

Equilibrium Ticket Pricing in the U.S. Concert Industry

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Abstract

The concert ticket industry has experienced a huge boom growing from a \$1.7 billion (U.S.) industry in 1990 to a \$7.3 billion (U.S.) industry in 2017. In 2016, over 40 million concert tickets were sold in the U.S.; more people are attending concerts than ever before. Along with this unprecedented growth, the average concert ticket price has risen from \$25.00 per ticket (1996) to \$75.00 (2016). Despite the rising cost of concert tickets over the past two decades, economic theories suggest concert tickets remain below the equilibrium price. Offering tickets below demand price opens the door for the secondary ticket market to monetize ticket sales by establishing a new equilibrium price point.

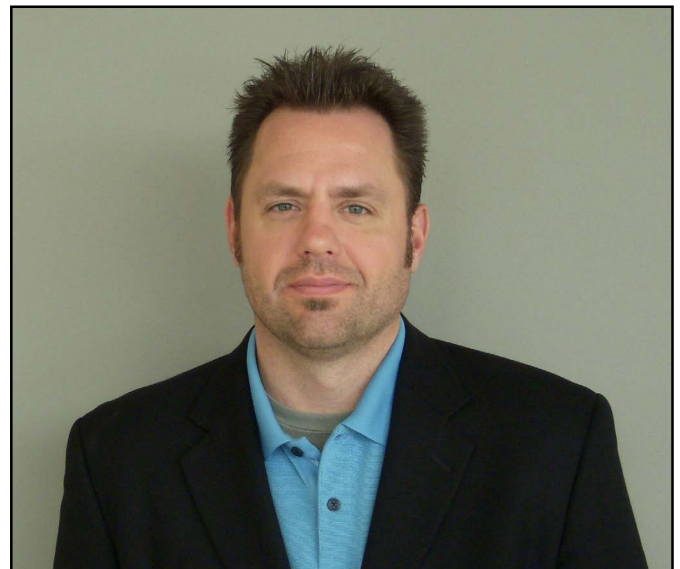
This paper presentation intends to examine factors impacting the determination of equilibrium ticket pricing in the US concert industry. It will explore trends in ticket pricing, the numerous factors impacting ticket pricing, aggregate demand and supply's effect on equilibrium ticket pricing, the role of the secondary ticket market in establishing the equilibrium price, and proposed solutions for the primary ticket marketplace to compete with secondary market ticket sales.

Keywords: concert promotion, concert ticket pricing, dynamic pricing, touring, secondary tickets, scalping

Editor's note (April 2019): Terry Tompkins continued to pursue research in equilibrium ticket pricing and in April 2019 published the article "An analysis of ticket pricing in the primary and secondary concert marketplace" in the [International Journal of Music Business Research](#).

Terry Tompkins has been a professional and professor in the music industry for the past twenty-five years. He began his career as an artist manager and worked as a talent buyer, journalist, record label president, festival organizer, A&R Rep, and Professor of Music Industry. Tompkins is currently Program Director and Assistant Professor of Music Industry at Hofstra University in Long Island, New

York. Recently, Tompkins held positions as Senior Director of Artist Relations at PledgeMusic, a leading music technology direct-to-fan platform and Program Director/Instructor of Music Business at Bowling Green State University. Tompkins spent seven years at Columbia Records working in A&R where he discovered the Grammy Award winning multi-platinum recording artist John Legend. His experience in the touring industry includes talent buying for a prestigious rock club as well as a Showcase Director for the Philadelphia Music Conference, one of the largest music conferences in the United States at the time. Early in his career Tompkins established Big Fish Artist Management and Consulting, managing international artists signed to major and independent labels. Tompkins career as an educator also includes serving as Professor of Music Industry at Millersville University, Saint Joseph's University, and Drexel University where he developed the curriculum teaching twelve courses and overseeing MAD Dragon Records, a nationally recognized award-winning student-run record label. Tompkins has been published in the Journal of the Music and Entertainment Industry Educators Association and the Journal of Instructional Pedagogies. Tompkins earned a BA from Temple University and MBA at St. Joseph's University.



Equilibrium Ticket Pricing: US Concert Industry

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Primary Revenue Streams in the Music Industry

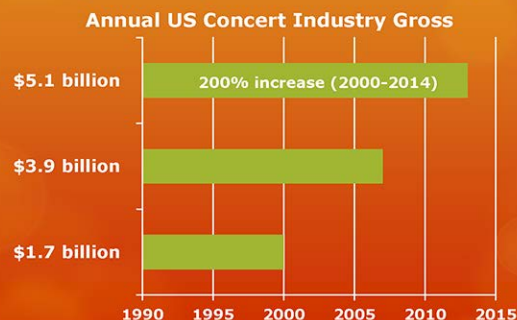
- Music Publishing Revenue
- Recorded Music Revenue
- Live Music/Concert Revenue



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U.S. Live Concert Industry - Trends

- Record high \$8 billion in 2017 (Pollstar)
- Between (2000-2014) 200% increase revenue, \$1.7-\$5.1 billion
- From (2014-2017) 56% increase revenue, \$5.1-\$8 billion



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U.S. Concert Industry Growth

- More Acts Touring
- Growth of Festivals
- Rising Cost of Tickets



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More Artists Touring

- Technology: no barrier to entry
 - Digital recording platforms (GarageBand, Pro Tools)
 - More releases (Tunecore, CD Baby, Distro Kid)
 - Self-Marketing (Social, Streaming)
 - Self-booking (Indie on the Move, Sofar Sounds)
- 60% increase tickets sold 2000-2015 (US)

North America Concert Ticket Sales Statistics	Total Tickets Sold	Average Ticket Price	Total Ticket Sales
2015	59,780,000	\$78.77	\$6,900,000,000
2014	51,680,000	\$82.07	\$6,200,000,000
2013	63,340,000	\$78.99	\$5,100,000,000
2012	51,330,000	\$79.03	\$4,700,000,000
2011	54,170,000	\$78.33	\$4,350,000,000
2000	37,100,000	\$40.74	\$1,700,000,000

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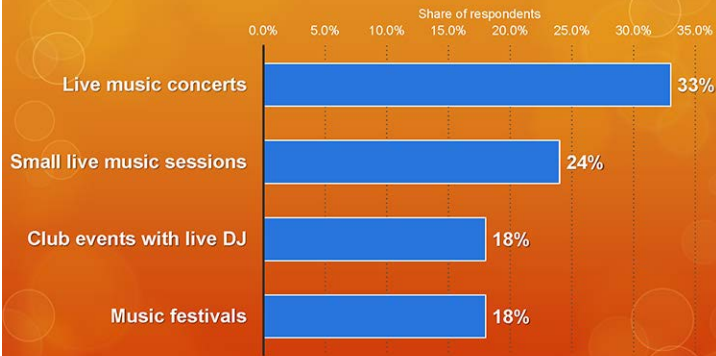
Growth of U.S. Festivals

- 800+ music festival/events produced in US (2017)
- 32 million people attend music festival each year in the US
- About 1/3rd (10.2 million) attend 2 or more festivals annually
- Travel 900+ miles on average



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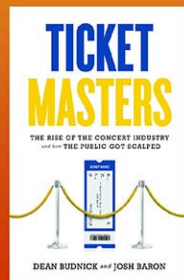
Live music attendance U.S. (2017)



Source: Nielsen Survey

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Rising Cost of Concert Tickets



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Rising Cost of Concert Tickets

- Economist Alan Krueger "Rockonomics" (2005)
 - Studied rising cost concert tickets
 - Between 1975 and 1995 concert ticket pricing only increased 2% over the rate of inflation
 - Between 1996 and 2005 concert tickets doubled
 - Findings (2005) - concert ticket prices rose 45% higher than the annual Consumer Price Index



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Rising Cost of Concert Tickets

- US average (2005-2016) concert ticket prices rose \$42.00 to \$76.55
- 82% increase



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Concert Ticket Pricing Factors

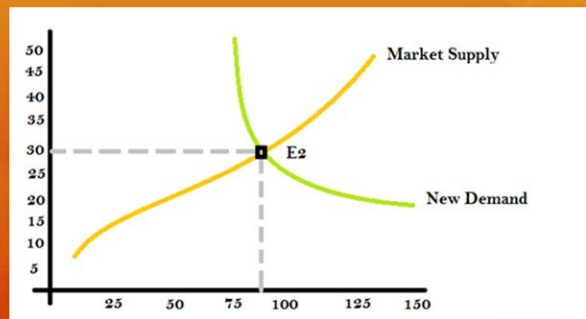
- Factors determine price of concert ticket:
 - Artist tour history
 - Airplay, sales/streaming, social
 - Artist Fees
 - Cost of production
 - Size, type of venue (seated vs. standing)



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Market Price Equilibrium

- Price where quantity of goods supplied is equal to quantity of goods demanded
- Demand and supply curves intersect



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Ticket Pricing Strategies

- Concert tickets set below EQ price (demand is greater than supply)
 1. Accommodate sale of complementary goods (Parking, concessions & merchandise)
 2. Maintain popularity/protect future income
 3. Demand uncertainty



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Complementary Goods

- Tickets set below EQ price (Promoter)
 - Former Live Nation VP Marketing Jim Steen
 - "85 to 90 percent of the ticket price goes towards artist fees"
 - Michael Rapino, CEO Live Nation
 - "Live Nation earns about \$4 out of every \$100 ticket on the ticket price"
 - "I lose \$80 million at the door every year"
 - "Every time a consumer walks in the door I earn \$12-\$14 on the ancillary business" (parking, merch, concessions)
- Lower ticket price = increased demand/sellout
- Maximize complementary/ancillary revenues

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Artist Future Income

- Tickets set below EQ price (Artist)
- Artists/Agents set prices below the profit maximizing level
 - Artist maximize profits over time
 - Make up for short term losses with future revenue



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Garth Brooks 2017 Tour

- Garth Brooks (2017 US Tour)
 - \$101 million/73 shows
 - Ticket pricing
 - Low ticket price (\$60)
 - All tickets same price
 - Access
 - No pre-sales
 - Paperless tickets
 - 8 ticket limit



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Demand Uncertainty

- Tickets set below EQ price
 - "Aggregate demand" uncertainty - weather for outdoor event
 - "Individual demand" uncertainty - consumers not able to commit advance date



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Ticket Pricing Effects

- Disequilibrium pricing creates excess demand, leads to price elasticity & scalping
- Opportunity for secondary market/reseller
- Estimated 1/3rd of all popular concert tickets are purchased on the secondary ticket market
- Secondary ticket market worth - \$4.5 billion (2016)
- Average markup "40% over face value"



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Billy Joel – reseller market

"The secondary market ticket brokers drive prices up"

"ripping me off because I'm not getting the money"

"and they're ripping off the customer because the customer wants the ticket and they know that the market will bear a certain price"

- Billy Joel

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Former Ticketmaster CEO Nathan Hubbard



"The resale market exists because ticket pricing is not perfectly efficient; supply and demand change over time"

(Ticketmaster.com blog, 2011)

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Secondary Marketplace & StubHub.com



- StubHub.com first major online secondary ticket agent sell tickets exclusively on-line as a ticket reseller (2000)
- Owned by eBay
- World's largest secondary ticket marketplace
- Sports, Concerts, Theater, Entertainment Events
- StubHub - 20 million unique visitors a month
- 10 million live events per month

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Growth of Secondary Marketplace

- Ticket Limited Supply
 - Bots – obtain tickets
 - Premium seats - limited avail/sellout
 - Consumers willing pay higher price for access to best seats
- Reliable Source
 - Consumers willing purchase higher price tickets from reliable source
 - StubHub - FanProtect

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Proposed Solutions: Primary Marketplace

- Legislation
- Paperless Ticketing
- Dynamic Pricing



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Legislation



- Federal law does not prohibit resale of concert tickets
- Anti-scalping laws vary state to state
 - Massachusetts' ticket resale law allows a maximum ticket markup of only \$2
 - Pennsylvania resellers maximum markup price of 25%
- State laws - benefit from ticket resale
- Altered ticket legislation to improve the economic wealth of the state

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Legislation

Ireland Wants to Outlaw Scalping and the Resale of Tickets Above Face Value

Marsha Silva March 7, 2018 2

In a survey last year, 9 out of 10 people in Ireland want profiteering from the resale of tickets to be banned. About 86 percent of respondents said they backed government action to [stop above-cost price selling of tickets for concerts or sporting events](#).

Ireland's 'Prohibition of Above-Cost Ticket Touting Bill' is going to make fans happy.

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Paperless Ticketing

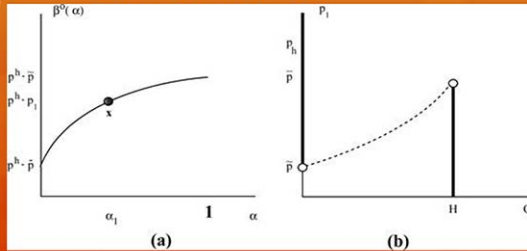


- Technology tool to ensure individual attending is same person who purchased the ticket
- Personal seat reservation secured electronically
- Ticket purchaser required to show I.D.
- Combats: Scalping, Counterfeiting, Lost/Stolen
- Artists: Bruce, Miley, Metallica, Bieber
- Sports: NCAA Final Four, Houston Rockets
- Drawbacks:
 - Credit card tied to buyer (purchaser not attendee)
 - Not transferrable (cant attend)

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Paperless Ticketing

- Karp and Perloff study (2005) determine effect of removing the secondary ticket marketplace
- Efficiency is reached in a market with scalpers
- "Free market" economic theory - price determined by open market



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Dynamic Pricing



- Time-based pricing
- Form of price discrimination
 - charging different prices to different consumers for similar goods
 - separate demand curves & different prices charged to each group
- "Price discovery"
 - buyer and seller identify highest amount consumer will pay
- Increase profit by capturing consumer surplus
- Secondary market thrived under this premise

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Dynamic Pricing



- Present in airline industry for decades
 - R/T ticket from NY to LA \$300-\$5000
 - First class traveler
 - Economy class traveler
- Capture the entire consumer surplus
- Separate demand curve and price for each group
- Hotel and Rental Car Industries
- Technology/Internet (On-line advertising)
- Possible for primary market to compete with secondary market

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Dynamic Ticket Pricing

Michael Janes, Former CMO, StubHub

"Primary ticket pricing is done by gut...makes sense for these guys to use some science"

Data/Analytics - Zach Cross, VP Revenue Analytics

"Understanding customer buying patterns allows companies to develop price points that meet the needs of price-sensitive customers"

"the key is making sure you do not displace the high paying demand"

75% of revenue from 25% of seats (VIP packages + Premium Seats)

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Dynamic Ticket Pricing

- Key: Demand Forecasting
 - Variables: genre, venue, event, section, row, customer segment
 - Make optimal inventory allocation decisions
- "The idea is for one person wanting a ticket at every sold out show" Bill Zysblat, RZO Productions

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Dynamic Pricing - Benefits

- Significantly improve ticket sale volume for events where interest is low
- Reduce the number of tickets resold on the secondary market
- Ticketmaster Platinum Service



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Dynamic Pricing

"Dynamic pricing puts the fan on an even playing field with the broker where THE MARKET MORE THAN GREED DETERMINES THE PRICE OF A TICKET"



- Randy Phillips, former CEO AEG

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Conclusion

- Rising ticket costs US and WW last 15 years
- Tickets priced below equilibrium price (Primary)
- Reasons: complementary goods, artist future income and demand uncertainty
- Secondary ticket market - opportunistic
- Primary Market Solutions:
 - Legislation, Paperless Ticketing, Dynamic Pricing
- Dynamic Pricing
 - Assist primary market in establishing equilibrium based ticket price
 - Provides opportunity to sell tickets at variable prices based on aggregate demand
 - Lessens impact of tickets sold on the secondary market
 - Promoter and Artist optimal profit

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