Privacy, price discrimination, and the seeds of capitalism's destruction

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Main thesis:

- technology is leading to fundamental changes in our society
- those changes are even more fundamental than generally perceived, threatening the incentives that have made the market system as dynamic as it has been
- price discrimination, facilitated by erosion of privacy, has a key but underappreciated role in these developments

Some preliminary caveats:

 presentation is US-centric, although main points should have wide applicability

 these are personal views, and some are yet to be documented (a paper on this topic will be available soon)

Lessons from the past:

- 19th century railroads presented a similarly fundamental challenge to the market economy
- price discrimination was the basic cause of complaints
- railroad price discrimination led to the first substantial US federal government intervention in the conduct of the economy
- expect that similar reaction will lead even US business interests to call for regulation on how information is used

More lessons from the past:

- US regulation of railroads led to an inefficient and sclerotic system
- almost complete deregulation (Staggers Act, 1980) (enabled by the rise of partially competing transportation technologies) produced a dramatic improvement
- quality of regulation may become main determinant of how successful an economy is

Lessons from the present:

Two recent (September 2015) events that attracted wide public notice:

- rise in US price of generic drug, Daraprim, from \$13.50 to \$750 per tablet
- VW emissions tests fraud

They point to a future dominated by search for choke points, and by cheating (or, in more polite terms, obfuscation).

Lessons from the present (cont'd):

Positive sides to these developments (only slightly in jest):

- solution to problem of jobs: we will all be busy cheating each other and detecting cheating
- reason this is less of a joke than it might seem: there
 are theories that human intelligence developed
 precisely for those purposes, as in small social groups
 of early *Homo sapiens* there were high rewards for
 successful but hidden cheating, and incentives to
 detect such behavior
- important form of human cheating involves
 self-deception: 75% of the people are above average,

Modern economy:

- based on dominance of the market and of corporations
- both are recent creations, and almost surely crucial to the dramatic shift to rapid growth and wealth of the last 200 years
- market disliked by both the public and corporations
- erosion of market principle by price discrimination (individual prices eliminate the basic market mechanism of a single price, which forces sellers to compete just on quality and price)

Modern economy (cont'd):

- too much attention paid to the obvious dangers from new monopolies that seem to be arising (platform providers such as Google, Facebook, Apple)
- too little attention paid to all the other actors who are able to use Big Data, analytics, ..., to create barriers to competition and extract value
- possible sign of the decline of market economy: paradox of high corporate profits, low interest rates, and low entrepreneurial activity

Price discrimination:

- very important role in economy
- role understood intuitively even by ancient policy makers, way before the theory was developed by the French econo-engineers of the 1840s
- never-ending quest to reconcile economic incentives to price discriminate with public concern about fairness



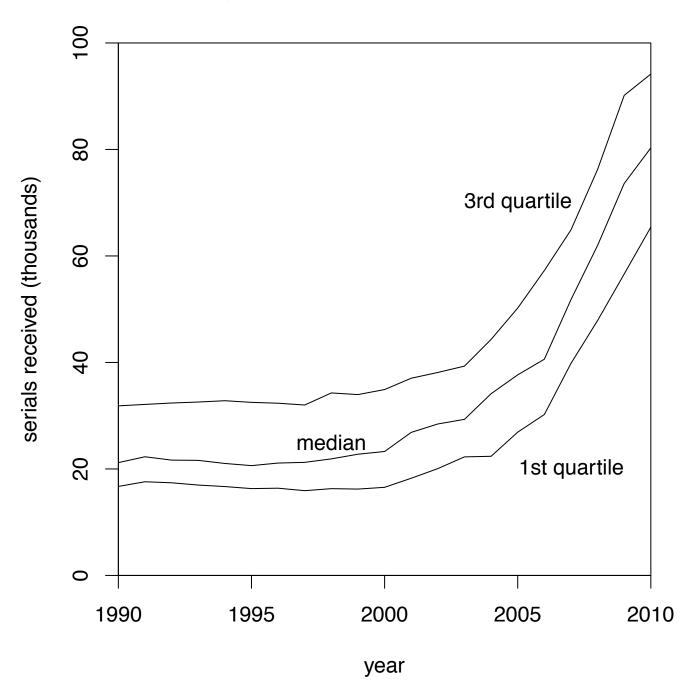
ZOOLOGY.

Railway Porter (to Old Lady travelling with a Menageric of Pets). "Station Master say, Mum, as Cats is 'Dogs,' and Rabbits is 'Dogs,' and so's Parrots; but this ere 'Tortis' is a Insect, so there ain't no charge for it!"

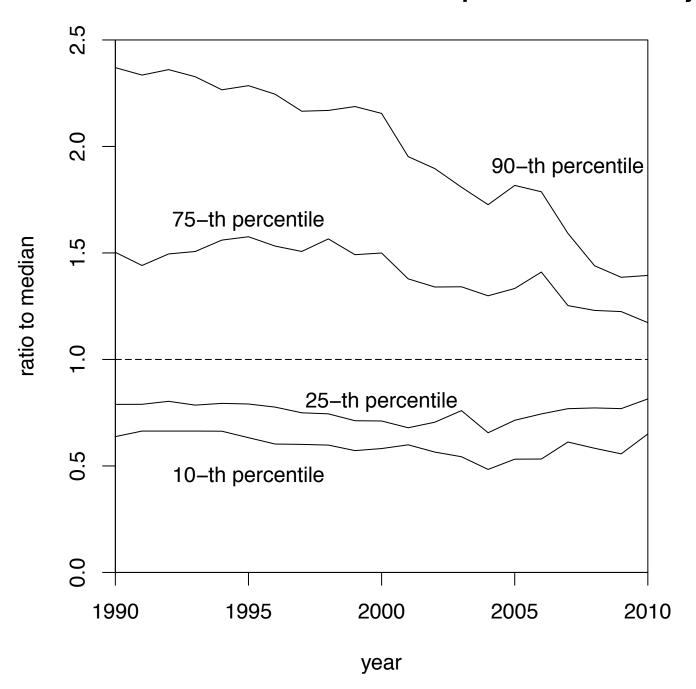
Price discrimination dangers:

- price discrimination usually increases output
- can shift benefits to either consumers or producers
- most fundamental danger not being discussed yet: undermining the incentives that drive the current economy

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Fundamental danger:

- secure system of property rights very important for economic development
- price discrimination taken to its extreme is equivalent to abolition of rule of law, and letting many mafias run free
- decreases ordinary economic rewards, and also offends human sense of fairness, and breaks down the trust that is vital to efficient markets

Conclusions:

- great promise for further economic progress
- great danger to the basic incentives that drive our current system, danger of slipping into a few form of feudalism
- regulation on use of information and on pricing likely to increase, even in US
- good regulation very tricky, no simple solutions

More information, papers, etc.:

http://www.dtc.umn.edu/~odlyzko/

or just google/bing "odlyzko"