

To auction or not?

**Historical perspectives on the
development of ecommerce**

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Share trading

Less information, please

NEW YORK

**Big shareholders are seeking more
opaque markets**

AFTER centuries of experimentation, the business of trading shares is still evolving. The latest mutation appeared on September 10th, when Pipeline Trading



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Development of the market economy and economic theory

market

standard economic model of rational utility-maximizing economic agents (*Homo economicus*)

The market model is triumphant now, but will it persist?

Caveats:

society's goals could change away from maximizing production

economic incentives of the standard economic model, combined with new technologies, could lead to subversion of the market model

Enron as prototype:

Enron trader A: “...all the money you guys stole from those poor grandmothers of California.”

Enron trader B: “Yeah, Grandma Millie, man. But she’s the one who couldn’t figure out how to (expletive) vote on the butterfly ballot.”

Enron trader A: “Yeah, now she wants her (expletive) money back for all the power you’ve charged right up _ jammed right up her (expletive) for (expletive) 250 dollars a megawatt hour.”

Enron as prototype (cont'd):

Collusion: extremely hard to stop in online markets (consider spectrum auctions)

In general, hard to stop people from doing what is in their self interest

Challenge: create languages with limited expressive power

Another attack on the market model:

Intensification of price discrimination could eliminate the market

[Alexander Graham] Bell should have anticipated Bill [Gates] and let someone else put in the phone infrastructure while he collected by the minute and distance (and even importance of the call if he could have figured a way to monitor it) in perpetuity.

email from Warren Buffett to Jeff Raikes
of Microsoft, Aug. 21, 1997

Price discrimination:

general benefits in maximizing production well-known

incentives to practice it are increasing

ability to engage in it is growing with erosion of privacy

English lighthouse fees:

13th century: 2p per ship

16th century: 6p for 2-masted ship

4p for 1-masted ship

2p for other vessels

17th century: based on cargo carrying capacity

1900: 2 – part tariff

18th Century: Beverley Beck Navigation

Cargo

Toll per Ton

Sand

2p

Timber, stone, salt

6p

Iron and lead

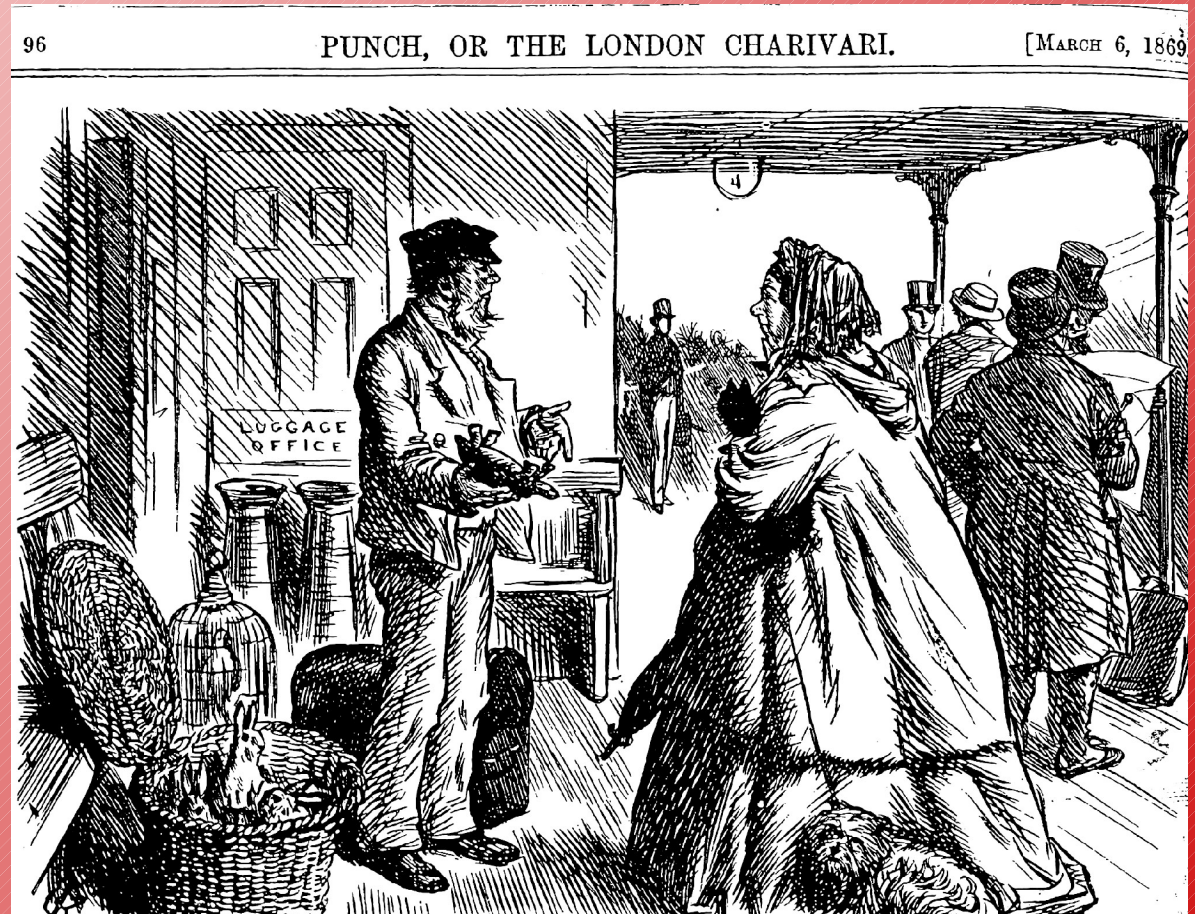
12p

There is extensive evidence that such practices often aid society's welfare, in accordance with standard economic doctrine.

Railroad practices, followed by first degree price discrimination and popular revolt

Cats is 'dogs' and rabbits is 'dogs' and so's Parrats, but this 'ere 'Tortis' is a insect, and there ain't no charge for it.

Punch, 1869



Versioning is motivated by incentives to price discriminate:

It is not because of the few thousand francs which have to be spent to put a roof over the third-class carriages or to upholster the third-class seats that some company or other has open carriages with wooden benches. What the company is trying to do is to prevent the passengers who pay the second class fare from traveling third class; it hits the poor, not because it wants to hurt them, but to frighten the rich.

And it is again for the same reason that the companies, having proven almost cruel to the third-class passengers and mean to the second-class ones, become lavish in dealing with first-class passengers. Having refused the poor what is necessary, they give the rich what is superfluous.

—Jules Dupuit, 1849

Explicit price discrimination would eliminate the waste of versioning, “damaged goods,” etc.

Clear example of dominant influence of price discrimination: Fares offered at www.continental.com on February 27, 2002:

Minneapolis to Newark, NJ on Wednesday, March 20, returning Friday, March 22: \$772.50

Minneapolis to Newark, NJ on March 20, returning March 27: \$226.50

Newark, NJ to Minneapolis on March 22, returning March 27: \$246.50

Politics makes for strange bedfellows, but so does economics:

On average, for each dollar American consumers pay for prescription drugs, the Germans are paying 71 cents; the Swedes, 68 cents; the British, 65 cents; the French, 57 cents, and the Italians, 51 cents. Unfortunately, U.S. policy allows pharmaceutical industry to maintain that disparity. . . . It's a moral outrage that Congress continues to allow millions of elderly and chronically ill Americans to suffer and die because they cannot afford the inflated prices charged for pharmaceuticals.

Congressman Bernie Sanders
letter to *Barron's*

Limitations on price discrimination:

Intense negative popular reaction, rooted in behavioral economics factors, especially concerns about fairness

Railroads in the 19th century: extremely important, widely hated

The drama was over. The fight of Ranch and Railroad had been wrought out to its dreadful close. . . . Yes, the Railroad had prevailed. The ranchers had been seized in the tentacles of the octopus; the iniquitous burden of extortionate freight rates had been imposed like a yoke of iron.

Frank Norris, *The Octopus*

Business opposition to price discrimination:

But the fact that the charges are so low does not make *differences* in charge bear any less severely upon business. A difference of five cents per bushel in the charge for transporting wheat a thousand miles is a small matter, taken by itself. It would be weeks before it would make a difference of one cent to the individual consumer of bread. But if a railroad makes this reduction for one miller, and not another, it will be enough to drive the latter out of business.

Arthur T. Hadley,
Railroad Transportation, 1885

Business demands for fairness:

When the rate went down to ten cents a hundred from Chicago to New York, or fifteen cents from St. Louis to New York, the rate was to some few fifteen, to some few others ten, but the main body of the commercial community were compelled to pay twenty-five and thirty cents a hundred, and the standard rate was forty and forty-five; thus inaugurating a wide-spread system of uncertainty, chicanery, fraud and personal favoritism, demoralizing trade and commerce even worse than the demoralizations due to an uncertain currency, because the freight charge fluctuated more frequently, even from hour to hour and day to day. Consequently, the combination which brought the rate to seventy cents a hundred, and maintains it there, is considered a God-send and a blessing, compared with the fifteen or ten cent fluctuating rates before, simply because the seventy cents is an equally distributed and calculable element.

Simon Sterne
New York Board of Trade and
Transportation, 1879

Interstate Commerce Act of 1887: first serious federal regulation

Provisions:

- Rates to be “just and reasonable”
- Personal discrimination forbidden
- “Undue or unreasonable preference” forbidden
- Charging more for short than long haul on same line forbidden
- Pooling forbidden
- Rates to be published
- . . .

Regulation and the “Robber Barons”

By 1903, it had become apparent that the law relating to personal discrimination and rebating needed strengthening. The carriers themselves sponsored legislation of this sort because they were losing revenue as a result of the widespread discrimination and departure from published rates. Yet they were unable to stop the practice without the aid of the government.

Locklin, *Economics of Transportation*

Fundamental problems:

How to reconcile incentives to price discriminate with public loathing of such practices

Warning: better data collection and analysis tools are becoming available to customers

Conclusions:

The idea of a market (and of auctions, ...):

very powerful

may not dominate