



## EconoMag

The Show that demystifies Economics

Virtual Economies – part 3

Virtual Currency©

by Pierre Vercueil

Hi there EnglishWaves listeners, and thanks for tuning back in to this week's edition of EconoMag. So as you'll recall, we're looking at virtual economies. We considered what a virtual economy is, what type of products or services are traded in these economies, and we also started thinking about virtual currencies. We looked at how virtual economies work in online gaming, and how these virtual economies were really some of the first to develop. We also looked at how real-world currencies move between the real-world economy, and virtual economies. Today we'll be further exploring the deepening flow of online or virtual currencies.

Now, building on what talked about yesterday, virtual currencies within virtual gaming worlds, it's clear that one of the major limitations to the growth of virtual economies is that all of the assets in those economies exist at the pleasure of the companies that run them. For example, taking all of your real-world assets and converting them to a virtual asset or virtual assets in say our fictional online game Farmtopia or Blizzard Entertainment's World of Warcraft is unimaginable, because there's no guarantee that the companies that run those games won't decide to shut the game down tomorrow, or simply debase the virtual currency with one of their constant streams of updates and expansions. If that were to happen, you would essentially lose everything.

However, the creation of independent online currencies provide a way around that, and allow virtual commerce to flow effortlessly in and out of the virtual world – a sort of free trade movement for the virtual world! There are currently several recognised virtual currencies in circulation, the primary being Bitcoin, Litecoin, Peercoin and Dogecoin. Now Bitcoin has a huge lead in terms of its market capitalisation, acceptance and usage. For example, the market capitalisation (meaning the number of Bitcoins in circulation multiplied by the price of each one) is around 4,7 billion US dollars, compared to the next largest currency, Litecoin, which has a market capitalisation of around \$120 million. Now that's a staggering difference and largely comes from the fact that a Litecoin trades for around \$3.53, whilst a single Bitcoin will set you back almost \$350. One thing which is common to the whole virtual currency family is volatility in their prices, meaning the price of a Bitcoin or a Litecoin is constantly and significantly changing – a bit like a volatile real-world currency, which can depreciate or appreciate wildly as a result of certain economic factors. Now until the time that that is solved, no online or virtual currency is risk-free. A simple way of thinking about this would be, you could buy 100 Bitcoins today for \$350 each, and tomorrow the price of a Bitcoin could fall to \$1 – essentially you would then have lost a lot of money! To understand virtual currencies better, let's focus on Bitcoin.

Bitcoin is a form of digital currency, created and held electronically. No one controls it. Bitcoins aren't printed, like dollars or euros – people, and increasingly businesses, running computers all over the world, using software that solves complex mathematical problems, they produce them. It's the first example of a growing category of money or currency known as 'cryptocurrency'. Bitcoin can be used to buy things electronically – you can buy virtual products, or real products. For example, Microsoft now allows you to buy their products using Bitcoins, as do many other large companies. In that sense, it's like conventional dollars or euros, which are also traded digitally. However, Bitcoin's most important characteristic, and the thing that makes it different to conventional money, is that it is decentralized. No single institution controls the Bitcoin network. This puts some people at ease, because it means that a large bank can't control their money.

Bitcoin and other virtual currencies have important features that distinguish them from traditional government-backed currencies. Firstly, as mentioned and perhaps most importantly, they're decentralised – no one controls their flow. Secondly, they're easy to set up. You don't need to go through the taxing experience of opening a formal bank account – you only need an e-wallet! Thirdly, it's completely anonymous so no one can link your purchases or sales to your identity. It's also fast, you can send money anywhere in the world within seconds, and there are no transaction fees for doing so. Lastly, it's reputable! Bitcoins cannot be duplicated – when they are sent, they are gone forever unless the recipient gives them back to you.