

TAMING THE TICKET MARKET: HOW A CLOSED TICKETING SYSTEM CAN BEAT BACK SCALPERS AND RECAPTURE LOST REVENUE

I. INTRODUCTION

Ticket resale for profit, or “scalping¹,” is seemingly as old as live entertainment itself.² With the advent of computerized “ticket bots” and online secondary markets, what started as a street-corner trade has exploded into a multi-billion-dollar industry.³ In today’s music market, this is particularly unfortunate as concert revenue often comprises the vast majority of an artist’s income.⁴

Lawmakers have tried and failed to address the problem. Economists, on the other hand, question whether scalping is a problem at all, or rather an illustration of the free market at work. This paper argues that it is the artist’s, rather than the market’s right to determine the price at which tickets reach the consumer. This can eventually be accomplished through blockchain ticketing, but as the industry waits for blockchain technology to reach scalability, Congress should federally mandate a closed-ticketing system that mimics the blockchain.

Part II of this paper explains the economics of the resale market. Part III looks at how lawmakers have tried and failed to curtail scalping. Part IV examines how the industry has responded with limited success. Part V proposes short-term and long-term solutions while Part VI concludes.

¹ The term, “broker,” is usually used to refer to an individual or business that is authorized to buy and resell tickets for profit. *What is a Ticket Broker?*, WISEGEEK, <https://www.wisegeek.com/what-is-a-ticket-broker.htm> (last visited Dec. 31, 2019). The more pejorative, “scalper,” refers to those that engage in resale for profit without official permission. *Scalper*, CAMBRIDGE ACAD. CONTENT DICTIONARY (2017), <https://dictionary.cambridge.org/us/dictionary/english/scalper>. This paper uses the terms “scalper” and “broker” interchangeably.

² Reports trace the scalping in the United States back to the days of P.T. Barnum in 1850, though Ticketmaster co-founder Albert Leffler claims that scalping originated in ancient Rome. KERRY SEGRAVE, *TICKET SCALPING: AN AMERICAN HISTORY, 1850-2005* 3 (2006); *Scalping goes upscale: The secondary ticket market’s online revolution*, W. P. CAREY NEWS, <https://news.wpcarey.asu.edu/20070702-scalping-goes-upscale-secondary-ticket-markets-online-revolution> (last visited Dec. 31, 2019) (quoting Leffler who claimed that spectators of Gladiator contests at the Roman Coliseum would resell or barter their tickets to those looking to gain a better view of the emperor).

³ Technavio projects the secondary ticket market will reach \$15.19 billion in 2020. *Top 13 Ticket Resellers in the Global Secondary Ticket Market*, TECHNAVIO BLOG (Dec. 10, 2017), <https://blog.technavio.com/blog/top-13-companies-secondary-ticket-market> (summarizing Technavio’s report on the global secondary ticket market. This statistic includes secondary market revenue from all live events, including live sports).

⁴ ALAN B. KRUGER, *ROCKONOMICS* 36-38 (2019) (“Of the top 48 musicians who toured in 2017, on average they earned 80 percent of their income from touring, 15 percent from recorded music, and 5 percent from publishing fees.”).

II. THE ECONOMICS OF TICKET RESALE

A ticket scalped is a ticket underpriced.⁵ With no resale restrictions, a scarce resource like tickets to a one-night-only Beyoncé concert will eventually approach the “market-clearing price”⁶ and end up in the hands of the consumer willing to pay the most for a given seat.

Economists have been baffled as to why concert tickets are consistently underpriced.⁷ There are a few explanations. First, artists often have imperfect information regarding demand; they price conservatively, preferring to lose some revenue rather than risk the embarrassment of discounting prices and/or performing to empty seats.⁸ Second, artists want to protect their reputation, or goodwill.⁹ Goodwill can make the difference between a one-time downloader and a lifelong fan and any perceived price-gouging may damage that goodwill. Lastly, many artists underprice because they view quickly selling out their shows as a point of pride.¹⁰ Whatever the cause, underpricing presents an opportunity to rent-seeking scalpers.

Rent seeking occurs when an entity (e.g. a scalper) seeks increased wealth without generating any reciprocal value for society.¹¹ In the past, scalpers’ rent-seeking behavior consisted of paying “pullers” to wait in line at the box office.¹² Today, pullers have been replaced by computer “bots” that can amass enormous ticket caches in mere seconds.¹³ Intuitively, it would seem society loses

⁵ KRUGER, *supra* note 4, at 6. Live Nation CEO, Michael Rapino said, “The way to solve the secondary market is to price the house better.” *Id.* at 142. See generally Aditya Bhawe & Eric Budish, *Primary-Market Auctions for Event Tickets: Eliminating the Rents of “Bob the Broker”?*, (Nat’l Bureau of Econ. Research, Working Paper No. 23770, 2018), <https://faculty.chicagobooth.edu/eric.budish/research/Ticket-Auctions.pdf>.

⁶ Will Kenton, *Clearing Price*, INVESTOPEDIA, <https://www.investopedia.com/terms/c/clearingprice.asp> (last updated Mar. 1, 2018) (defining the “market-clearing price” as the point at which supply meets demand).

⁷ Bhawe, *supra* note 5, at 1.

⁸ U.S. GOV’T ACCT. OFF., *EVENT TICKET SALES: MARKET CHARACTERISTICS AND CONSUMER PROTECTION ISSUES* 8-9 (2018).

⁹ *Id.* at 8.

¹⁰ David Marcus, Head of Music at Ticketmaster North America, explained that, “Artists value the ability to say, ‘We’re sold out, and we sold out in a minute, or two minutes,’ and that is historically a banner to waive that reflects your stardom. But, from an economic perspective, that’s a disaster; if you sold out in a minute, you underpriced dramatically.” *Why Is the Live-Event Ticket Market So Screwed Up?*, FREAKONOMICS RADIO (Dec. 6, 2017, 11:00 PM), <http://freakonomics.com/podcast/live-event-ticket-market-screwed>.

¹¹ *Rent Seeking*, THE ECON. TIMES, <https://economictimes.indiatimes.com/definition/rent-seeking> (last visited Dec. 31, 2019).

¹² KRUGER, *supra* note 4, at 19. See also Jason Koebler, *The Man Who Broke Ticketmaster*, VICE: MOTHERBOARD (Feb. 10, 2017, 5:00 AM), https://www.vice.com/en_us/article/mgxcb8/the-man-who-broke-ticketmaster (defining the term, “pullers”).

¹³ FREAKONOMICS RADIO, *supra* note 10. In a study of U2’s 2015 North American tour, the New York Attorney General reported that on December 8, 2014, a single bot purchased 1,012 tickets in one minute to the band’s Madison Square Garden show. OFF. N.Y. ST. ATT’Y GEN. ERIC T. SCHNEIDERMAN, *OBSTRUCTED VIEW: WHAT’S BLOCKING NEW YORKERS FROM GETTING TICKETS* 18 at fig. 6

when bots snatch underpriced tickets away from true fans. Despite this, economists believe scalpers increase net social wealth.

So the theory goes, ticket allocation is often sub-optimal after the initial sale; due to factors including speed, luck, and the costs of waiting on line, there may be ticketless fans willing to pay more for a seat.¹⁴ Economists believe scalpers provide utility by helping each ticket find its way to the consumer that “values” it most, as measured by their willingness to pay.¹⁵ Economists further argue that scalpers benefit the artist by speculatively gobbling up tickets, thereby assuming the risk that demand may fall short of expectations.¹⁶ In short, society is better off when scalpers compete in an unfettered market.¹⁷

Concertgoing, however, is a unique commercial experience and buying a ticket to one’s favorite artist is more personal than purchasing an appliance, for instance. Mistakenly, these economists narrowly view consumer value in terms of dollars and cents but discount the emotional value a fan derives from seeing their favorite artist, an experience that provides valuable, albeit intangible societal benefit. Moreover, underpricing may help the artist realize a net economic gain. For instance, suppose Ed Sheeran determines that by selling front-row seats at \$100 each, he can get younger, social media savvy fans to his show and that those fans will convince their Instagram followers to buy his new album. Even if there are consumers willing to pay many times that \$100 ticket price, Ed may be better off foregoing the additional ticket revenue. Further, unlike corporations, some artists choose to underprice for altruistic reasons.¹⁸ For instance, some sold-out Broadway shows hold ticket lotteries where they virtually give away front-row seats.¹⁹ Scalpers may play a valuable role under limited circumstances, but this paper argues that artists should be able to control if, when, and under what terms scalpers may enter their market.

(2016), https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf. On the same day, two bots purchased 15,087 tickets at over 20 North American venues for the same tour. *Id.*

¹⁴ See generally Phillip Leslie & Alan Sorensen, *Resale and Rent-Seeking: An Application to Ticket Markets*, 81 REV. ECON. ST., 266 (2014).

¹⁵ *Id.* at 267. The point at which these transactions cease to produce a marginal benefit relative to marginal costs is what economists call “allocative efficiency.” *Id.*

¹⁶ Tracy C. Miller, *Scalping Isn’t Scamming*, U.S. NEWS & WORLD REP. (Oct. 4, 2016, 4:00 PM), <https://www.usnews.com/opinion/articles/2016-10-04/why-congress-shouldnt-curb-ticket-scalping-after-hamilton-prices-soar>. Reports estimate that 50 percent of tickets resold on the leading secondary market website sell for less than face value. U.S. GOV’T ACCT. OFF, *supra* note 8, at 12.

¹⁷ Leslie, *supra* note 77, at 296-98.

¹⁸ See Jacklyn, *What Other Bands Can Learn from Ed Sheeran*, STAGE RIGHT SECRETS (Jan. 10, 2015), <http://www.stagerightsecrets.com/what-other-bands-can-learn-from-ed-sheeran> (quoting Ed Sheeran as saying, “I didn’t want people to pay \$170 and get front row tickets and a meet and greet. I hate that shit. The moment you allow a kid with a rich father to have more things than a kid with a poor father, I think that’s just shit.”).

¹⁹ Erik Piepenburg, *Cheap Broadway Tickets Can Be a Matter of Luck, Timing and Apps*, N.Y. TIMES (Oct. 29, 2015), <https://www.nytimes.com/2015/10/30/theater/cheap-broadway-tickets-can-be-a-matter-of-luck-timing-and-apps.html>. Following *Rent*, which during its heyday would hold pre-show lotteries for \$20 front-row seats, *Hamilton* now holds pre-show lotteries, selling 21 front-row seats, each for a “Hamilton” (i.e. \$10). *Id.*

III. THE LEGAL LANDSCAPE

There are currently 34 states with resale laws,²⁰ but the event ticketing industry is not federally regulated.²¹ Many of these laws are antiquated—all are inadequate.

A number of states set resale price caps. Some allow for moderate price increases²² or limited service and handling fees²³ while others require the vendor's prior authorization.²⁴ In theory, price caps are supposed to protect consumers from exorbitant markups while preserving their ability to resell tickets they cannot use. The simplicity of the price cap is also its shortcoming. In a 2018 study of the event ticket market, the U.S. Government Accountability Office (GAO) found that price caps are largely disregarded, difficult to enforce, and risk forcing the resale market underground, thereby increasing ticket fraud and depriving consumers of the mainstream market's benefits including refund guarantees.²⁵

Eight states have implemented resale licensing requirements.²⁶ Licensing requirements regulate, rather than curtail the secondary market. Most requirements are reasonable and provide vital consumer protections.²⁷ However, in states that have had comprehensive licensing regimes on the books for some time (e.g. New York), the secondary market is still thriving.²⁸ Simply licensing scalpers does nothing to empower artists to deliver underpriced tickets to their fans at face value.

A number of states prohibit ticket resale within a certain distance of the venue grounds.²⁹ Others allow resale at the venue but prohibit resale during certain times, usually the day of the

²⁰ See *generally* SQUIRE PATTON BOGGS, SECONDARY TICKET MARKETPLACE: GUIDE TO US TICKET RESALE REGULATIONS (2018), <https://www.squirepattonboggs.com/~media/files/insights/publications/2018/10/2018-secondary-ticket-marketplace-guide-to-us-ticket-resale-regulations/2018usticketresalelawguidebrochure.pdf> (providing a comprehensive overview of current state and local resale laws).

²¹ U.S. GOV'T ACCT. OFF, *supra* note 8, at 5.

²² See e.g. S.C. CODE ANN. § 16-17-710(A) (2019) (allowing a resale price increase of \$1 above face value for tickets resold in South Carolina).

²³ See e.g. ARK. CODE ANN. § 5-63-201(a)(1)(A) (West 2019).

²⁴ See e.g. KY. REV. STAT. ANN. § 518.070 (West 2019).

²⁵ U.S. GOV'T ACCT. OFF, *supra* note 8, at 40-42.

²⁶ See SQUIRE PATTON BOGGS, *supra* note 20. Massachusetts is particularly stringent, making it unlawful to resell even a single ticket without a license—and giving away a ticket for *free* is considered a resale! MASS. GEN. LAWS ANN. ch. 140, § 185(A), (D) (West 2019).

²⁷ Such protections include requiring licensees to maintain a physical place of business, provide a toll-free number, and offer a standard refund policy. U.S. GOV'T ACCT. OFF, *supra* note 8, at 6.

²⁸ SCHNEIDERMAN, *supra* note 13, at 8, 25.

²⁹ See e.g. ARIZ. REV. STAT. ANN. § 13-3718 (2019) (prohibiting the resale of tickets in Arizona for a price in excess of face value within 200 feet of the venue's entrance or the entry to a contiguous parking area).

event.³⁰ These laws are antiquated in the age of the Internet. Though some brokers still resell tickets on the streets outside of venues, the substantial majority of the resale market has migrated to the web,³¹ thereby making temporal and proximity laws moot.

Quantity restrictions are typically imposed by the ticket vendor, not the legislature,³² but the federal Better Online Ticket Sales Act of 2016 (the BOTS Act) gives legal effect to vendor-imposed limits by making it illegal to circumvent website security measures that enforce purchase limits.³³ Many viewed the BOTS Act as a much-needed weapon in the war against scalpers.³⁴ Unfortunately, that optimism appears to have been premature. To date, no one has been prosecuted

³⁰ See e.g. DEL. CODE ANN. tit. 11, § 918 (West 2019) (prohibiting resale in excess of face value on the day of or the day preceding an event at specified Delaware venues).

³¹ Bhavé, *supra* note 5, at 2. There are no precise statistics on the number of tickets resold via the Internet versus on the street, but speed, safety and ease-of-transaction make the Internet a clearly superior option. See Will Caiger-Smith, *How New Scalping Technology is Keeping You Out of Concerts*, VICE: MOTHERBOARD (Jun. 9, 2016, 3:20 PM), https://www.vice.com/en_us/article/ae8j4z/ticket-scalping-new-technology (“You can still spot dogged profit-chasers loitering outside music venues, but in the digital age, street scalping is old-school. Thanks to the growth of online marketplaces . . . scalpers can cash in without leaving their living rooms.”).

³² Georgia, however, sets a statutory limit: each ticket broker, or affiliated group of brokers, shall not acquire and resell an amount of tickets in excess of 1 percent of the total tickets allocated for any event. GA. CODE ANN. § 43-4B-28(b)(2) (West 2019).

³³ 15 U.S.C. § 45(c) (2018).

³⁴ Ticketmaster called the law, “a critical step in raising awareness and regulating the unauthorized use of Bots.” Dan Rys, *President Obama Signs Anti-Scalping Bill into Law*, BILLBOARD (Dec. 15, 2016), <https://www.billboard.com/articles/business/7625257/president-obama-signs-bots-act-law>. *Hamilton* creator Lin-Manuel Miranda joined New York Senator Chuck Schumer to promote the BOTS Act in the hopes it would curb rampant scalping of *Hamilton* tickets. Press Release, U.S. Senator Charles E. Schumer, Standing with Broadway’s Lin-Manuel Miranda, Schumer Spotlights & Rallies for Critical Senate Bill that Finally Cracks Down on Hackers Who Use Bots to Steal Popular Broadway & Concert Tickets Before True Fans Have a Chance to Even Turn On Their Computer (Aug. 14, 2016), https://www.schumer.senate.gov/newsroom/press-releases/standing-with-broadways-lin-manuel-miranda-schumer-spotlights-and-rallies-for-critical-senate-bill-that-finally-cracks-down-on-hackers-who-use-bots-to-steal-popular-broadway_concert-tickets-before-true-fans-have-a-chance-to-even-turn-on-their-computer. Emphasizing the stakes at play, Miranda tweeted, “Chuck Schumer is John Connor. The bots are Skynet. I guess that makes me Sarah Connor, which is awesome.” Lin-Manuel Miranda (@Lin_Manuel), TWITTER (Aug. 15, 2016, 6:10 AM), https://twitter.com/lin_manuel/status/765173803504787456.

under the BOTS Act.³⁵ This is not due to a lack of bot activity nor the law’s deterrent effect.³⁶ BOTS Act sponsor Senator Jerry Moran says, “It’s going to require, in my mind, someone being made an example of.”³⁷ Nearly three years after becoming law, the industry continues to wait for that example.

The Better Oversight of Secondary Sales and Accountability in Concert Ticketing Act of 2019 (The BOSS Act) aims to “protect competition in the resale marketplace so that consumers have more than one expensive and overbearing source from which to shop for or resell their tickets.”³⁸ Additionally, the bill would require certain disclosures by primary and secondary ticket sellers, including the ticket’s face value and all associated fees.³⁹ While consumers will welcome these disclosures, this bill fails to provide a mechanism for artists to enforce the terms and prices of their tickets. Contrary to this bill’s proposal to increase secondary market competition, this paper argues the inverse: Congress should *restrict* the secondary market by requiring the initial sale and all resales to be self-contained within the vendor’s platform.⁴⁰

Because it has proven difficult to enforce anti-scalping laws on individuals, it seems logical to focus enforcement efforts on the secondary market websites themselves. However, section 230 of the Communications Decency Act (CDA) gives interactive computer service providers immunity for publishing information provided by third parties.⁴¹ Section 230 frees websites such as Facebook from the litany of legal claims they might face if they were to be held liable for what users post their site. In 2012, the North Carolina Court of Appeals in *Hill v. StubHub, Inc.* held that immunity extends to ticket resale websites.⁴²

IV. INDUSTRY-BASED SOLUTIONS

With current laws falling short, the music industry has implemented a number of approaches with mixed results. Artists have tried issuing nontransferable paperless tickets that require the

³⁵ Chris Chmura et al., *Bots at the Box Office Pushing Event Ticket Prices Higher*, NBC BAY AREA (May 1, 2019, 2:27 PM), <https://www.nbcbayarea.com/news/local/Bots-at-the-Box-Office-Pushing-Event-Ticket-Prices-Higher-509338731.html>.

³⁶ In its *2019 Bad Bot Report*, online security firm, Distil Networks, reported that “bad” bots still comprise 39.3 percent of all online box office web traffic. *2019 Bad Bot Report*, DISTIL NETWORKS 9, (2019). Bots are able to avoid detection and enforcement is difficult because most bot activity originates abroad. U.S. GOV’T ACCT. OFF, *supra* note 8, at 48.

³⁷ Chmura *supra* note 35.

³⁸ Press Release, Pascrell, Pallone, Blumenthal Reintroduce BOSS Act (Jun. 13, 2019), <https://pascrell.house.gov/news/documentsingle.aspx?DocumentID=3931>.

³⁹ See generally H.R. 3248.

⁴⁰ See *infra* Part V.

⁴¹ 47 U.S.C. § 230 (2018) (“No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.”).

⁴² *Hill v. StubHub, Inc.*, 219 N.C. App. 227, 249 (2012). The court held that StubHub could not be held liable for violating North Carolina’s anti-scalping laws because StubHub is a “neutral tool”; because it is the ticket broker and not StubHub who sets the ticket prices, StubHub cannot be held liable for the violative third-party content. *Id.* at 244-45.

ticketholder to present the buyer's credit card or other identification to enter the venue.⁴³ The GAO Report notes that nontransferable tickets do help to curb scalping.⁴⁴ It's somewhat surprising then that nontransferable tickets comprise only 0.1 percent of total sales.⁴⁵ This may be because transferable tickets offer consumers a valuable form of insurance—if a ticketholder cannot attend the event, they can likely get some, if not all of their money back by selling on the secondary market.⁴⁶ Scalpers have already found ways to curtail these restrictions by simply buying tickets with gift cards and then mailing the gift card to the eventual ticket purchaser.⁴⁷

Ticketmaster's Verified Fan program allows authenticated fans to register for a chance to receive a presale code that will grant them early access, and thereby an increased chance at scoring tickets.⁴⁸ The program seems to have curtailed some scalping. According to Ticketmaster's early reports, 95 percent of fans that bought their tickets through the service did not resell them.⁴⁹ Scalpers, however, are learning to adjust; presale codes are now available for purchase on websites like presalecodes.com, a website which offers everything from presale codes, to actual phone-verified Ticketmaster accounts.⁵⁰ Additionally, it turns out Verified Fans may be just as interested in turning a profit as scalpers.⁵¹ Verified Fan has made some progress but lacks a couple of features included in this paper's proposal including the ability for the artist to set resale restrictions (e.g. price caps) and share in a portion of the resale fees and/or price increase.⁵²

⁴³ Ticket vendors are legally able to set these restrictive terms because courts dating back to 1886 have held that a ticket to an entertainment event is a freely revocable license rather than personal property. *Purcell v. Daly*, 19 Abb. N. Cas. 301, 304 (1886) (holding that "[a] theatre ticket is simply a license to the party presenting the same to witness a performance to be given at a certain time, and being a license personal in its character can be revoked.").

⁴⁴ U.S. GOV'T ACCT. OFF, *supra* note 8, at 38 n. 75.

⁴⁵ Adam Vaccaro, *From Concert Goers to Big Business Concerns Inside the Fight Over Paperless Tickets*, BOSTON.COM (Jan. 10, 2015), <https://www.boston.com/news/technology/2015/01/10/from-concert-goers-to-big-business-concerns-inside-the-fight-over-paperless-tickets>.

⁴⁶ *See* U.S. GOV'T ACCT. OFF, *supra* note 8, at 39 (noting that consumers may be reluctant to purchase an expensive ticket they may be stuck holding should their plans change).

⁴⁷ *Id.* at 24.

⁴⁸ *Ticketmaster #VerifiedFan FAQ*, TICKETMASTER (Nov. 1, 2019), <https://blog.ticketmaster.com/verifiedfan-faq/>.

⁴⁹ Kaitlyn Tiffany, *How Ticketmaster's Verified Fan program toys with the passions of fandom*, THE VERGE (Feb. 7, 2018, 9:00 AM), <https://www.theverge.com/2018/2/7/16923616/ticketmaster-verified-fan-tumblr-reddit-taylor-swift-harry-styles>.

⁵⁰ *About Us*, PRESALECODES.COM, <https://www.presalecodes.com/about-us/> (last visited Dec. 31, 2019).

⁵¹ As the time of this writing, there were well over 1,000 Verified Fan tickets available on Ticketmaster's own secondary market for a July 2020 Taylor Swift concert in Inglewood, CA, including a pair of front-row seats listed for an eye-popping \$31,196.77 for the pair.

⁵² Depending on their deal with Ticketmaster, artists may be sharing in the resale ticket fees, but such confidential deal terms are not publicly available.

The industry is currently experimenting with slow ticketing and dynamic pricing models. “Slow ticketing” is as it sounds; rather than releasing all tickets to the public at once, vendors slowly release tickets in small batches to pre-registered fans.⁵³ This allows vendors to avoid the inevitable flood of bots that pound their servers at initial release.⁵⁴ “Dynamic pricing” is a tactic widely used in the airline and hotel industries that involves adjusting prices as supply and demand fluctuate.⁵⁵ From a sheer numbers perspective, the slow ticketing/dynamic pricing models are working.⁵⁶ Fans have not been welcoming however,⁵⁷ illustrating why artists have been reluctant to charge market prices. Whether an artist will turn off their fans by charging market rates is an artist-specific inquiry. For those that choose to price below market rates, these pricing models are of little help.

One of the most promising ticketing innovations currently in development is blockchain ticket technology. A blockchain is a decentralized network of computers that records transactions into an immutable ledger, providing complete transparency throughout the transaction process.⁵⁸ Though mostly known as the technological underpinning of cryptocurrencies such as Bitcoin, blockchain technology has broad application and could solve a host of ticketing issues. First, blockchain ticketing could make ticket fraud⁵⁹ nearly impossible because the purchaser’s identity is digitally affixed to the ticket and would be verified upon entry.⁶⁰ Ticket transfers would require

⁵³ See Dave Brooks, *Taylor Swift Has Concert Industry Embracing “Slow Ticketing” Model*, BILLBOARD (Dec. 14, 2017), <https://www.billboard.com/articles/business/8070644/taylor-swift-concert-industry-slow-ticketing-model-sales> (describing how Taylor Swift has used the Verified Fan program to implement a slow ticketing model).

⁵⁴ *Id.*

⁵⁵ *Id.*; *Pricing Secrets of Ticket Scalpers*, HARV. BUS. REV., <https://hbr.org/2011/07/pricing-secrets-of-ticket-scal> (last visited Dec. 31, 2019).

⁵⁶ There are estimates that Taylor Swift may have made an additional \$1-to-\$1.5 million in additional revenue per show by implementing these models in her *Reputation* tour. Brooks *supra* note 53.

⁵⁷ Seglins et al., *“I’m getting ripped off”: A look inside Ticketmaster’s price-hiking bag of tricks*, CAN. BROAD. CORP. (Sept. 18, 2018, 4:00 AM), <https://www.cbc.ca/news/business/ticketmaster-prices-scalpers-bruno-mars-1.4826914> (reporting on fans’ negative reactions to dynamic pricing).

⁵⁸ See Ameer Rosic, *What is Blockchain Technology? A Step-by-Step Guide for Beginners*, BLOCKGEEKS, <https://blockgeeks.com/guides/what-is-blockchain-technology/> (last updated Mar. 1, 2019) (providing a primer on blockchain technology).

⁵⁹ Ticket fraud continues to be a significant nuisance; about 12 percent of respondents to a recent poll reported being the victims of ticket fraud. Megan Leonhardt, *About 12 percent of people buying concert tickets get scammed*, CNBC: MAKE IT (Sept. 14, 2018, 8:45 AM), <https://www.cnbc.com/2018/09/13/about-12-percent-of-people-buying-concert-ticketsget-scammed-.html>.

⁶⁰ Jonathan Keane, *Blockchain Startups Take on Ticket Touting, But Will They Gain Traction?*, COINDESK (Jul. 30, 2017 10:30 AM), <https://www.coindesk.com/blockchain-startups-take-ticket-touting-will-gain-traction>. One’s identity could be uploaded and verified through a number of methods, including a credit card, facial or voice recognition, or through decentralized digital identity services. *Id.* See also Sarah Perez, *Ticketmaster puts an end to screenshots with new*

an identifiable purchaser who would likewise have their identity imprinted on the ticket's digital code.⁶¹ Second, blockchain technology could finally provide a meaningful check to ticket bots. Like slow ticketing, the blockchain delays the purchasing process, thereby preventing bots from instantaneously buying large quantities of tickets.⁶² Because one's identity is tied to the ticket and all transactions are transparent, bot activity would be readily identifiable, allowing vendors to block suspected bots.⁶³ Further, because tickets live as digital assets on the blockchain, there is no way for scalpers to resell tickets outside the closed system.⁶⁴ Third, the blockchain would afford ultimate control of each ticket from issue to venue entry via digital "smart contracts" that allow the artist to dictate the precise terms of resale.⁶⁵ Because the smart contract's terms are forever associated with the ticket, the terms cannot be breached, thus solving resale laws' enforceability problems.⁶⁶ Lastly, the blockchain will allow artists and other value creators to receive a portion of every resale as the transaction is commenced.⁶⁷

Industry leaders are already investing in blockchain ticketing. DJ duo, The Chainsmokers, bought into YellowHeart set to launch in 2020.⁶⁸ The Schubert Organization, Broadway's largest

digital ticket technology, TECHCRUNCH (May 16, 2019, 11:56 AM), <https://techcrunch.com/2019/05/16/ticketmaster-put-an-end-to-screenshots-with-new-digital-ticket-technology> (describing Ticketmaster's development of facial recognition tools); Dan Gisolfi et al., *Decentralized Identity Introduction*, IBM BLOCKCHAIN, <https://www.ibm.com/downloads/cas/OPEQYEL7> (last visited Dec. 31, 2019) (explaining decentralized identity).

⁶¹ Keane, *supra* note 60.

⁶² *Blockchain Could Beat the Bots, Says Tao Chief*, TICKETING BUSINESS NEWS (Jul. 11, 2016), <https://www.theticketingbusiness.com/2016/07/11/blockchain-could-beat-the-bots-says-tao-chief/>.

⁶³ Bryce Weiner, founder of blockchain ticketing company, the Tao Network, says that on the blockchain, "Everybody is going to see that you're a ticket scalper and we're going to build all these mathematical metrics in order to determine who is and who is not a ticket scalper and then address the problem from where it stands." *Id.*

⁶⁴ Keane, *supra* note 60.

⁶⁵ See Josh Baron & Stephen Glicken, *Blockchain Ticketing Today: One Company's Quest to Overcome Current Hurdles*, HYPEBOT <https://www.hypebot.com/hypebot/2019/01/blockchain-ticketing-today-one-companys-quest-to-overcome-current-hurdles-in-blockchain-ticketing.html> (last visited Dec. 31, 2019) (describing smart contracts as "a set of rules created at the initial transaction that is forever associated with the asset" (e.g. a ticket)).

⁶⁶ The terms an artist could impose are virtually limitless. For instance, artists could include strict resale price caps, conditions on when and where resale can occur, and even specific rules based on the type of ticket (e.g. balcony seats may be resold for 200 percent of face value, but tickets in the first 5 rows cannot be resold above face value).

⁶⁷ Keane, *supra* note 60.

⁶⁸ Murray Stassen, *The Chainsmokers Back Blockchain Ticketing Platform Yellowheart*, MUSIC BUS. WORLDWIDE (Oct. 21, 2019), <https://www.musicbusinessworldwide.com/the-chainsmokers-back-blockchain-ticketing-platform-yellowheart>.

theater operator, is partnering with True Tickets, which runs on IBM's blockchain platform.⁶⁹ Ticketmaster entered the space in 2018 by acquiring UPGRADED.⁷⁰ While actual test cases have been limited, GUTS, a Netherlands-based company, distributed 50,000 tickets over 36 shows in 2019, though distribution occurred only partially on the blockchain.⁷¹ In November 2019, German airline Hahn Air issued three tickets as a test case using the blockchain.⁷²

Blockchain ticketing is still in its nascent stages and there are issues left to address before widespread adoption is possible. The first problem is scalability; blockchain transactions are currently much too slow. Major ticket vendors like Ticketmaster reportedly process billions of transactions per day,⁷³ but currently, the blockchain heavyweight, Ethereum, can only handle about 15 transactions per second.⁷⁴ Second, once smart contracts are written onto the blockchain, the terms are not readily changeable.⁷⁵ This means that dynamic pricing models could be difficult to employ. A third issue is the questionable enforceability of smart contracts. Only Arizona and Nevada have amended their laws to specifically incorporate smart contracts into their state versions of the Uniform Electronic Transactions Act, which gives electronic records and signatures the same effect as written documents.⁷⁶ These lingering issues have deterred companies like Project

⁶⁹ Christopher Zara, *It's not "Bitcoin the Musical," but blockchain technology is coming to Broadway*, FAST CO. (Oct. 16, 2019), <https://www.fastcompany.com/90418176/its-not-bitcoin-the-musical-but-blockchain-technology-is-coming-to-broadway>.

⁷⁰ *Ticketmaster Acquires Blockchain Ticketing Solution UPGRADED*, PR NEWswire (Oct. 18, 2018, 10:00 AM), <https://www.prnewswire.com/news-releases/ticketmaster-acquires-blockchain-ticketing-solution-upgraded-300732863.html>.

⁷¹ The company stored some key data in its centralized database, stopping short of full blockchain ticketing. Nicky Morris, *Blockchain ticket protocol sells 50k tickets in 3.5 hours*, LEDGER INSIGHTS <https://www.ledgerinsights.com/blockchain-ticket-protocol-sells-50k-tickets/> (last visited Dec. 31, 2018).

⁷² Gertrude Chavez-Dreyfuss, *German airline Hahn Air issues first blockchain-based tickets*, REUTERS (Nov. 18, 2019, 6:29 AM), <https://uk.reuters.com/article/us-blockchain-airlines-hahn-air/german-airline-hahn-air-issues-first-blockchain-based-tickets-idUKKBN1XS1TC>.

⁷³ Orate, *Ticketmaster Traces 100 Million Transactions per Day with Jaeger*, MEDIUM (May 6, 2019), <https://medium.com/jaegertracing/ticketmaster-traces-100-million-transactions-per-day-with-jaeger-38ec6cf599f0>.

⁷⁴ David Schatsky, Aniket Dongre & Amanpreet Arora, *Blockchain and the five vectors of progress*, DELOITTE INSIGHTS (Sept. 28, 2018), <https://www2.deloitte.com/us/en/insights/focus/signals-for-strategists/value-of-blockchain-applications-interopability.html>.

⁷⁵ Baron, *supra* note 65.

⁷⁶ ARIZ. REV. STAT. ANN. § 44-7061 (2019); NEV. REV. STAT. ANN. § 719.090 (West 2019). See generally Alex Lipton et al., *An Introduction to Smart Contracts and Their Potential and Inherent Limitations*, HARV. L. SCH. F. ON CORP. & GOVERNANCE FIN. REG. (May 26, 2018), <https://corpgov.law.harvard.edu/2018/05/26/an-introduction-to-smart-contracts-and-their-potential-and-inherent-limitations/#14b> (providing a primer on smart contracts and associated legal and practical considerations).

Admission from going the full-fledged blockchain route, opting instead to solve ticketing issues through a traditional centralized database.⁷⁷

V. PROPOSAL

As described above, state laws are ineffectual and outdated, while industry solutions have had only limited success. This paper proposes that while the blockchain will eventually be the best solution to control the ticket market, federal law, including provisions that mimic the blockchain, should be enacted in the interim.⁷⁸

First, Congress should forbid states from setting restrictive resale laws including price caps. Because artists have idiosyncratic reasons for underpricing tickets, they should have the sole authority to set the terms of their resale market.

Second, Congress should require that tickets be freely transferable at all times, and vendors should be prohibited from setting resale price floors, as well as resale price caps below face value. Transferability is an important ticketholder insurance policy that should be protected.

Lastly, and most importantly, the industry needs a closed ticketing system. In the long term, this can be accomplished via the blockchain or a part-blockchain, part-centralized hybrid ticketing model. As described above, blockchain technology will end ticket fraud, increase consumer confidence, and will provide valuable consumer data once a digital ticket is tied to the concertgoer's identity. Artists will finally be able to set the terms of their ticket market and ensure that underpriced tickets remain with the fan that walks through the turnstile. If the artist would like to allow resale, they can easily share in the downstream revenue.

As blockchain technology continues to develop, Congress can pass legislation that mimics the blockchain. First, Congress can require vendors to employ a closed ticketing system in which the initial sale and all resales occur. Ticketmaster already does this to some extent through Verified Fan. Second, like the blockchain's public ledger, Congress should require vendors to keep a record of all ticket transfers. Again, this likely already occurs with Verified Fan and is currently required of all brokers operating in New York State.⁷⁹ This ledger could be periodically audited by government enforcement agencies. Lastly, to mimic the blockchain's unbreachable smart contracts, Congress should both require that vendors enforce the artist's resale parameters and make it illegal for consumers to circumvent these parameters to violate the artist's resale terms.

These proposals will bring significant challenges. First, these proposals will impose significant compliance costs upon vendors. However, these costs may be offset by the increased fees they will collect once all resales are forced to occur within their platform. To ensure smaller vendors are not overly burdened, there could be an exception for vendors issuing less than a certain number of tickets to a single event (e.g. 1,000). Second, this closed ticketing system will

⁷⁷ Baron, *supra* note 65.

⁷⁸ Federally regulating the ticket market should not run afoul of the Constitution's Commerce Clause. Even under the restrictive interpretation in *U.S. v. Lopez*, the multi-billion-dollar ticket industry clearly has a "substantial effect" on interstate commerce. See *generally* *U.S. v. Lopez*, 514 U.S. 549 (1995).

⁷⁹ N.Y. ARTS & CULT. AFF. § 25.25 (McKinney 2019) ("Every licensee shall at all times keep full and accurate sets of records showing the prices at which all tickets have been bought and sold by such licensee and the names and addresses of the person, firm or corporation from whom they were bought.").

likely receive vigorous pushback from those companies solely operating in the resale market. But with blockchain ticketing increasingly becoming a reality, these companies would be wise to enter the primary market through merger or acquisition. Third, as with current resale laws, enforceability will continue to be a significant impediment. Congress should authorize the FTC to enforce these laws, but as seen with the BOTS Act, enforcement may continue to be an issue, further illustrating the need for blockchain ticketing. Fourth, by requiring vendors to build resale parameters into its platform, they may lose their CDA section 230 “neutral tool” immunity. For example, were a site to erroneously set the parameters and enable a seller to breach the artist’s resale terms, a court could find the vendor “materially contributed” to the user’s unlawful conduct and face secondary liability.⁸⁰ Congress could protect vendors by imposing liability only for knowing or reckless violations.

VI. CONCLUSION

The tension between artists’ pricing strategies and crude market forces are what enable ticket scalpers to capture billions of dollars while adding little value to the concert experience. The explosion of ticket bots has supercharged scalping and left state and federal government stymied by how to control activity that occurs across borders at lightning speed. The music industry has responded with some success by implementing new pricing and distribution strategies, but as of yet, scalping is still a major problem and artists have little control over the secondary market.

Blockchain ticketing offers the best chance to achieve the dual goals of consumer protection and artist control. In the interim, Congress should act by requiring vendors to maintain a closed ticketing system with enforceable resale parameters as dictated by the artist. With these solutions, artists will finally be able to bend the secondary market to their will and recapture billions in lost revenue.

⁸⁰ In *Fair Housing Council v. Roommates.com, LLC*, the court held that an Internet service provider loses its section 230 immunity if it “materially contributes” to the publication of unlawful content. *Fair Hous. Council v. Roommates.com, LLC*, 521 F.3d 1157, 1168 (9th Cir. 2008) (“[A] website helps to develop unlawful content, and thus falls within the exception to section 230, if it contributes materially to the alleged illegality of the conduct.”). In that case, the Ninth Circuit held that by posing discriminatory questions to its users, the Internet service provider materially contributed to users’ unlawful discriminatory responses, thus removing the website’s immunity. *Id.* at 1165.