Zvi and Hedonic Price Indexes

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How far back do we go?

- My version
  - Famous MIT class on job market in 1966-67
    - Hall, Stiglitz, Nordhaus, Weitzman, Akerlof
  - Zvi invited me to breakfast, I picked him up in my 1958 Volkswagen at Michael Bruno's apartment

- His version: several years earlier

Why Was He So Special?

- Obvious: the intellectual insight

- The Chicago Econometrics workshop
  - We only overlapped there in 1968-69

- Back in the 1958 Volkswagen
  - Rushing him off to the telephone company office

Zvi on Hedonics

- Ernie Berndt should give us his memories of what Zvi added to a hedonic study

- He invented it, 1961

- Famous book introduction, paper 1967, published 1971

- Griliches-Ohta, ultimate on automobile hedonics, 1976

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Hard to disentangle Zvi and Jack Triplett on autos

- Early issues
  - Physical characteristics vs. performance
  - We wanted speed, power, comfort
  - What we had was weight, length, horsepower

- General issue: shifting ratio of true attributes to performance characteristics

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Zvi and Jack on luxury models

- Coefficient on weight overstated

- Reflected "prestige" attribute, 10% extra weight might add 30% to price

- Overstated coefficient on weight

- Overstated quality change, understated price change

Solution for Luxury Models?

- Make Effects

- Zvi first pointed out compact car bias in mixed samples (1959, 1960)

- Simple solution, restrict sample to same makes

- Griliches-Ohta (1976) – extensive attention to make-effect dummies

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Left-out Variables, Zvi had nailed this issue intuitively

- Biggest example, very important after 1973: fuel economy

- Fuel economy negatively correlated with weight

- Couldn't estimate its own coefficient

- Solution: Wilcox, separate regression explaining FE as a function of weight, time, and other characteristics

Two reasons hedonics were necessary but not sufficient

- Had to add auxiliary regression for fuel economy

- Weight-saving innovations, downsizing

- Triplett concluded much later: autos "too complicated" for hedonic studies

- Difficulty of estimating plausible coefficients on accessories, e.g., air conditioning

- No alternative to going beyond simple hedonic regressions

Examples where hedonics work well and badly

- Autos – too complex

- Commercial aircraft, not enough models
  - Net revenue criterion

- Computers, ideal but becoming more complex
  - OK, speed and memory
  - Size, clarity of screen. CDs vs. floppies, ethernet vs. phone cord (my delightful experience in Paris)

Two examples from my recent research: apparel and housing

- Apparel, glaring discrepancy

- 1993/1914.
  - CPI says 7X
  - Median dress in Sears catalalog: 50X

- Ruffles and bows

- Hedonic makes remarkably little difference

Shelter

- Good data, bad data

- 1975-2001, American housing survey

- Huge sample, lots of quality characteristics

- Unique twist, strip out the quality and get an annual change in quality that might provide insight into the dark ages when little or no quality data

What We're Missing

- In our heads and hearts, we are all looking to that missing person to assess our work.

- Well, at the end, what did you think?