

Safeer Ahmed

Reviewed by Professor Grace A Giorgio

15 December 2021

Containing Digital Scalpers

Abstract: The growth of the internet has led to more online marketplaces and more online shoppers. The coronavirus pandemic has also created an influx of online shoppers because of stay-at-home orders. This transition to online shopping is problematic since certain individuals are maliciously scalping, which means buying items and reselling them, through the use of sophisticated online botting. The United States government has limited ticket scalping through the BOTS Act of 2016, but the recently scalped markets are in a disastrous state and need legislative attention to prevent the bubble market from growing, and possibly bursting. This research paper will develop context and explain the solution to tackle this controversial problem.

Containing Digital Scalpers

Recently, the rapid increase of online shopping has opened the doors for products to be flipped at insane prices across numerous shoppers' favorite online marketplaces. The global pandemic has recently played a role in this controversy of increased scalping due to a higher dependence on shopping virtually. However, the central problem involved in the controversy of scalping in online markets is scalpers having control of pricing products; therefore, scalpers can artificially increase pricing based on high demand which leads to inflated pricing that can 'burst' at any point – essentially being like a bubble market (Johannessen). The federal government is aware of the controversy of online scalping as they have previously introduced legislation against certain types of scalping, but the legislation is arguably not doing enough to alleviate the controversy. Hence, in order to solve the influx of scalping taking place in technology, the federal government needs to revamp current anti-botting laws and create further legislation to ensure buyer equality online. This paper will delve into a deeper explanation of the problem of online scalping, the root causes of said problem, and the mentioned solution needed to take place.

The controversy of online scalping is relatively new, so an overview of the problem it creates will be explained. But prior to that, it is necessary to understand the history of scalping itself. Since the era of the internet is only a few decades in and is continually growing, the number of scalpers is increasing. Scalping is the process of buying goods online and flipping them for a profit. The term began to be used in this context when tickets for music festivals and concerts began to be sold online – and then were resold at high prices. Sam Gruet, a BBC reporter recognized within the technology space, considers the term scalping as, "... first [being] used to describe buying up large quantities of tickets for stuff like gigs and festivals and then

selling them on, pocketing the profit” (Gruet). Essentially, the origin of modern online scalping was ticket sales, but it has spread. Now, scalping is done in numerous markets using programmed bots that utilize sophisticated algorithms to bypass restrictions and purchase large amounts of stock and immediately post listings on secondhand marketplaces.

A major market that has been, and is currently, widely impacted by scalping is technology gadgets. For example, graphics cards which are often sold online through websites such as Amazon, Newegg, etc. are being impacted. There is currently a graphics card shortage going on, and a similar shortage occurred in 2017. The shortage in 2017 was because of cryptocurrency mining which led to high demand, and the current shortage is due to the global chip shortage which is associated with the Coronavirus Pandemic (Roach). In Jacob Roach’s deep dive of the chronological history of the graphics card shortage, he cites that according to data engineer Michael Driscoll, “... scalpers have sold approximately 50,000 Nvidia GeForce RTX 3000 series cards for a total of more than \$61.5 million in sales” (Roach). Roach goes on to explain that consumers had to buy these cards because the demand for computers grew by 13.1% due to stay-at-home orders from early 2020 (Roach). The high demand for computer parts like graphics cards because of the pandemic enabled scalpers to target this market.

Additionally, another technology gadget that is in numerous headlines because of the holidays is gaming consoles. The new consoles such as the PlayStation 5 and Xbox Series X are in high demand since they are relatively new and very popular. However, as mentioned, there is a global chip shortage due to the pandemic. The Infographics Show cites that the chip shortage is also heavily affecting the supply of the new gaming consoles (Preston). This shortage has created the opportunity for scalpers to flip these consoles at high prices as well. Although it has been over a year since the gaming consoles have launched, they are still being scalped. In a

Bloomberg article by Takashi Mochizuki, it is stated that “... resellers [are] charging \$1,300 or \$1,400, almost triple the retail price, on sites like eBay and Twitter” (Mochizuki). This indicates that certain items in popular markets are scalped for long-term periods and that it is an ongoing problem that needs attention.

Not only are technology gadgets like gaming consoles and graphics cards being scalped, but common goods are being bought out and resold by scalpers too. Michael Kan, a longtime reporter in the technology industry, interviewed individuals that are running botting services themselves. In this interview, a bot manager under the alias Avo claimed that “Swimming pools... were probably one of the most profitable items on eBay [he’d] ever seen” (Kan). This emphasizes that even mundane items are able to be scalped on online marketplaces. This insane influx occurring to goods being scalped across can also boil down to the recent global pandemic. The pandemic has increased the number of online shoppers which has led to resellers “branching out to whatever goods are in demand” (Kan).

One might notice that there is a common similarity between the aforementioned markets being plagued with scalping. All these markets share the effects of having lower supplies due to the pandemic; however, it should be noticed that scalping originated from concert tickets prior to the pandemic, and graphics cards were being scalped in 2017 before the pandemic. Hence, the true root cause of the scalping craze is actually not the global pandemic. Instead, the root cause can be summarized by a snippet from a *Bloomberg Businessweek* report, “The scarcity of some in-demand products could introduce a lot of volatility and unpredictability” (Hunt). Essentially, items that are scarce but also have high demand are easy targets for scalpers because it ensures that they can be bought and resold since consumers have a high enough desire to still pay for the goods.

This control of the supply by scalpers can be detrimental since they can control the price artificially because of the high demand – which parallels bubble markets. To briefly explain what a bubble market is, the book *Innovations Lead to Economic Crises: Explaining the Bubble Economy* by economics professor Jon-Arild Johannessen will be referenced. The Tulip Crisis of the 1600s embodies what a bubble market is. The book explains that Dutch merchants bought out entire stocks of tulip bulbs and limited the sale of them which allowed them to artificially raise the price to absurd amounts (Johannessen). The issue is that when demand suddenly dropped for the tulips, the price plummeted – the price ‘popped’ like a bubble. This can be related to the current scalping phenomenon because scalpers practically control certain markets entirely similar to the Dutch merchants. As stated, when demand diminishes, the pricing of goods can burst to devastatingly low prices and potentially cause economic fallout at large scales (Johannessen). When the price of certain goods crashes, a chain of goods’ prices may fall which can damage thousands of businesses and millions of consumers (Johannessen). This is exactly why the issue at hand of scalpers creating bubble markets is so important to recognize and combat.

Before providing the best possible solution, it is crucial to recognize the situation of the stakeholders of this issue that are heavily impacted by the current inflated market problem which scalping has created. There are four major stakeholders in this controversy: consumers, scalpers, manufacturers/retailers, and governing bodies. The main stakeholder in this controversy is the average consumer. Items like the mentioned gaming consoles, computer components, or even regular mundane items are having their prices skyrocket which makes it difficult for regular consumers to afford them. Because of this, consumers are calling for restrictions to be made on scalping either via legislation or retailers strengthening preventions. In either case, consumers believe that scalpers are in the wrong and have even in extreme cases acted as vigilantes by

interfering with bot listings. One anonymous vigilante claimed that he has “[zero] problems taking money from unethical people” (Gruet). Shoppers’ security is additionally at risk from scalping. According to a security report from Imperva’s State of Security Within eCommerce, “... over half (57%) of attacks targeting retail websites this year were carried out by bots, versus just 33% across other industries” (Muncaster). This security report clearly shows that there is an explicit security risk created by scalpers utilizing bots online. Scalpers, on the other hand, claim that they are just acting as entrepreneurs taking advantage of the free capitalistic markets online (Gruet). When faced with accusations, many scalpers insist that it is instead the job of the retailers to ensure equality in the buying process. Nevertheless, to better understand the upcoming solutions which will be argued, it was important to mention stakeholders affected by the scalping controversy because there is a massive scope of individuals affected, so change is definitely needed to protect the populace.

Because the issue of scalping is a new problem that has arisen with the growth of the internet and online shopping, there is not much legislation presently in place to prevent it from occurring. However, since scalping began with ticket sales and had a massive effect on that market, there is some federal legislation against those scalpers in the United States. Specifically, “The Better Online Ticket Sales (BOTS) Act bans using software to circumvent ticket purchase limits – a practice that lets resellers buy tickets in bulk and resell them at a steep markup” (Robertson). This is the summary of the current law in place by the U.S. congress by Adi Robertson in her *Verge* article. The legislation created by the U.S. Congress gives authority to the FTC to enforce against violators; however, the law is only applied to online ticket scalping, not every item being scalped. Earlier this year, the FTC enforced the BOTS Act of 2016 for the first time on a large scale. The FTC “issued multimillion-dollar fines against three bot-powered

ticket scalping operations” which indicates that the federal government is aware of scalping taking place (Robertson). As explained up until now in this paper, scalping is evidently affecting numerous markets for goods across the entire internet, yet the present law only protects the ticket industry.

To provide more context, some shoppers are putting massive blame on the retail industries for not doing enough instead of the government; however, with the current legislative support –or lack thereof– retailers have limited defense against scalpers and their botting techniques. For example, in his op-ed, a senior technology news editor Michael L Hicks claims “Companies haven’t just stood pat over the last year. But their solutions... are either inadequate or unfair to consumers” (Hicks). An *IGN* article by Taylor Lyles overviews all the solutions companies such as Amazon, Walmart, Best Buy, etc. *are* implementing to stop scalping bots. However, as stated earlier and in this article “Not even the BOTS Act of 2016 can help, as it only outlawed bots from being programmed to purchase digital tickets; other purchases are mostly fair game” (Lyles). Because other purchases are fair game, retailers have limited restrictive options to choose from, which Lyles goes into more depth about in his article.

Now that the current status quo has been explained, it is clear that in order to prevent scalping from occurring in other marketplaces, the federal government must expand the BOTS Act of 2016 to cover all online goods. But prior to arguing for the expansion of the BOTS Act of 2016, it is absolutely necessary to revamp the legislation itself because it has glaring flaws. These flaws will be outlined using the well-crafted journal article by studying law expert Zachary Sturman in the *Vanderbilt Journal of Entertainment and Technology Law* as a reference. Although Sturman has an extremely negative view of the current legislation after he deeply researched the law, he provides possible solutions to revamp the current BOTS Act. Sturman’s

key distaste with the BOTS Act is its connection with the FTC. The journal explains that the FTC currently acts as a “boogeyman” and has a bad history of mistreating the manufacturers/retailers under the claims of protecting consumers (Sturman). Therefore, Sturman suggests that, “... [the] approach would be to keep the BOTS Act... but relieve the FTC from enforcement... and instead allow private parties to sue under the BOTS Act” (Sturman). This revamping of the legislation would give power to both distributors and consumers to report acts of online botting that scalpers commit and take them to court. Essentially, the legislation in place can be enhanced to give power to consumers and retailers to file civil suits against scalpers with hefty fines. This would both create a fear factor for scalpers to stop scalping using advanced bots and fine those who continue to inflate pricing. To ensure that bad actors are caught, the revamped act could also give retailers more power to track bank accounts linked to scalpers which is a strategy currently not utilized. The BOTS Act was enacted in 2016 but has only had one major fining by the FTC which happened earlier this year, so revamping and expanding the legislation is necessary whether it be through amending the current BOTS Act or creating a new act entirely.

Still, there are calls from some consumers and scalpers that claim retailers should be blamed instead of government inaction. The issue reappears then because it is just not possible for retailers to prevent scalpers legally with the legislation in place as of right now. Two law firm workers for CMS (a massive international law firm) have an informative article that highlights the only options present for retailers to beat the bots with current legislation. The first option is technical blocks such as CAPTCHA or membership systems, but those often deter the user experience (Taplin & Grolman). Also, bots can just be reprogrammed to bypass such technical restrictions. The Walmart Chief Information Security Officer in a report claimed that for the

holiday season of 2020 Walmart blocked over “20 million bot attempts”, but “bot scripts are constantly evolving and being re-written” (Kan). The other option is utilizing terms and conditions which users must agree to before purchasing items. The issue here is that scalpers can use fake identities online and it is extremely difficult to bring violators in for court hearings with the current legal system (Taplin & Grolman). Therefore, the argument against government action is not applicable because retailers do not have the legal or technical strength to combat scalping bots without support from federal legislation.

To conclude, it should be reiterated again that a new solution is absolutely needed – and should happen fast. With the solution proposed to revamp and expand current legislation, when giving private entities the legal power to sue other entities which commit online botting to scalp products, retailers –and also consumers– will be able to legally challenge scalpers to guarantee a more fair and equal buying opportunity for consumer goods that are in high demand. This will in turn prevent the artificial price hikes from taking place which is currently out of control of the retailers and manufacturers. Hence, by enacting the proposed solution, it would alleviate the distress taking place in the present market and halt any bubble markets from forming online – which have the potential of wreaking havoc when popping.

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