a review of law economics and history shall be considered to determine that what is once considered 'other worldly' is accepted as the norm. Thirdly, the paper will consider a virtual world economy, namely that of Second Life to establish the real world impacts that virtual world economies can have. Fourthly, the paper will consider two case studies of financial crisis occurring in the virtual worlds and the synergies we can draw from the real world. Finally, the paper will conclude with the proposition that legal governance is required and will enable what is already a lucrative business to flourish further within the realms of possibility and not virtually.

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1. Introduction

Within this paper the legal philosophy behind virtual economies will be discussed to determine whether virtual world economies are virtual and therefore outside the remit of the rule of law, or whether they are merely a continuum of the real world economy. The aim of the paper is to enable the reader to understand the concepts of virtual economics and the virtual market place within virtual worlds. The paper will advance the position that virtual worlds are not as virtual as one may initially think. Virtual worlds are affected by the real and the real by the virtual, thus demonstrating the continuum of existence that has occurred since human beings have evolved.

This paper advocates this theory and will outline the rational and thinking behind this proposition.

First and foremost we must turn our attention to the virtual world in which the economics we will later discuss occur. So this point turns to what is a virtual world and whether a virtual world, created by a computer software system can ever be what its namesake suggests i.e. virtual. If the world is truly virtual then economic activities or any other activity need not be applicable to real world laws. However, if these virtual worlds are not indeed 'virtual', then the problem of legal culpability and jurisdiction arises. Therefore it is important to establish what is a virtual world? Is a virtual world really virtual? And what activities take place within that

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world that requires real world legal culpability and jurisdiction?

Academics have tried to capture what a virtual world actually means. Knock describes virtual as being a world created by humans. He says that: "Virtual worlds can be described as technology-created environments that incorporate representatives of real world elements such as human beings, landscapes and other objects".¹ In other words Knock is stating that a virtual world is a simulation of the real world, with real world elements within it, but that it is acted out via a computer generated system. It is these real world elements that pose problems for researchers when examining the virtual worlds. Firstly if the virtual world is a simulation of the real world, it is not 'virtual' in its truest sense. Secondly, if these real world objects in the virtual world (or 'in world' if you shall) are affected by events in the real world then it is not 'virtual' either. Rather it is more a continuum of the development of e-commerce and the cyber world. It is more akin to a faux representation of the real world and simulates the real world to be a utopia of what real worlds could be. Therefore, it is not virtual but rather faux virtual. Second Life (SL) "is a good example of a virtual world that attempts to replicate elements of the real world with practical application in mind"², and it is for this reason that SL economy shall be considered later within this paper.

However, worlds such as SL are termed as being virtual and this virtual status comes to be at its truest when considering the implication of the actions taken within the virtual worlds. The implications whether they are criminal, civil, social or economic can be seen to have an effect on the real world. The problem therefore comes when the implications, named above, do not have real world consequences. For example, the situation surrounding rape in a virtual world and whether it is a criminal event in the real world is unclear.³ If such a serious crime in the real world is ambiguous to say the least in the virtual then what does the virtual world hold for more mundane but none less important world of economics, banking and monetary policy?

We now turn our attention to the economy of virtual worlds and the economy of SL. Since its creation SL has been underpinned by its closeness to the real world and the economy is no different. Every economy in the real world is influenced by policy makers and government alike, SL is no different. In SL the virtual economy is affected by its developers for, as mentioned above, there is no government controlling the virtual world. Spiress (2006) points out that one of the most recent changes to the economy of SL is because of the decision taken by the developers, Linden Labs. "Second life's economy has been surging since Linden Lab made the unusual decision three years ago to grant users intellectual property rights. Thousands of people have created homes and

business on virtual land leased from the site and are peddling virtual items as varied as yachts and ice cream".⁴ Spiress therefore indicates to the turning point in SL economic history, where Intellectual Property rights were granted to SL residents and from this economic activities have thrived. We can therefore determine that there is an economically active world, taking place within second life and this is later demonstrated by recent figures disseminated from SL itself and its own stock exchange, but more of that to come later. What must be considered here is the very nature of what a virtual world is? We have established that within the world called SL there is an economy and trade does take place. The trade is facilitated through the in world currency Linden\$'s. The name itself derives from the real world word, dollars.

2. What is a virtual world?

A virtual world according to Castronova is a computer programme with three defining features: Interactivity, physicality and persistence. Before examining these three elements let us turn to defining the word virtual and world, separately and in turn.

Virtual, as an adjective, is defined as:

- virtual(a): being actually such in almost every respect; "a practical failure"; "the once elegant temple lay in virtual ruin"
- virtual (a): existing in essence or effect though not in actual fact; "a virtual dependence on charity"; "a virtual revolution"; "virtual reality".⁵

Or as:

- Virtual (a) having the essence or effect but not the appearance or form of.⁶

The word comes from the Medieval Latin term *virtualis* or *virtus* meaning virtue.

Virtue is defined as:

- Virtue (a) the quality or practice of moral excellence or righteousness;
- Virtue (b) the particular moral excellence;
- Virtue (c) any of the cardinal virtues; justice, temperate, and fortitude
- Virtue (e) an affective active, or inherent power or force.⁷

Virtue comes from Old French *Vertu* and Latin *Vertus* meaning manliness and courage, (Vir man).⁸

¹ Kock, N. 'E-collaboration and E-commerce in Virtual Worlds: The potential of second life and world of war craft', International Journal of E-collaboration, Vol. 4, Issue. 3. 2008.p.1.

² Ibid, p.3.

³ Lynn, V. 'Virtual rape is traumatic, but is it a crime?' Wired. 5 April 2007. http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/05/sexdrive_0504 retrieved 29 April 2010; MacKinnon, 'Virtual Rape', Journal of Computer Mediated Communications, October 2007 13 Vol 2 No.4.; Bugeja, M. 'Avatar Rape', Inside Higher Ed. 25 February 2010. <http://www.insidehighered.com/views/2010/02/25/bugeja> retrieved 29 April 2010.

⁴ Sipress, A. 'Where real money meets virtual reality, the jury is still out', Washington Post, 26 December 2006. <http://www.washingtonpost.com/wp-dyn/content/article/2006/12/25/AR2006122500635.html> 29 January 2010.

⁵ www.wordnetweb.princeton.edu/perl/webwn retrieved 29 April 2010.

⁶ Collins English Dictionary.

⁷ Ibid.

⁸ Ibid.

These definitions give us a clue as to why the name was chosen for the virtual world. The first definition, virtual is the being' actually such in almost every respect', goes along with the line of thinking of the paper. The world created online is as close to reality as possible. It simulates the real world and demonstrates its desire to be as close as possible to the real thing but incorporating every day aspects into the virtual world, which is given no escape. It is more of a utopia than a virtual reality. The second definition; that virtual is 'existing in essence or effect though not in actual fact' also agrees with the "the once elegant temple lay in virtual ruin". The third definition still does not pose a problem for this paper's proposition regarding the virtual world. Virtual is, 'having the essence or effect but not the appearance or form of'. In a virtual world there is no form other than pixels on the computer screen but it has the essence and the effect of a real world.

From the definitions above we can determine that a virtual world is one that exhibits all the characteristics of a real world and the only difference being is that the virtual one has no physical form to it. If this is the case, then is it hard to see why there are no legal ramifications for actions in world.

Returning to Catronova's idea of what a virtual world is somewhat differs from the literal definition of what a virtual world is. In so far as the author believes that these elements can be taken and can demonstrate that the virtual world created is not actually virtual, but a continuum of the real world, but placed in a virtual platform. If this is so, and which is what the paper argues, then the virtual should be subject to real world laws. Economics is a perfect example of how virtual economics is actually highly influenced and driven by the economic factors in the real world. This is because there is a single common denominator of the two worlds. That being human beings. The question is whether anything that is created, played and thought about by Humans can ever be truly virtual? As mentioned above Catronova examines three elements of what constitutes a virtual world. The first can be expanded to include the idea that the game can be accessed remotely by a large number of people, with "the command inputs of one person affecting the command inputs of other people". This interactivity can be further expanded to demonstrate the idea that the 'command inputs' are given by real world people, and have affects in world and in the real world on other input commands. Therefore put simply, the real world is affected by the actions in world, outlining the idea that the virtual is not so virtual.

The second element of Catronova's virtual world is physicality, that being "people can access the programme through an interface that simulates a first-person physical environment on their computer screen; the environment is generally ruled by natural laws of Earth".⁹ By having this synergy with the real world, these virtual worlds are taking on the appearance of being a continuum of the real world and not being as virtual as their name suggests.

The final and third element is that of persistence; this being the idea that the computer remembers the closing play of that person or people, whether anyone is using it or not.¹⁰ Nothing

alters unless the users of that virtual world make it happen, thereby demonstrating that the 'in world' needs people to make it a world. It needs the real world influences to ensure that the 'in world' occurrences happen. In other words, the virtual world cannot operate without real world influences.

Having examined the definitions of what a virtual world is it can be logically deduced that a virtual world is all but real barring its lack of physical form. Therefore if it has real world affects and is all but real barring its physical form could it not be right to say there needs to be a 'Rule of Law' operating within the world.

The Rule of law is that, as Lord Bingham suggests, that all persons and authorities within the state, whether public or private, should be bound by and entitled to the benefit of laws publicly and prospectively promulgated and publicly administered in the courts.¹¹ In general therefore it means that no one is above the law and that the state's citizens are bound by the rules and that if broken they shall be tried fairly by a fair legal system. Lord Bingham further clarifies the Rule of Law through eight further points. These being:

1. That law must be accessible and so far as possible intelligible, clear and predictable;
2. That questions of legal right and liability should ordinarily be resolved by application of the law and not the exercise of discretion;
3. That the laws of the land should apply equally to all, save to the extent that objective differences justify differentiation;
4. That means must be provided for resolving, without prohibitive cost or inordinate delay, bona fide civil disputes which the parties themselves are unable to resolve;
5. That ministers and public officers at all levels must exercise the powers conferred on them reasonably, in good faith, for the purpose for which the powers were conferred and without exceeding the limits of such powers;
6. That adjudicative procedures provided by the state should be fair. The rule of law would seem to require no less;
7. That the existing principle of the rule of law requires compliance by the state with its obligations in international law, the law which, whether it is derived from treaty or international custom and practice, governs the conduct of nations;
8. That the existing principle of the rule of law requires compliance by the state with its obligations in international law, the law which whether deriving from treaty or international custom and practice governs the conduct of nations.¹²

We can say for certain that none of these are being carried out in any clarity of distinction within virtual worlds and it is this which is holding back their economies and development. It is only with the adoption of these rules within the virtual worlds that commerce can begin to have a real positive effect on the real world. What is required is for the rule of law of real world countries be adopted for these virtual worlds. The legal jurisdiction of virtual worlds is a discussion for another paper

⁹ Catronova, E. 'Virtual Worlds: A first hand account of market and society on the cyberian frontier', CESifo Working Papers, No. 618, December 2001.

¹⁰ Ibid.

¹¹ Lord Bingham Text Transcript. Law Society for Hereford and Worcester Tuesday 15 April 2010.

¹² Ibid.

but whether the jurisdiction is adopted from the location of the server or whether there is a new international rule of law drafted, agreed on and implemented, it is clear the legal situations must be clarified.

2.1. Law, economics and history

Virtual economics is a tricky area to pin down. Many academics¹³ have considered the economic point of view from a commodity, profit and loss standpoint. Few have considered economics as the economy, i.e. the money, the transactions, the value of goods, the crises emanating from the economy, of a virtual world. This part of the paper gives way to these ideas. It is not meant to be an examination of economics and the calculations of the profits and net gains of the virtual world. For now what is being considered is the monetary policy of virtual worlds. In other words how can a computer pixel be attributed a real world value and how can this be controlled given that once withdrawn from the in world, it has real world affects?

The reason why we turn to history once again is that history informs us of how things in world and in the real world have come about. The idea is that we only have economics and in turn currency because it has been accepted over time. In society we have placed a value on various commodities and we exchanged money to get the goods.¹⁴ But the question is how did we get to the idea that coins and paper have a value and that these can be exchanged for goods and now even more so that we consider a plastic card as the means of paying for goods, as this card holds our wealth, or means, to do so.

Let us travel back in time. Where did the idea of money come from? The idea of money dates back to about 4000–5000 BC. Remember that the idea of a virtual currency can be traced back to this early period; after all, what is virtual is, this paper is arguing, but a continuum of the real. What was considered, other worldly in 4000BC is now out of date for us and what is virtual money now could be, and most likely will be, considered out of date in several thousands of years time.

The basic form of trade was called bartering, where you swap something of yours for something that you want in return. This is ok for a time but what happens when you want something and the person does not want to trade your goods for it? This led to the idea of having a common commodity which could be traded for goods, such as grain, rice, honey etc... It was this common feature which can be seen in elements of virtual money today. The common feature allows for a fixed and standard measure for goods to be traded and purchased, it also allows for the common commodity to store value and also act as a medium of exchange.¹⁵ This is where the concept of money was born; this method provided a common measure accepted by all for exchanges of goods. It is important to labour this point as trade “cannot happen if there is not an agreement amongst

everyone that a particular currency has value”.¹⁶ People of SL accept that Linden\$ are currency and that they have an agreed value. They use these Linden\$ as a means of bartering and obtaining good that they would not be able to obtain unless this system of ‘money’ was in place.

In 3000 BC the idea of collective protection of currency began. The idea was to collect together the currency and share the cost for an army to protect their currency and therefore loss. Along the banks of the Nile, granaries for grain appeared which kept the grain for local people. This is where the name bank comes from, i.e. the storage of currency was first along the river banks. The first accountants began logging what came into the collective store and what was removed. Having grain as a mode of currency was fine until there was a draught and grain was in sparse supply and this happened to the ancient Egyptians around 2200 BC. This was the first banking crisis in the world.

As the grain became scarcer, it also becomes more valuable. After 200–300 years of problems associated with the lack of grain, metal became the chosen common commodity for currency. “This is important because it finally moves currency to something that is more abstract”.¹⁷

However practically speaking, moving large amounts of metal around to conduct transactions posed various physical problems and so countries such as Sweden and China converted the metal currency to paper money. These sums of currency were held in banks. By converting the currency to paper from metal and in turn from grain, adds another layer to our currency continuum, from the real to the abstract.

What happened next, and yes forgive me that the leap is rather a large one, but the next step is rather an interesting turn of events for bankers and currency globally. This was the creation of the reserve or central bank in any one country. It was created by John Law (1671–1729), who at the age of 29 shot a man in a duel for the hand of a lady and was tried and convicted of murder. He was sent to jail and escaped to France soon after. Law was an early economist and observed that it would be better for nations to control the flow of currency and to do this he observed, it would be prudent to issue more IOU’s than the banks had metal for should the need arise to make an issue to the depositors. Law came up with the idea that if the nation had a reserve bank which guaranteed the money, each individual bank could lend more than it had in its reserves. However, this could not happen unless there was support from the government as the central bank could only be controlled by the law of the land and therefore the government. Law managed to convince the government to undertake this task and created what is known today as ‘fractional reserve banking’, whereby the banks only hold a fraction of its obligation in any one time. This notion is ok, whilst the people of the nation trusts its government and therefore banks. If a society loses its trust and confidence in the government and or the banks, then bank runs can occur, i.e. where everyone decides to take their money out of the bank at one time, and thus the bank, only holding a fraction of its obligation, fails to provide each person with their money.

¹³ Castronova, E. ‘Virtual Worlds: A first hand account of market and society on the cyberian frontier’, CESifo Working Papers, No. 618, December 2001.

¹⁴ Coins to QQ at Web 2.0 19 February 2008. <http://www.forbes.com/2010/01/04/virtual-economy-gaming-technology-breakthroughs-levchin.html> retrieved 23 April 2010.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

The modern day (from the 1920's) history of the reserve bank and the international and national collaboration is a story for another time, for now what we can see is three fold. Firstly for currency to be in place, it must be a common accepted medium. Secondly currency has moved from the real to the abstract in the real world and therefore the creation of virtual money is no less real than the creation of paper as a means of representing metal coins, it is just rather new to us all. Finally, and most importantly, is that someone must be in control of the flow of money into and out of the banks and the nation. This is not the case for the virtual banks at the moment and it is this which is causing the problems in world currently. As Spiress points out: "Courts are trying to figure out how to apply laws from real life, which we've grown accustomed to, to the new world. The Law is struggling to keep up".¹⁸ Whether it is the criminal law or civil law, the legal position of virtual worlds, is ambiguous and unclear. There is no dispute that the virtual world contains elements such as politics, crime and economics but the law which governs and controls is unclear.

3. Virtual economics and markets

Within virtual worlds, (and not just SL), there are thriving economies, with their own markets and currency (World of Warcraft is yet another example). At the present time most of these virtual worlds and currencies are separate. They are bifurcated only by the lack of open standards, whereby virtual money, avatars and commerce can be exchanged between worlds. An open standard would allow for free movement of goods and trade between these virtual worlds and would pave the way for a definite need for a higher jurisdictional basis. If we assume that the regulatory position at the moment within virtual worlds is that rules are issued by the game developers, and not by a court of a real world, then we can assume that when open standards arrive in virtual worlds there will be a need for one governing body. The technology is present in these worlds to facilitate open standards. What is lacking is the clear legal position. Therefore, although the economies are thriving in each individual world, they are also stuck within those worlds. If we embrace the idea of having e-commerce developed via virtual world economies then the legal position of the economy needs to be established. This part of the paper will examine SL economy and will explore the virtual economics phenomenon and the challenges it faces.

In SL, the economy really started to thrive once a legal position of ownership rights was clarified. Thus, it gave credence to the argument that once there is a clear legal position within the virtual world, it allows users more freedom and security to fully immerse themselves within the game.¹⁹ Furthermore, it is important for the economic position to also be clear within these worlds. As Castronova indicates, "economists believe that it is the practical actions of

people, and no abstract arguments, [are those] that determine the social value of things",²⁰ and affect the economy. Castronova believes that, "virtual worlds may also be the future of e-commerce".²¹ It is therefore important for legal and economic scholars alike to understand the already complex and multi-layered economy of virtual worlds.

3.1. The economy in second life: Linden monetary policy

"When it comes to money SL and your first life are very similar."²² As previously mentioned SL resembles in most ways the real world. If you want a new pair of shoes then, in the real world, you need to have money to buy those shoes. It is the same in SL. The currency in SL is called Linden dollars or L\$ as an abbreviation. This currency only has value in that world but it can be exchanged on an exchange to real world currency. This is very unusual in virtual worlds but it is beginning to be the trend for the future. This is because, as will be considered later on, e-commerce has been very successful in the real world. The 'in world' exchange is called the LindeX. Therefore, you can say that SL has money in the world. You can use the 'in world' money to make more in world money and then cash it out and pay for real world goods with it. LindeX is run and monitored by Linden Labs, and although it is not a government or financial services organisation, it deals with the exchange of money flowing through SL. This poses further queries for governance. In a sense, this is an unregulated monetary exchange. There is no recourse, nor rule of law governing the exchange of money.

So the question that needs to be asked at this stage is how you get real money into the virtual world. This is relatively easy; all you need is either a credit card or a PayPal account. You just select the amount you want to transfer and like a normal transaction, you can purchase the Linden \$. This is done through the LindeX, as in the real world on the stock market. You will then on your account (top right of the screen) have an amount of Linden \$ that you can then spend or invest as you wish. Linden Labs will charge any user an amount to carry out the transaction to transfer Linden \$ to real world currency. Therefore to cash out of the 'in world' monetary system will cost you money and will make Linden Labs more money. However, the price of the transaction is all market dependent. It is about supply and demand, if someone sells a large amount of Lindens for a low price, the price of Lindens goes down. You have three options when you are cashing out your money. You can have it paid into a PayPal account, have a domestic cheque if you are in the USA or have an international cheque if you are outside the USA. These methods may take a few days for the money to be transferred. It is not as a quick process to get your money out as it is to put your money in. This method of cashing out poses problems for money laundering and what this paper will later go on and discuss, but if you have the money paid out as a cheque,

¹⁸ Sipress, A. 'Where real money meets virtual reality, the jury is still out', Washington Post, 26 December 2006. <http://www.washingtonpost.com/wp-dyn/content/article/2006/12/25/AR2006122500635.html> 29 January 2010.

¹⁹ Ibid.

²⁰ Castronova, E. 'Virtual Worlds: A first hand account of market and society on the cyberian frontier', CESifo Working Papers, No. 618, December 2001.

²¹ Ibid.

²² Robbins, S. & Bell, M. 'Second Life for Dummies', 2007, Wiley Publishing. P.15.

domestic or international, or through a PayPal account the anti-money laundering checks for these methods do not allow for checks on money laundering.

Another way of purchasing Linden \$ is via in world transactions. During your time 'in world' you can press the 'Purchase Linden \$' button and purchase the amount you require whilst in world. Your account details you provided when setting up an account and will debit your credit card or PayPal account for the required money.

SL economy is known for its free market agenda, however controls are placed on how many Linden \$ you can trade in any given transaction. The control and the limits is meant to protect Linden \$ from fraud, although whether this is completely successful is nebulous, but more of that to come.

The economy in SL has not been far from contention since its conception and continuous growth. In January 2008, Linden Labs implemented a not so free market banking policy after the financial crisis of Ginko Financial collapsing. Linden Labs issued a 'New policy' dictum which indicated their increasing increment into the governance of laws and policies over the virtual world. The new policy indicates that no one other than a regulated bank in the real world can now operate a bank within a virtual world.²³ The policy states; "we are implementing this policy after reviewing resident complaints, banking activities and the law, and we're doing it to protect our residents and the integrity of our economy".⁽¹¹⁾ Linden Labs stated the risk these unregulated banks posed to the SL economy succinctly. They stated, "These banks have bought unique and substantial risks to SL, and we feel it's our duty to step in. Usually we don't step in the middle of resident-to-resident conduct".²⁴ This highlights the importance of clarifying the legal and regulatory situation surrounding not only the economy but the rest of the in world society. Linden Labs acknowledges this by stating; "As these activities grow, they become more likely to lead to destabilisation of the virtual economy. At least as important, the legal and regulatory framework of these non-chartered, unregistered banks is unclear."²⁵ However, they are not prepared and nor should they be, to become a bank or lender of last resort. They are after all, nothing more than a successful games developer. They are not a bank but their role, in world, is ambiguous and unclear at best. They play at creating the law, being the governance of the world and being the financial regulator, but in actuality they do none of these things when it is required of them. What they do is issue guidance and in world rules none of which have governance in the real world. The rule for this is that; "Under its new banking rules, SL says only chartered banks will be allowed, though it isn't clear any real banks will operate in the virtual play world".²⁶ However, whether in world rules can ever

amount to a strong and robust economic and financial framework which is needed to control the amount of money flowing in and out of the world is contentious. Readers and commentators must not forget that SL is a virtual world and ultimately a game. But a game which has real world affects. The lines drawn between the two are unclear and blurred. It is no wonder that regulators and governments alike are baffled by how to regulate and control this medium of monetary exchange. Yet it is clear that some degree of control and structure will need to be put into place quickly given the growth of SL's economy. As Linden Labs outlines and admits: "The whole SL adventure encourages user freedom, but it has so many users, and so much money is flowing in, that you have to face that the community needs some degree of control".²⁷

3.2. Synergies with real economies and the macroeconomic impacts of virtual economies

"If virtual worlds do, in fact grow, as a human phenomenon, there may be some implication for Earth economies".²⁸ Castronova denotes this point succinctly and for the most part he is correct. Virtual worlds do actively affect the real world economies merely because they are part of the continuum of what occurs in the real world. Hence the virtual is not so virtual. What is causing nebulousity is the lack of governance over these macroeconomic impacts of virtual economies. Castronova continues with this assertion and says; "If economic activities migrates into virtual economies, where there are no earth jurisdictions, there will be a net loss of taxable assets and incomes in Earth's economies".²⁹ Again, he is right. Without a clear and defined legal structure the economies of the virtual worlds could spiral out of control and the benefits which they could offer to the real economy might be lost. This next section examines two instances where financial scandal has hit virtual economies with a minimal legal response. However, the impact of such virtual financial scandals is only too real for those who lose money in the virtual worlds.

3.2.1. Virtual bank runs and troubles: case studies Ginko Financial & EveOnline

"So now, Linden Lab has deemed that only banks in the real world can open a bank in SL. And so, folks who deposited money in the virtual banks want their money back, and some have closed".³⁰ The reason for this is due to the financial crisis that has occurred within virtual worlds. Virtual economies, like real world economies have suffered the fate of financial scandal and crisis. Two of the most recent and well known are charted here for the record.

²³ Linden Labs. 'New Policy Regarding In-World Banks', 8 January 2008. <http://blogs.secondlife.com/community/features/blog/2008/01/01/new-policy-regarding-in-world-banks.htm> Retrieved 15 March 2010.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Sidel, R. 'Cheer up Ben: Your Economy isn't as bad as this one', The Wall Street Journal, 23 January 2008. <http://online.wsj.com/article/SB120104351064608025.html> retrieved 15 March 2010.

²⁷ Semuels, A. 'Virtual Bank's Second Life Scheme Raises Real Concerns', 22 January 2008. <http://articles.latimes.com/2008/jan/22/business/fi-secondlife22> Retrieved 26 April 2010.

²⁸ Castronova, E. 'On Virtual Economies', CESifo Working Papers, No. 752. July 2002.

²⁹ Ibid.

³⁰ Edu Games Blog. 'A Run on Virtual Banks in SL', 23 January 2008. <http://edugamesblog.worldpress.com/2008/01/23/a-run-on-virtual-banks-in-sl/> retrieved 29 January 2010.

3.2.2. Ginko Financial

Ginko financial was a large investment bank within Second Life. It has been described as “unregulated, unaudited, and a magnet for controversy”.³¹ However in its day Ginko Financial was a very popular and successful business. It offered investors large returns on their money in return for investing their money in the virtual bank. Linden Labs made policy changes to gambling and financial matters ‘in world’ which subsequently made investors want to withdraw their money. Ginko financial could not deal with this demand on investments and there was a run on the bank. This eventually led to many investors losing their money. It has since been discovered that the investment bank was actually a Ponzi scheme whereby new investor’s money is used to pay old investors thus leaving no money for the new investor’s to reclaim. Linden Labs, as a result of this, made any bank which was not regulated or chartered in the real world illegal in SL.

As Sidel states: “The banking crisis at SL surfaced during the summer when Linden banned gambling on the site, citing conflicting regulations around the world. That caused a run on Ginko Financial that had invested heavily in the virtual world’s gambling operations. Ginko capped withdrawals and ultimately issues bonds to customers instead. The bank went out of business in August”.³² He continues and denotes: “The collapse led to an outcry from depositors at SL banks”. (12) Linden Labs responded by allowing only chartered banks to have bank status in the virtual world. However Linden Labs insists it cannot and will not act as a banking regulator. “If this is real money, there is an argument you need to follow real law”.³³

However, Duranske point out that “A lot of people forget that Second Life is governed by U.S. law and the laws of California, it just so happens that these laws haven’t been enforced.”³⁴ This lack of enforcement and even the confusion that there could be a legal safety net for investors causes many problems for the virtual world economy e.g. inhibiting growth and furthers the argument that the virtual world is not so virtual and should be regulated via real world laws.

An advocate for not incorporating real world laws is Bloomfield who says: “I am really hoping that RL (real life) regulation does not come to SL because right now SL has the chance to sort out what type of oversight and regulation it wants.” He further opines that: “If the RL authorities or Linden Lab do start meddling with business affairs, it could ruin a golden opportunity for real innovation and creativity, a chance to recreate a world in a new image.”³⁵

Ginko Financial scandal undoubtedly changed the face of ‘in world’ banks and financial institutions and just as in the real world it is scandal which pushes through policy changes and

regulatory reform. In this case it is Linden Labs who alters policy allowing only real world banks and financial institutions to act as such in the virtual world but it did not again, produce clarity on the legal jurisdictional issues which SL so needed.

3.2.3. Eve Online

A games developer and one of Iceland’s top companies set up a virtual world called Eve Online. What has happened in Eve Online during 2009-10 demonstrates the similarities with real world banks. Eve Online was very successful: in 2009 it had 300,000 people paying \$15 a month to use the platform for interacting on the site. The virtual world has a free ‘anything goes’ market and allows users to buy goods and support their role within the world. “Eve has 66 market places for some 5000 items with more than one million transactions per day”.³⁶ Eve created a virtual bank, Ebank. The currency is called interstellar credits (ISK) and is traded for goods within the world. However, when some players did not have enough ISK’s to purchase goods, an entrepreneur in Eve created a bank that would accept depositions and lend to players who would pledge their world assets as collateral.³⁷ Given human nature and banking interaction, the bank was a success and accumulated 8.9 trillion ISK in deposits and 13,000 accounts belonging to 6000 users.³⁸ The top executive of the Ebank then made off with the deposits of the bank and sold them for real cash to gamers on the black market exchange on Eve. He has since been kicked off the game and the bank has shut down. The bank, along with its board has been trying to sort out the crisis that ensued. Depositors withdrew 5.5 trillion ISK from the bank.

Reports are unclear as to the amount that the executive embezzled but there are discussions that 10% of the overall bank deposits were taken by him. What is important though is that there is no final regulator or no lender of last resort which would offer a safeguard for depositors.

This was reported globally and news agencies called this the start of the “Virtual version of the credit crunch”.³⁹ In fact it is supposed that the executive stole the money to pay medical bills and to put down a deposit on a house, both of which are consequences of real world affects. The executive has been thrown out of the game due to the terms and conditions of Eve online and steps were taken to recapture some of the money. Within all this the issue of law and jurisdiction arises, as there is none, or at best the legal situation is unclear.

It has been noted that “the laissez-faire approach to both business and the law has allowed EVE players to enact spectacular scams, with other players paying the price. One player opened a bank and then walked off with about 700 billion in the game’s ISK currency, or close to \$120,000 in U.S. dollars if sold illegally to other players on eBay.”⁴⁰

³¹ Reuters. A. ‘Ginko Financial- pyramid or pioneer’. 15 October 2006. <http://secondlife.reuters.com/stories/2006/10/15/ginko-financial-pioneer-or-pyramid/> retrieved 7 May 2010.

³² Sidel, R. ‘Cheer up Ben: Your Economy isn’t as bad as this one’, The Wall Street Journal, 23 January 2008. <http://online.wsj.com/article/SB120104351064608025.html> retrieved 15 March 2010.

³³ Ibid.

³⁴ Gardiner, B. Bank Failure in Second Life leads to calls for regulation. Wired. 15 July 2007. http://www.wired.com/gaming/virtualworlds/news/2007/08/virtual_bank retrieved 7 May 2010.

³⁵ Ibid.

³⁶ Cox, R. ‘A Virtual Bank With Real Woes’, The New York Times, 15 June 2009. <http://www.nytimes.com/2009/06/15/business/15views.html> Retrieved 29 January 2010.

³⁷ Ibid.

³⁸ Ibid.

³⁹ BBC News. ‘Billions Stolen in online robbery’, 3 July 2009. <http://news.bbc.co.uk/2/hi/technology/8132547.stm> Retrieved 26 April 2010.

⁴⁰ Hse, J. ‘Second Life Bank ‘Crash foretold financial crisis’. MSNBC <http://www.msnbc.msn.com/id/27846252/> accessed 7 May 2010.

When real world items are affected by ‘in world’ actions, users call on real world enforcement agencies to govern the world. There is, therefore confusion over whether it is a virtual world where the rules are governed by the developers of the game or whether because real world aspects are being affected, real world repercussions should occur. Cox illustrates this succinctly, “as in the real economy, the customers [are] tempted to appeal to a higher authority”.⁴¹ What is unclear is what is this higher authority, the developers or the Rule of law?

4. Summary

Within this paper we have explored the complex world of virtual economics and in particular the economy of one world, Second Life. It has been demonstrated that the nuances between the real and the virtual are indefinable except for one, rather important facet: that being the legal position of the virtual world and its citizens.

There are two schools of thought in this debate: one being that the virtual and the real are distinct, bifurcated by the realms of reality. The second, and the one which is advocated within this paper, is that the two are merely a continuum of each other and that over time, what is considered unreal will soon be considered the norm and the real. What is clear from all of this discussion is that the legal situation is vastly ambiguous and at best unclear. There is a lack of clear governance, jurisdiction and rule of law. Within this lack of governance and control there is a lack of real world regulation such as price control, taxable assets and income control which would have a benefit for the real world and causes disadvantages to the virtual world. What must be considered is the legal position of the virtual world. For the virtual is not as virtual as its name suggests and is considered here as a continuum of the real world and thus must be subject to the Rule of Law.

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⁴¹ Cox, R. ‘A Virtual Bank With Real Woes’, The New York Times, 15 June 2009. <http://www.nytimes.com/2009/06/15/business/15views.html> Retrieved 29 January 2010. 14.