

# Lecture 03b: Hedonic Pricing

ECON 5263: APPLIED MICROECONOMICS



1

# Key Ideas

Hedonic Pricing Model

- Idea: A good's characteristics determine its price
- Lancaster (1971): Alternative theoretical approach to demand based on the notion that goods per se are not demanded by consumers, rather it is the characteristics or attributes that goods possess that are demanded by the consumers

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2

## Hedonic Pricing Model

A hedonic pricing model identifies the factors and characteristics that affect an item's price

- I.e., price is a function of a good's internal characteristics and relevant external factors
- The hedonic pricing model a <u>revealed preference method</u> in that it estimates the contribution of each characteristic to a consumer's overall valuation of a good

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3

#### Hedonic Pricing Model

Many goods, such as housing, are multi-dimensional with each dimension contributing to the over all price of the good

Knowing the contributions of specific product features is more informative than simply know the price of a good

With large databases, this will help narrow down the relevant attributes of a good

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4

## Hedonic Housing Price Model

The price of a house depends on <u>internal characteristics</u> (square footage, number of bedrooms, number of bathrooms) and <u>external factors</u> (quality of schools, distance to an incinerator):

$$P = \beta_1 + \beta_2 \cdot SqFt + \beta_3 \cdot Bed + \beta_4 \cdot Bath + \beta_5 \cdot SchQual + \beta_6 \cdot DstIncin + \varepsilon$$

Collecting data (e.g., from Zillow) on recently sold homes allows the model to be estimated

Slope estimates give the marginal contributions of each attribute

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5

### Takeaway

In a hedonic pricing model a goods characteristics are regressed against price

• Coefficients on characteristics indicate the marginal values consumer attach to traits

6