

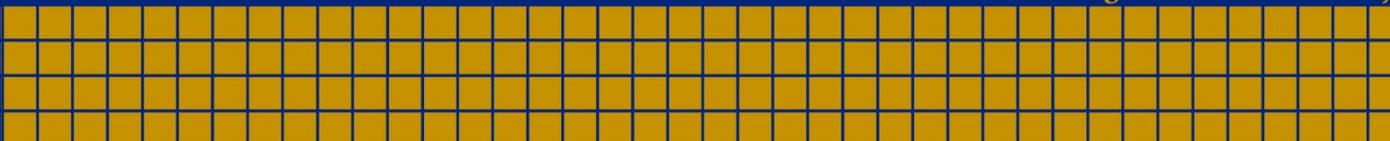
# Potential Usefulness of eBay Data for Measuring Quality Change

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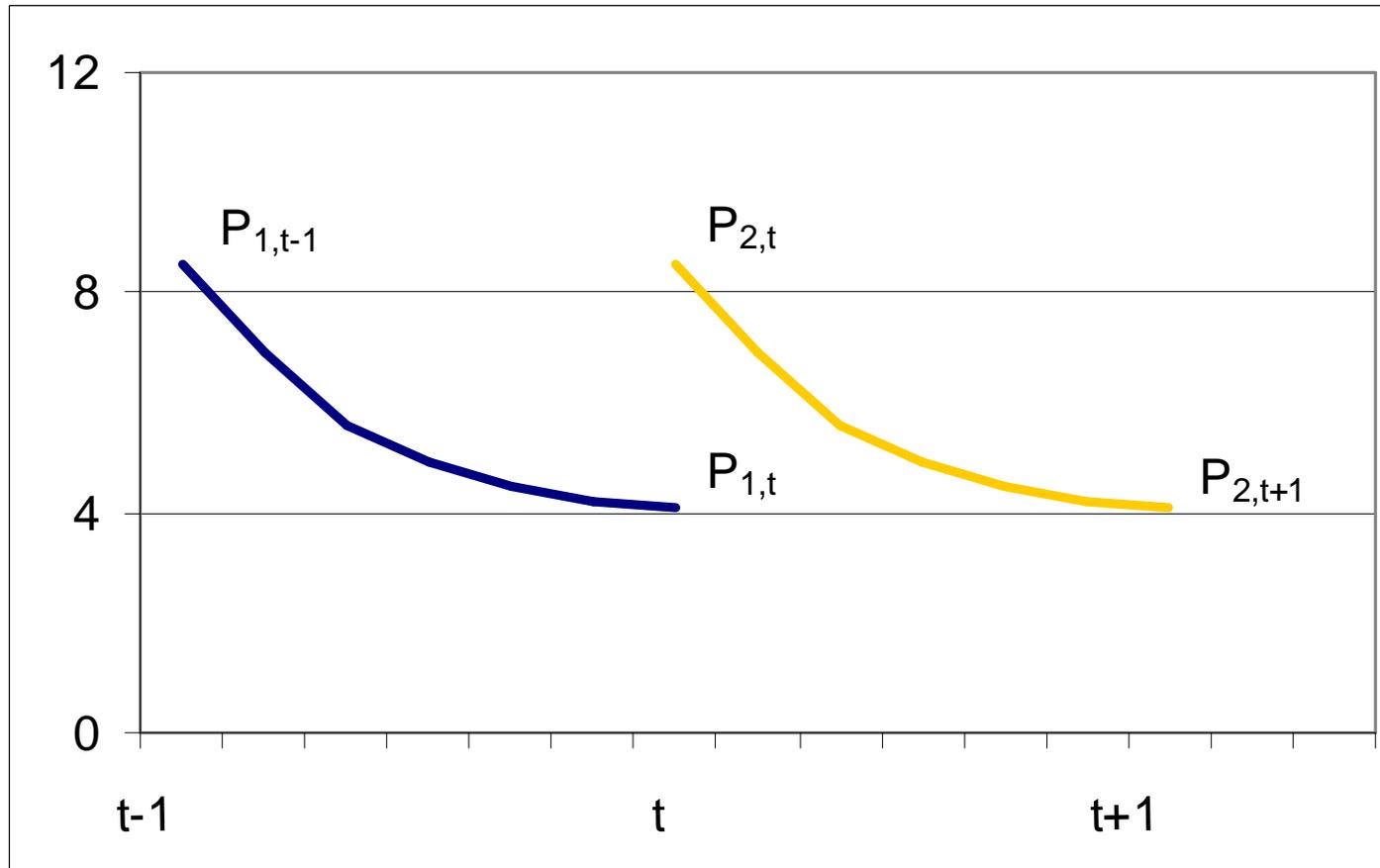


## Outline of talk

- Focus on one fundamental problem in measurement -- Quality change
- Specifically, measuring quality change when consumers have different reservation prices for goods
- Little is known about reservation prices



# The Problem: Implications of heterogeneity for measuring quality change



Standard approach attributes gap between prices at time  $t$  to quality change

This makes sense in a representative consumer setting, where the consumer buys both goods at time  $t$

But, what if the consumers buying good 2 and good 1 are different people?

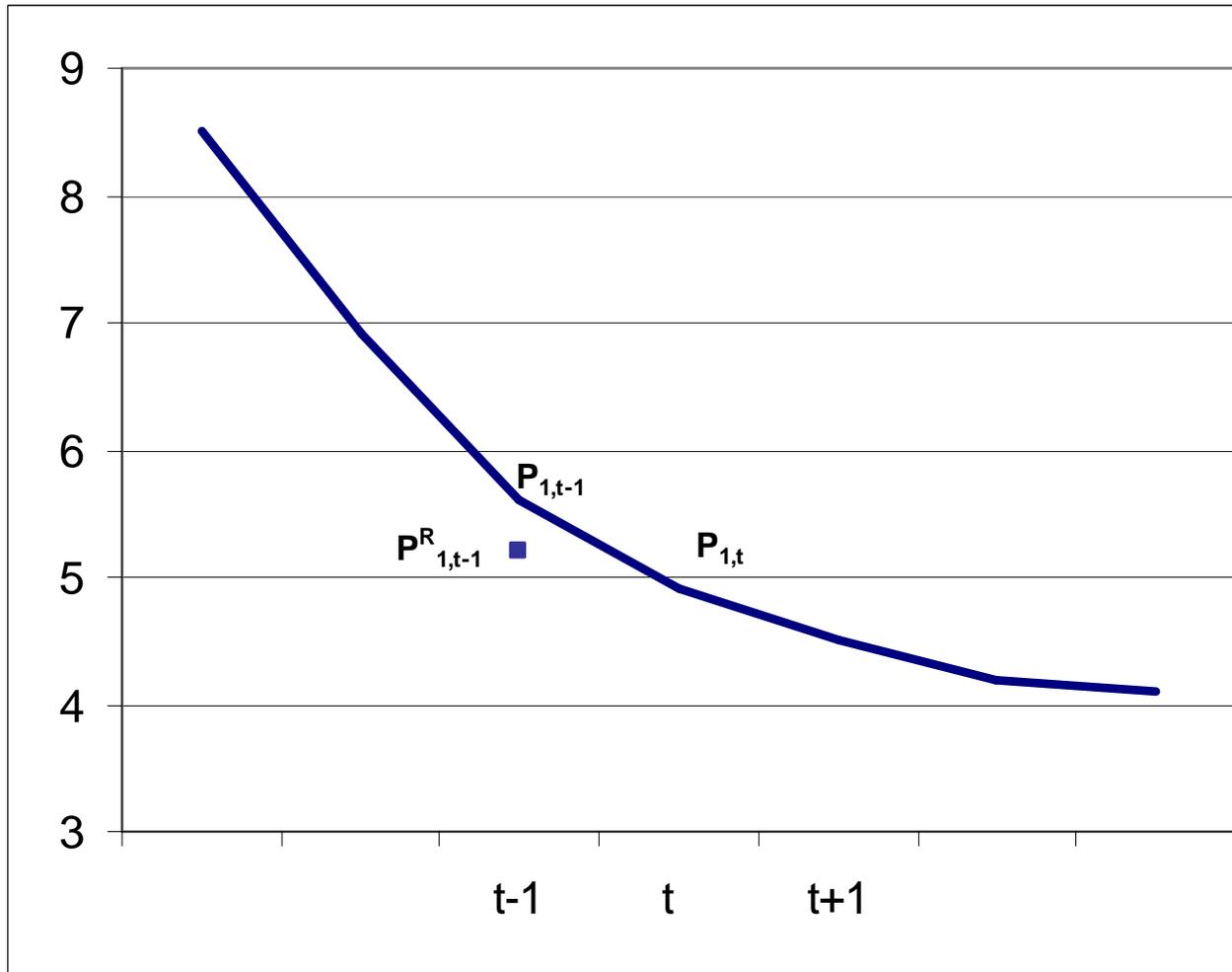


# Two Potential Solutions

- Hedonic approach (Aizcorbe, Bridgman and Nalewaik (2005) )  
Idea is to use the hedonic to control for characteristics of goods and *buyers*.
- “Reservation Price” approach in index number context (Fisher-Griliches (1995), Griliches-Cockburn (1995), or FGC)  
Idea is to use reservation prices to measure price change for consumers when they enter the market.



# FGC Solution for goods with downward-sloping contours



Assume that time  $t$  reservation prices are bounded by the two prices (prices at  $t-1$  and  $t$ .)

A price index that uses reservation prices will fall no faster than the usual price index

Potential magnitude of the problem depends entirely on the distribution of reservation prices within those bounds

Unfortunately, little is known about how reservation prices are distributed across consumers of different types and how they might change over time.

Maybe eBay data can help?

