

# The Rise of Transport Network Companies: Taxis v. Uber

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## Overview of Presentation

Issues raised by the regulation of rides for hire in the US

Some history - Justifications given for government intervention

Impacts of economic regulation (US experience)

Impacts of early experiences with deregulation - taxis, airport vans

The current situation

Issues raised and implications

# A Brief History of the Regulation of Rides for Hire

Justifications for regulation:

- barriers to entry, economies of scale, potential for “destructive competition” leading to monopoly
- asymmetric information - consumer protection
- negative externalities - safety, environmental protection, congestion concerns

Regulations often were imposed because of complaints about service

Regulations often were also protectionist and exclusionary



# Conventional Taxi Regulations (Typical US Conditions)

Cities **limit the number of taxis** based on medallions or licenses

Cities **regulate fares** – typically setting a fixed schedule that must be posted

Cities **regulate taxi vehicles** - usually must display highly visible logos, roof signs, approved color schemes, etc.

Cities also **enforce a variety of additional rules** about vehicle emissions, cleanliness, age, equipment, and cruising.

Taxi drivers must pass a **detailed background check** including fingerprint checks for criminal records; in some cities also they must **pass a knowledge test** of city

**Drivers are independent contractors** who may own or rent cars and/or medallions from a taxi company, pay for services such as credit card processing, but keep the fares and tips

Customers can obtain a taxi from a stand, **by hailing** a cruising cab, or **via telephone or computer**

Regulation	Justification	Critique
entry restrictions (limits on number of taxis, medallion requirements)	avoid race to the bottom and loss of participants, eventual monopoly due to "destructive competition"	Risks regulatory capture; evidence that competition in taxi industry is destructive is mixed at best; limited number of operators may not accommodate growth, respond to changing markets, serve thin markets, etc.
Regulated prices	barriers to entry and economies of scale in the taxi industry (due to dispatching and vehicle fleet factors) risk monopoly, price gouging	Modest barriers to entry such as radio dispatch and vehicle fleet management are vanishing due to cellphones, GPS, third party dispatching, third party vehicle provision and maintenance. Also, price regulation leads to politically set fares that do not necessarily reflect market realities.
Metered rates	Needed due to asymmetric price and route information between driver and customer	GPS and data access on smart phones and tablets have made this information readily available to most customers and drivers – passenger can know best route, distance, travel time ahead of time – meters aren't needed.
Regulated vehicle age, make, condition, markings, etc.	consumer protection, public safety, environmental protection	Concerns can be managed through less intrusive, more flexible, more effective information systems, inspections, audits, pricing strategies, customer rating systems, etc.
Driver qualifications-verification	Customer safety (check driver criminal and driving records), assure driver knowledge of area	Crime risk overblown; can be managed through normal licensing & customer rating systems ; knowledge of street system replaced by GPS systems

# The Move toward Deregulation

Starting in the 1960s economists began to challenge the justification for economic regulation

In the 1970s the US federal govt. deregulated transport industries in interstate commerce: air, rail, trucking - while taxis are regulated at the local level, the deregulation impulse was felt there as well

Taxi regulations were questioned on the grounds that barriers to entry and price controls were leading to **market distortions - monopoly rents for the license owners and higher fares – rather than better services**

Cities such as San Diego, Atlanta, Indianapolis, Phoenix, Tucson, Portland, OR, Oakland and Berkeley deregulated or partially deregulated taxis in the 1980s – Many cities also let shuttle vans begin operating in some markets, e.g., airport service

# Taxi Deregulation Findings

**Results were mixed**, reflecting the underlying market for taxis and how constrained entry had been.

In some cities taxis became more readily available, competition improved service, and prices declined.

In other cities there was little or no change in availability or price and in a few there was loss of service or consolidation of companies.

Thin / iffy markets didn't get better service – waits remained long and “no shows” frequent.

Confusion / congestion at airports were common complaints

**Many city officials viewed the results as too uncertain to be worth pursuing – Also, few officials wanted to pick a fight with the taxi lobby, which benefited from regulation**

# Other Forms of Shared Ride Services in the US

Jitneys

Shared taxis

Dial-a-ride services

Ridesharing for commuters

Casual carpooling / slugging

Government sponsored “dynamic ridesharing” programs



**fizzled out or had limited market niches but provided useful lessons**



# Lessons Learned

Ridesharing services appeal to people who do not want to, or can't, commit to a regular ridesharing arrangement, find transit too slow and unreliable, can afford the service (where it's not subsidized) – latter two points raise issues for govt.

Registration and screening by a ridesharing service reduces concerns about safety and security; info exchange is valued even when experience indicates danger is low

Market interest is not just for commute trips but also running errands, going out for drinks, etc.

Both drivers and riders must be numerous enough that participants find a match quickly; travelers will quit trying to use a matching service after a few failures



confirmed several program elements, but also pointed to potentially mixed social and environmental impacts and suggested a limited tolerance for slow startup

# Enter Uber (2010) and Lyft (2012)

A play on the gig economy, with high tech gloss

Aggressive stance toward regulators: characterized company as a ridesharing service, not a taxi, therefore claimed taxi regs didn't apply

Pulled lessons / ideas from previous ridesharing experiences as well as from social media as well as from problems in existing transport markets

Pushed hard on rapid diffusion in key markets (undercutting prices?)

Made use of available technology – cell phones and internet, GPS vehicle location, electronic maps, traffic data – in systematic and creative ways - MODERN

Tried out a variety of services from “black car” luxury rides to pizza delivery

## How It Works (though there are variations....)

Drivers sign up, are checked out, use their own vehicles, drive where and when hours they want to drive

Riders sign up, provide cellphone no., email address, and credit card

When a call comes in it is matched to nearby available driver using GPS

Rider gets estimated arrival time, can also get estimated time, fare to destination

Fare can be variable (surge pricing) and rider can opt to accept “pool” option; also there’s a charge for cancellation -- otherwise fees for pickup, miles, wait time, tolls etc. just like taxi

Company handles electronic payment and transfers 75-80% to driver

# Uber vs Taxi : What's Different and What's Not

What's not different from taxis:

Nearly all drivers are offering rides to make money, not because they are on their way somewhere and can capture a traveler incentive if they share a ride.

Drivers sign up and undergo a background check as well as a driving record check

Most drivers are treated as independent contractors, not employees (work for themselves)

What's different from taxis:

Drivers use their own cars rather than a special taxi obtained from a company (though there are leased vehicles in some Uber applications.)

Drivers can set their own hours much more freely, including part-time, since vehicles aren't being scheduled for 8-12 hr. shifts. However, drivers must cover their own vehicle maintenance costs.

Passengers' contact info is on file (better safety and security for drivers)

Passengers can be charged for cancelling service or no show.

Company takes a cut of earnings rather than an up front charge

Service "innovations" such as ridepooling, peak period price surcharges are tried out in various markets.

# What's an improvement over taxis:

## For the customer:

Vehicle availability: at least in areas of highest demand, more rideshare vehicles than taxis, arrival times smaller

Vehicle quality: for the most part riders find Uber and Lyft vehicles more comfortable than taxis

## For the driver:

More flexibility in work hours than as a taxi driver

Ability to use own vehicle (blessing and curse?)

Less risk of passenger crime

## For both driver and rider:

No cash to worry about: credit card / other form of electronic payment handled by rideshare service (works for most but not all)

The driver and passenger rate each other after each trip is completed (or if a trip is missed) and either can be dropped from the service if ratings are too low

# Results

Many happy users who found services to be better quality than taxis (fast, safe, comfortable) , at equal or lower price

Quickly spread to other US cities and internationally

Vastly increased number of vehicles offering rides in major markets

Prompted protests by taxis that services were “gypsy cabs” - claimed unfair competition; then taxis began to emulate many features where permitted to do so

Some taxi drivers moved from leasing a taxi to driving their own car for Uber et al.

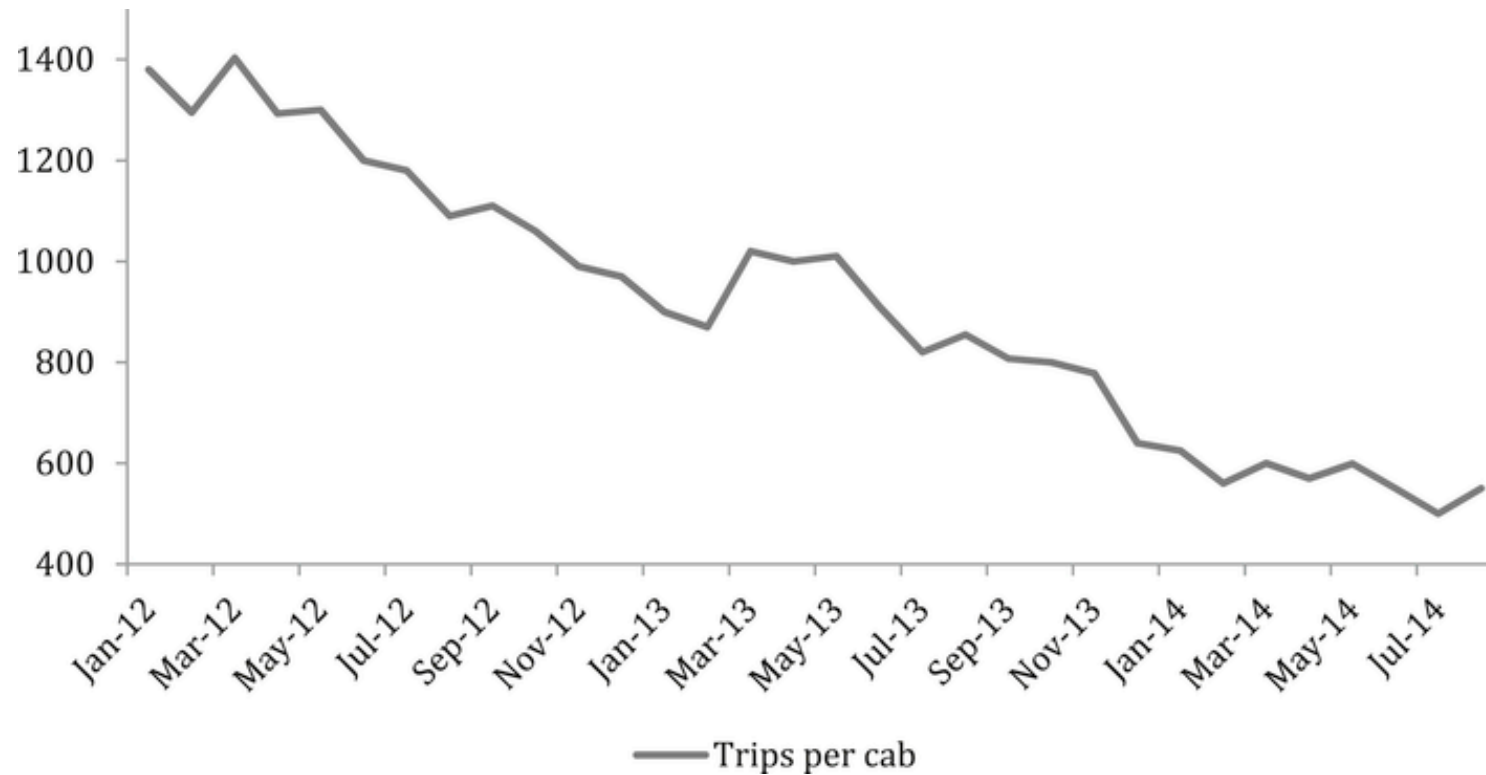
US insurance companies added provisions to personal car insurance policies excluding coverage while the vehicle is operated in a for-hire service, prompting need for quick responses by TNCs, state insurance companies, and regulators – today rideshare services provide insurance

Incidents with drivers, prompting fights over level of background check needed (still ongoing)

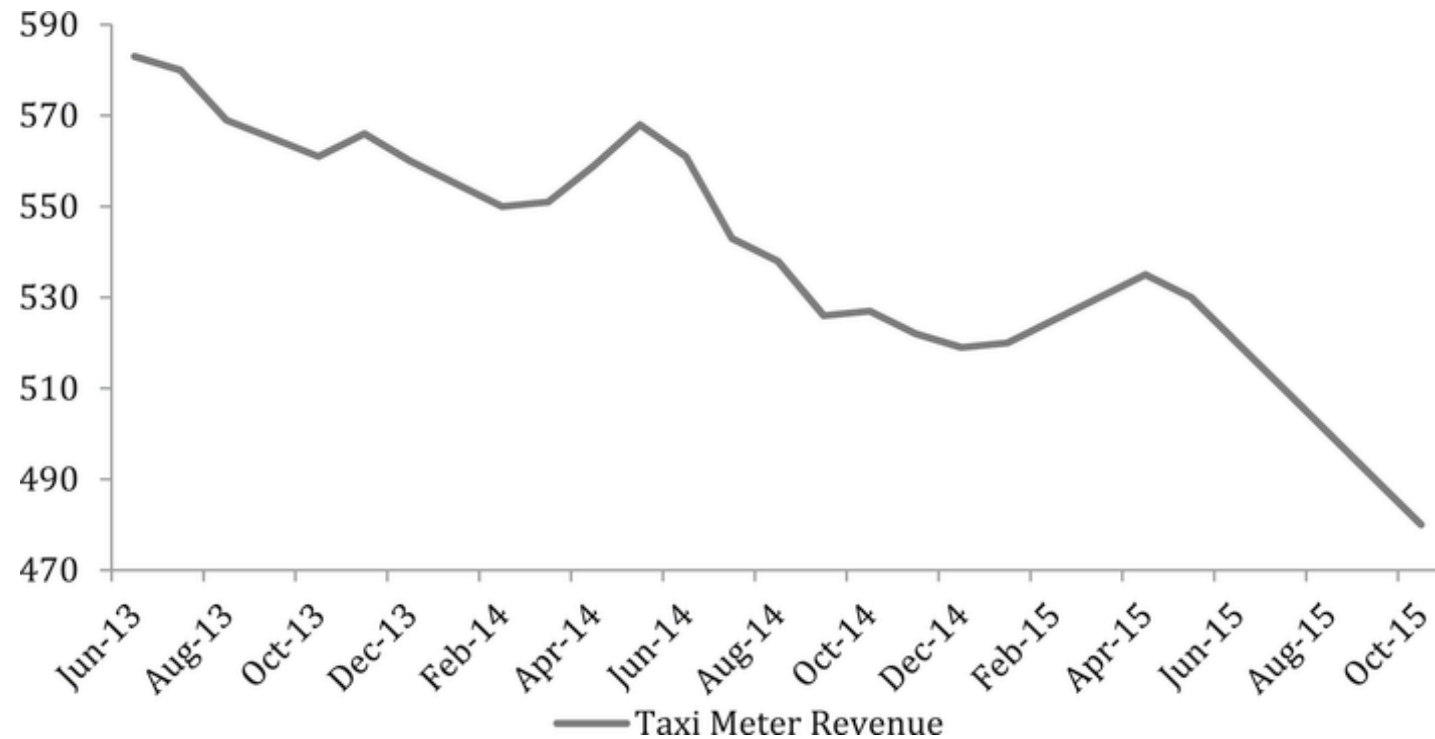
**First quarter of 2015, ridesharing accounted for an average of 46 percent of paid car rides in business travelers’ expense reports in US**, according to one study, while rides in taxis, limos and shuttles fell from 85 percent to 53 percent of the market

**Taxi medallion (license) value plunged**

# Average monthly number of trips per taxi in San Francisco



# Yellow Taxi Meter Revenue, New York City





# Issues

Not enough drivers want to work in lower-demand areas – companies offering bonuses to drive there but it's not clear that it is working - long wait times

Part time gigs were a big selling point, but Uber and Lyft are paying rewards to drivers who work more, provide more rides

Drivers can gross \$50-60 thousand a year, but pay 20-25% in service fees, can expect \$10-15 thousand a year in vehicle depreciation, O&M, get no benefits because they are not employees – low net earnings

Drivers are beginning to complain about “promises” vs. performance

Smart technology may not be beneficial to drivers, e.g., surge pricing takes “smarts” out of the job for the driver – company tells everyone where and when there are hotspots so those who would do well by being informed about traffic patterns, user behavior no longer have an advantage

## Issues (cont.)

Environmental sustainability concerns: congestion due to drivers converging on hot locations, surge messages exacerbate this; traffic violations by rideshare drivers are also a problem in some cities (e.g. San Francisco – Uber drivers are most of the violators of exclusive bus lanes; added VMT due to walk, transit shift to rideshare

Social equity concerns: user complaints that drivers refuse to go to remote locations, carry service animals, assist wheelchair users, help with heavy suitcases, discriminate against ethnic and racial minorities

Economic sustainability: Uber hasn't gone public so no formal data on performance but leaked data indicate big losses - if accurate, not encouraging; also, not clear that labor pool will be available if slow economy ever picks up

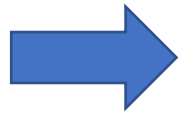
# Policy Issues

Why regulate taxis now that Uber and Lyft are on the scene? Distinctions are slim in terms of actual service and costs, but new services win on “cool” factor

Many legislators don't see a need to pick a fight with a popular service - let situation work itself out?

Deregulation is not popular with traditional taxi industry: medallion owners are speculating they can maintain a reasonable market share, owner-operators are just hoping to hold on

Cities are increasingly concerned about too many vehicles driving too many km, fear dereg would just increase number of vehicles



leveling the playing field through deregulation has few advocates

While social and environmental concerns are troubling, it's not clear that cities have done a lot better on these issues with heavy regulation (regulatory capture?)

HOWEVER:

Some govt. agencies beginning to make data access a condition of continued cooperation with new services – and thinking about using the data for pricing VMT, etc.

# Conclusions

De facto deregulation of taxis through brash corporate resistance and appeal of modern sharing economy approach

Not clear where traditional taxi industry will be in 10 years (will it stabilize at a lower market share? Die a slow death?)

New ridematching services are definitely popular, but they show strains and raise questions about sustainability

Governments in US are struggling to find a feasible, equitable, desirable way forward