# How to Fix the Market for Event Tickets

Eric Budish

Professor of Economics

University of Chicago, Booth School of Business

First scalped ticket: Sept 17, 1986 (Mets clinch)

FTC Workshop "That's the Ticket" on Consumer Protection Issues in the Ticket Market



#### **Charles Dickens, Nov 1867**

Mr. Dickens in Boston--The Eages Demand for Tickets.

New York Times (1857-1922); Nov 20, 1867;

ProQuest Historical Newspapers: The New York Times (1851-2007)

pg. 1

## Mr. Dickens in Boston-The Eages Demand for Tickets.

From the Boston Journal, Nov. 19.

#### **Boston, November 1867**

- "... But the crowd out in the cold was a most patient, orderly and gentlemanly crowd, and seemed determined to be jolly and good-natured under any circumstances."
- "Jokes were cracked, some very good and some very poor; quotations from Dickens were made, some apt and others forced..."
- "Everything in the sale of tickets within the store seemed to be conducted with entire fairness. The limit was set at forty-eight tickets to one person—twelve course tickets—so as to prevent, as much as possible, ticket speculating."
- "But this was not entirely avoided. Speculators were on the streets and in the hotels selling tickets readily for \$10 and \$15 each for the opening night, and a few as high as \$20 each. Tickets for the remaining three nights were also sold by speculators at high prices. At about 7:30 o'clock last evening every good seat and nearly every poor seat in the hall were sold; indeed, the only seats that could be bought were those on benches in very unpleasant places."

But the crowd out in the cold was a most patient, orderly and gentlemanly crowd, and seemed determined to be joily and good-natured under any circumstances. And it was situated in a place where iollity was a virtue-wherein Mark Tapley even might find it a pleasant task to be oily. The wind swept around the corner of Hamilton-place incessantly and remoraelessly, and worked its way through the thickest coats and the warmest shawls to the very vitals of those they attempted to comfort and protect. But there was no complaint; jokes were cracked, some very good and some very poor; quotations from DICKENS were made, some apt and others forced; and sustches of songs were sung, the most popular of which was "We Won't go Home till Morning"which at one time it seemed likely that some would not. And the crowd was gallant, too, as the follow-

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desired in very unfreezent town in the morning and



#### Charles Dickens, Dec 1867

Mr. Dickens' Readings-Sale of Tickets for the Second Course. New York Times (1857-1922); Dec 12, 1867;

ProQuest Historical Newspapers: The New York Times (1851-2007)

#### Mr. Dickens' Readings-Sale of Tickets for the Second Course.

Three weeks later, in New York City ...

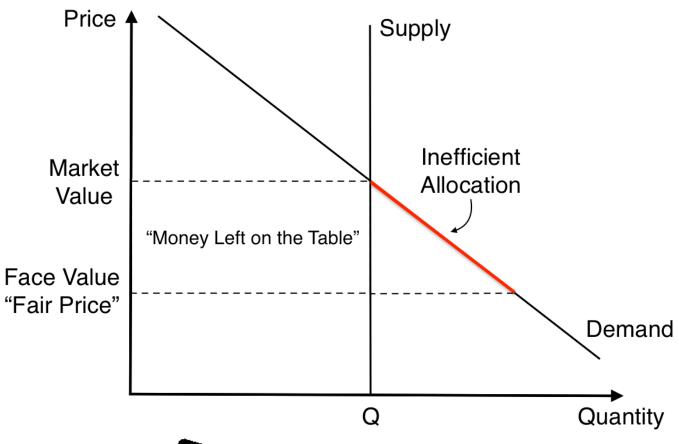
- "... the widespread notoriety of the sale ... had the effect of gathering an immense concourse of persons, long before the hour appointed. At 8 o'clock, Tuesday evening, a little newsboy took up his station next the main door ... Gradually this number was augmented until at day-break over 150 persons had gathered"
- "A large proportion of those standing near the head of the line were ticket speculators, but scattered through the single file were many laboring men and several little boys, who only came to be bought off. The little fellow who led the force was very fortunate in selling his place to a Southern gentleman, it is said, for **\$30 in gold.** There were many such instances—indeed it was not uncommon for anxious individuals to give from \$10 to \$30 for the privilege of supplanting another."
- "A detachment of Police officers ... was present to preserve order."
- "...the unsuccessful ones who brought up the rear, retired with expressions of disgust more forcible than elegant."

At 9 o'clock yesterday morning the box office at Steinway Hall was thrown open for the sale of ickets for the second course of readings in this City by Mr. Charles Dickens. At the first sale, about twelve days ago, the attendance of purchasers was limited, because the public generally were not fully apprized of it, but the widespread notoriety of the sale of yesterday, through the columns of the newspapers, several days before, had the effect of gathering an immense concourse of persons, long before the hour appointed. At 8 o'clock, Tuesday evening, a little newsboy took up his staion next the main door leading to the vestibule of the Hall. Shortly before midnight a party of seven came upon the scene and began the tedious waiting for the morning hours. Gradually this number was augmented until at day-break over 150 persons had gathered, and as the hour announced for opening the doors approached the line had stretched its length from Steinway Hall east to Irving-place, thence to Fifteenth-street, thence to Fourth-avenue, thence to and through Fourteenth-street again, until a score of persons only were needed to effect the union of the two extremes.

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### **Economics of Underpricing, Without Resale**

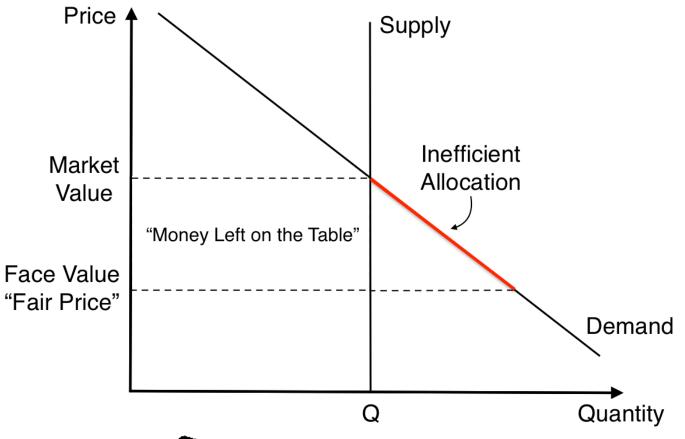


- Issue 1: Inefficient allocation
- Issue 2: Seller leaves "money on the table"
- Gary Becker, 1991:

   "along with many others,
   I have continued to be puzzled by such pricing behavior"



### **Economics of Underpricing, Without Resale**



- But many economists, including Becker, found reasonable explanations for underpricing
  - Events are a social good
  - Public image, want to be perceived as "fair"
  - "Best" fans might not be those able to pay the most
  - Careers are long (hopefully)
- Underpricing as in the long-run interests of the artist/team, not some big economic blunder



## Resale Technology, Then and Now

- Dickens Era
  - Primary market: lines, queues
  - Secondary market: resellers mainly outside the venue, at hotels, etc.
- As recently as 1990s: similar to Dickens Era
  - Spitzer AG report. "Diggers", "Scalpers", "Ice"
- Economics of Pre-Internet Ticket Resale
  - Localized
  - Few economies of scale
    - One person = one spot in line
    - One person = one tout outside the venue
    - (Exception: corrupt box offices.)
  - A bit shady ...

OFFICE OF NEW YORK STATE ATTORNEY GENERAL ELIOT SPITZER



"WHY CAN'T I GET TICKETS?"

REPORT ON TICKET DISTRIBUTION PRACTICES

BUREAU OF INVESTOR PROTECTION AND SECURITIES

MAY 27, 1999



## Resale Technology, Then and Now

#### **Economics of Internet-Era Ticket Resale**

- No longer localized.
- Massive economies of scale.
- Scale in the Primary market:
  - A single broker can purchase underpriced tickets across the country
  - Bots to automate! Win "race to click". (Analogy: high-frequency trading)
  - Low-wage overseas workers to outwit captchas, etc.
- Scale in the Secondary market:
  - A single broker can resell across the country
  - A single website can make markets for events across the country
- Much less friction.
- Also less shady.
  - Ordinary customers can use eBay, StubHub, etc.
  - "I paid my way through college"





 It's easy to see why an artist or sports team might wish to charge a true fan a low price.

- It's really hard to tell a story where artists or teams want to charge brokers a low price, who then charge the fans a high price on StubHub, etc.
- It just makes no sense.



#### **Hannah Montana**

The Internet Broke the Old Equilibrium

BUSINESS DAY | DIGITAL DOMAIN

Hannah Montana Tickets on Sale! Oops, They're Gone

By RANDALL STROSS DEC. 16, 2007

HANNAH MONTANA has made 2007 a very bright year for various business interests, but especially for StubHub, the online ticket exchange site.

Though the year is not yet complete, StubHub announced on Dec. 5 that its concert ticket sales had already passed \$100 million, a record for this seven-year-old company now owned by eBay. The standout performer has been Hannah Montana, the stage persona of the 15-year-old singer-actress Miley Cyrus, whose "Best of Both Worlds Tour" has brought in \$10 million of StubHub's sales this year, the most for a single act in the company's history.

It is rather mystifying how ticket brokers, who are well represented among sellers on StubHub and other online ticket exchanges, have been so successful in snagging Hannah Montana tickets in plentiful quantities.

Ticket sales for big-name concerts now follow a distressingly consistent pattern: At 10 a.m. on a Saturday, tickets go on sale, and by 10:05 a.m., all tickets are sold. Yet by 10:05, StubHub and other ticket exchanges already have a plenitude of tickets listed for the sold-out event — only now, they cost much more.



Stars

Screen

Binge

updated 8:41 p.m. EDT, Fri October 12, 2007

## **Brokers snatch joy from Hannah Montana fans**



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ENTERTAINMENT NEW

OCTOBER 17, 2007 / 7:27 PM / 12 YEARS AGO

**Ticket Scalpers Should Be Shot** 

Parents go to extremes for Hannah Montana tickets

Entertainment

"Hannah Montana" fans steaming over ticket scalpers

anuary 13, 2015

# **Scalpers Rake In Dough as 'Hannah Montana' Miley Cyrus' Tour Sells Out**

IDENTITY By Mitchell Sunderland Jun 13 2017, 10:37ar

Happy Ten-Year Anniversary of Dads Paying \$3,000 for Hannah Montana Tickets



#### **Ed Sheeran**

#### The Internet Broke the Old Equilibrium

Ed Sheeran tickets SOLD OUT in under five minutes



Photo Credit: erintheredmc. Creative Commons license



Aa 📅

## Ed Sheeran is successfully battling ticket resellers

Published: Mar 7, 2018 3:49 p.m. ET



The U.K. just banned four ticket resellers from 'misleading' consumers about ticket prices

# Ed Sheeran's Management Admits to Selling Directly to Resellers

INDUSTRY MUSIC SCALPING TOP STORY ① May 30, 2018 A TicketNews



#### **The Grateful Dead**

○ SHOWS & PODCASTS

#### The Internet Broke the Old Equilibrium



A SIGN IN

NPR SHOP

**V** DONATE

KNOCKED DEAD

# Tickets for the Final Grateful Dead Shows Are Going for \$114,000

Three-day passes for the Chicago run of final shows are going for exorbitant sums on StubHub.



mes Joiner Updated 07.12.17 3:09PM ET / Published 03.02.15 9:12AM ET







MUSIC NEWS

Sold Out Grateful Dead Chicago Concerts Attract High-End Scalpers

+ PLAYLIST

May 12, 2015 · 5:09 AM ET Heard on Morning Edition

EMBED

TRANSCRIPT

Some sellers are offering three-day packages for the Grateful Dead concerts for more than \$100,000. Steve Inskeep talks to drummer Bill Kreutzmann, for his thoughts on the six-figure tickets.



Photo Credit: Shelby Bell, Creative Commons License



## **Bruce Springsteen**

The Internet Broke the Old Equilibrium

Springsteen Sets New Broadway Record in Resale Market 08.30.17

Bruce Springsteen on Broadway tickets are already going for thousands, despite Ticketmaster's anti-scalping tech

BRUCE SPRINGSTEEN ON BROADWAY | NOV. 27, 2017

Springsteen to Extend Broadway Run, Giving You More Chances to Miss Out on Tickets

By Ethan Sapienza



Photo Credit: Raph PH, Creative Common License



#### Hamilton

The Internet Broke the Old Equilibrium

**HOME > DIGITAL > NEWS** 

#### Ticketmaster Says Bot Army Bought 30,000 'Hamilton' Tickets

Opinion

**OP-ED CONTRIBUTOR** 

## Stop the Bots From Killing Broadway

By Lin-Manuel Miranda

June 7, 2016



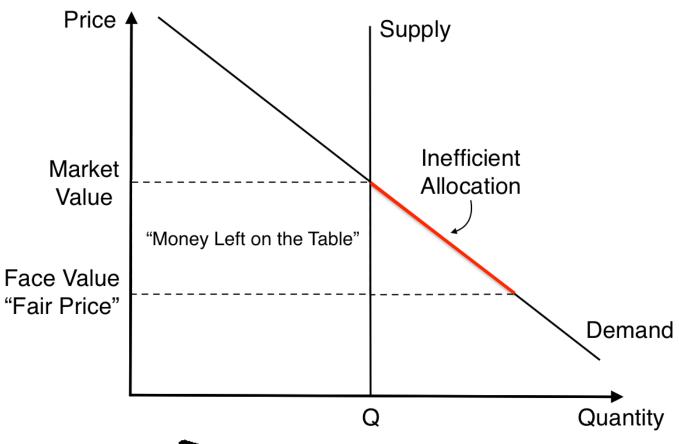




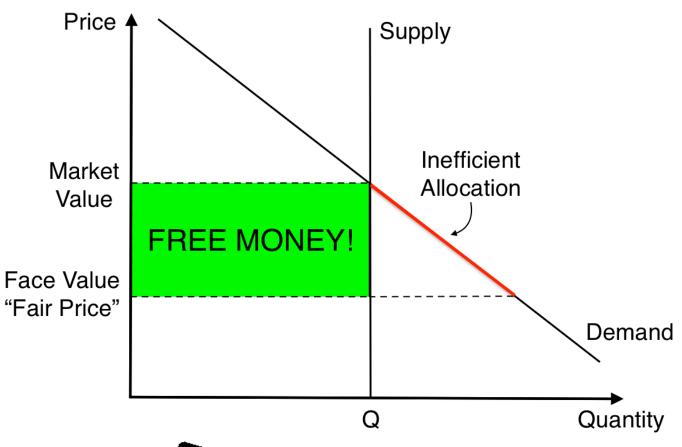
I Paid \$2,500 for a 'Hamilton' Ticket. I'm Happy About It.

By N. Gregory Mankiw

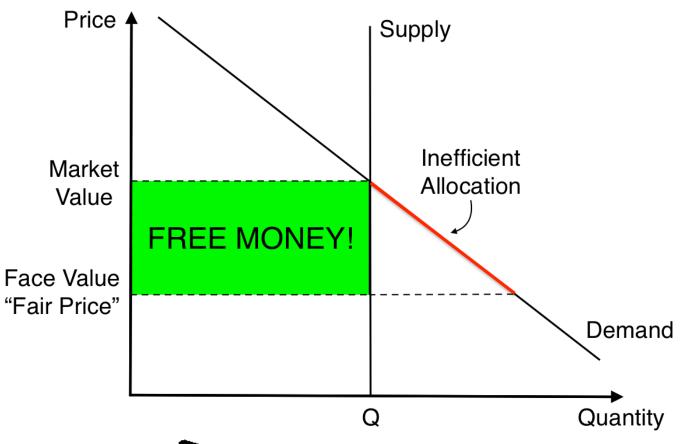












- Q: What happens when you give away FREE MONEY?
- A: RENT SEEKING!
- Scale of the problem ...
  - StubHub alone nearly \$5bn of volume
  - Ticketmaster another ~\$2bn of volume
  - Total: \$15bn? (Estimates vary)
  - Ticketmaster: 20% of all tickets get resold. In extreme cases, up to 90% for some events.
  - Recent lawsuit against a ticket broker claimed that a single ticket broker was able to get 30-40% of all tickets to Hamilton
- "The secondary market is now the market"



#### Who Gets the Rents From Resale?

#### Example

- \$100 primary-market price (inclusive of fees)
- \$200 secondary-market resale value (inclusive of fees)
- \$200 \$100 = \$100 is "economic rent". The "prize" in the rent-seeking competition.
- Secondary market venue fee:
  - 15% of resale price to buyer
  - 15% of resale price to seller
  - Resale price = \$174 (because \$174 (1 + 0.15) = \$200)
  - Total fees = \$52
- Broker profits
  - Broker gets the rest of the economic rent: \$100 \$52 = \$48
  - Equivalently, gets \$174 \* (1- 0.15) = \$148 net of fees, paid \$100, nets \$48
- Punchline: at current fees, secondary-market platform gets a large chunk of the underpricing rents. For tickets with 100% markup, split is about 50/50.



#### Who Gets the Rents From Resale?

Platform	Buyer Fee	Seller fee	Intal Fee as % of All-In		% of Rent Captured by Platform if Ratio of Market Price to Face Value equals: (^)		
			Price to Buyer (*)	Take-home to Seller (**)	1.5x	2x	5x
StubHub	22%	15%	30.3%	43.5%	91.0%	60.7%	37.9%
Ticketmaster	17%	14%	26.5%	36.0%	79.5%	53.0%	33.1%
SeatGeek	30%	10%	30.8%	44.4%	92.3%	61.5%	38.5%
VividSeats	28%	10%	29.7%	42.2%	89.1%	59.4%	37.1%
TickPick	0%	10%	10.0%	11.1%	30.0%	20.0%	12.5%

Note: Fees as observed by the author on June 6th, 2019 for tickets for the Rolling Stones, Chicago, June 21st, 2019.

<sup>(^)</sup> see previous slide for example of calculation



<sup>(\*)</sup> computed as (Buyer Fee + Seller Fee) / (1 + Buyer Fee)

<sup>(\*\*)</sup> computed as (Buyer Fee + Seller Fee) / (1 – Seller Fee)

# **Economic Gravity**

#### THREE CHOICES

- 1. Set a market-clearing price in the primary market.
- 2. Set a below-market price in the primary market. Much of the "real" allocation will happen in the secondary market.
- 3. Set a below-market price in the primary market + <u>ban resale</u>.
- Key point: setting a below-market price, and hoping/praying that the tickets go to fans and never get resold, is economics fantasy land.
  - The way to get tickets to fans and not have them get resold, is to either set a market-clearing price in the first place, or to prohibit reselling them.



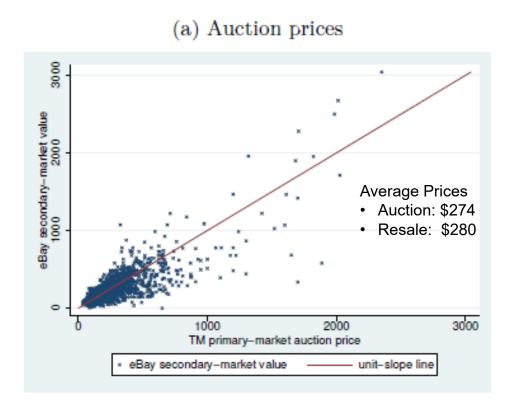
# **Choice 1: Market-Clearing Price**

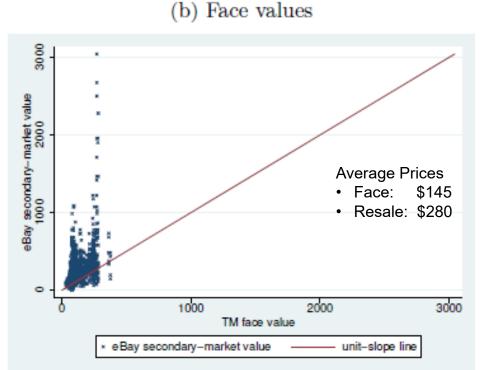
- Methods
  - Auctions
  - Dynamic pricing
  - Use past data

Stakeholder	Effects
Artist / Team	<ul><li>Pro: more revenue</li><li>But: bad PR? Risk of empty seats (TSwift)</li></ul>
Secondary Markets	<ul> <li>Con: less volume took away the "free money"</li> <li>Still a role for secondary market, just reduced</li> </ul>
Brokers	<ul><li>Con: took away the "free money"!</li><li>Nuance: also engage in less rent-seeking activity</li></ul>
Fans	<ul> <li>High prices</li> <li>Arguably similar allocation to status quo</li> <li>Fans who would have been able to purchase at below-market price are worse off</li> </ul>



#### **Evidence on Auctions**



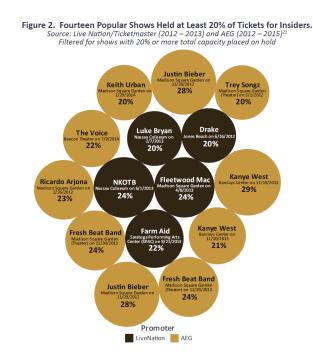




Source: Aditya Bhave and Eric Budish, "Primary-Market Auctions for Event Tickets: Eliminating the Rents of 'Bob the Broker'"

# Choice 2: Underprice, Much of the Allocation in the Secondary Market

Stakeholder	Effects		
Artist / Team	<ul> <li>Less money than market-clearing price</li> <li>Less heat from fans. "Tried" to set a fair price</li> <li>Some artists/teams seem to divert tickets to secondary market, to get market price</li> </ul>		
Secondary Markets	Winner: get a big share of the free money		
Brokers	Winner: get a big share of the free money Nuance: "marginal" broker should break even, free entry (Hsieh and Moretti, 2003)		
Fans	<ul> <li>HATE THE STATUS QUO.</li> <li>Hence 6724 comments to FTC.</li> </ul>		





## Choice 3: Low Prices, Ban Resale

#### **Implementation Details**

- IDs, credit cards, or phones to tie ticket to buyer (analogy: plane tickets)
- Some scope for refund if plans change, with penalty fees (analogy: plane tickets)
- Speculator who buys N tickets could resell N-1 of them, "walk them in", but this doesn't scale. More like Dickensera resale than Bots-era resale

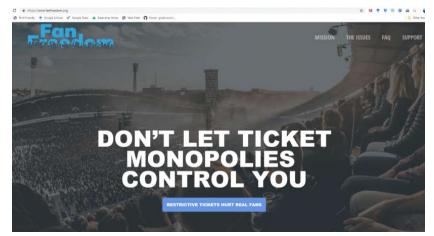
Reference: Pascal Courty, "Ticket Resale, Bots, and the Fair Price <u>Ticketing Curse</u>"

Stakeholder	Effects
Artist / Team	<ul> <li>Can set the price they want, including below-market</li> </ul>
Secondary Markets	HATE THIS.
Brokers	HATE THIS.
Fans	<ul> <li>Pay "fair price". The "free money" goes directly to them.</li> <li>Some allocative inefficiency. Even if I really want to go, may not be able to. (Greg Mankiw \$2500 for Hamilton tickets).</li> </ul>



## **Politics of Choice 3**

- Concentrated Interests oppose it
  - Secondary market players
  - Brokers
  - Arguably Ticketmaster, which has taken a "join the party" approach to the secondary market, now at ~\$2bn volume
- Dispersed Interests benefit
  - Fans
- Artists/Teams may have a loud-enough voice to effect change





#### Part I Summary

1 Briefly describe the organization's mission or most significant activities:
THE MISSION OF FAN FREEDOM PROJECT IS TO PRESERVE, EDUCATE AND INFORM CONSUMERS OF THEIR FUNDAMENTAL RIGHTS
RELATING TO ACCESS TO AND ATTENDANCE AT LIVE PUBLIC SPORTS, MUSIC, THEATRICAL AND OTHER EVENTS, INCLUDING RIGHTS TO
A FREE AND OPEN SECONDARY TICKETING MARKETPLACE ALLOWING ALL CONSUMERS TO BUY, SELL OR SHARE TICKETS-WHEN THEY
WANT, WHERE THEY WANT, AND WITH AND TO WHOM THEY WANT; TO EDUCATE CONSUMERS ABOUT THESE RIGHTS, THREATS TO
THESE RIGHTS, AND OPPORTUNITIES TO DEFEND OR PROMOTE THESE RIGHTS; AND TO CHALLENGE EFFORTS OF CONTENT OWNERS,
VENUE OWNERS, TEAM OWNERS, EVENT PRODUCERS, TICKETING AGENCIES, AND GOVERNMENT LEGISLATIVE AND REGULATORY
AGENCIES THAT INTENTIONALLY OR UNINTENTIONALLY SEEK TO INHIBIT THESE RIGHTS.



2

# Policy Proposal I

 Artists and Teams should have the CHOICE to restrict resale for some or all of their tickets



# Policy Proposal I, cont.

- "FREE MONEY" -> massive rent-seeking, broken market.
- Only 2 real alternatives to the status quo
  - 1) Set a market-clearing price (Taylor Swift, Rolling Stones)
  - 2) Set below-market prices, restrict resale
- I propose that artists/teams be free to choose their preferred mix of (1) and (2)
  - I suspect many will choose some of both
- I understand both (1) and (2) are bad for secondary-market players
  - You may hear some complaining ...
  - Chicago economists have a thick skin.



# **Policy Proposal II**

- Fee transparency
  - Fees are both OPAQUE and HIGH
  - In both the PRIMARY and SECONDARY markets
- Proposal: adopt the DOT model
  - You have to show the all-in price, if the fee is mandatory (i.e., can't buy the ticket without paying the fee)
- Note: firms will not "unilaterally disarm"
  - StubHub experiment shows that transparent fees, in the context of a market that is otherwise often non-transparent, is very costly
  - (Blake, Moshary, Sweeney and Tadelis, "Price Salience and Product Choice")



#### Disclosure of Full Fares and Ancillary Fees

For both domestic and international markets, carriers must provide disclosure of the full price to be paid, including government taxes/fees as well as carrier surcharges, in their advertising, on their websites and on the passenger's e-ticket confirmation. In addition, carriers must disclose all fees for optional services through a prominent sink on their homepage, and must include information on e-ticket confirmations about the free baggage allowance and applicable fees for the first and second checked bag and carry-on.



# **Concluding Thoughts**

- The ticket market has been broken for a long time
  - The structural economic issue is artists/teams sometimes want to "underprice" their tickets relative to what the market will bear (fairness, PR, long-run economic interests, etc.)
  - This creates an incentive for rent-seeking behavior
- The internet has badly exacerbated the problem
  - Rent-seeking has gone haywire
  - For many events, the secondary market is now the market
- Two proposals that would do a lot of good to fix the market:
- Allow artists and teams the choice to restrict resale for some or all of their tickets.
- 2. Fee Transparency. In both the primary and secondary market.



# **Concluding Thoughts**

- I want to close by connecting these two simple policy ideas to ideas that I've learned from two influential figures in the history of economic thought:
- 1. Milton Friedman
  - "Free to choose"
  - "Rules of the game" as the role of government
- Alvin Roth
  - Market Design
  - Matching: some markets don't clear through price alone
- I think the tickets market may be one where we've learned, from 100+ years of history, that price alone may not be the only determinant of "who gets what"
- Whether artists/teams determine the allocation based on who pays the most, who's willing to wait in line, likes on Instagram, etc., it should be their choice.
- And whether in the cheap seats or front row, fans deserve a transparent market

