Some Uses of CE

"Using Consumer Theory to Test Business Cycle Models"
(with Pete Klenow, *JPE*, 1998)

- Engel Curves to Predict Employment Cyclicality by Good
- Durable luxuries cyclical employment, productivity, and prices
  — support for cyclical factor utilization
"Quantifying Quality Growth" (with Pete Klenow, *AER*, 2001)

- Estimate Quality Engel Curves for Durables
- Use Quality Engel Curves as instrument for Quality
- Predicts Unit-Price inflation 1980-1996 across goods
- Also Predicts CPI inflation across goods
Figure 3

Quality Engel Curve for CARS

real price of car purchased (in logs)

household real nondurable consumption (in logs)
Figure 4

Quality Engel Curve for VACUUMS

real price of vacuum purchased (in logs)

OLS

Kernel

household real nondurable consumption (in logs)
Figure 5

Quality Slope

1980-1996 Unit Price Inflation

corr = .51
"Has Consumption Inequality Mirrored Income Inequality?"
(with Mark Aguiar, 2010)

- Large increase in income inequality over last 30 years
- Consumption inequality, measured by CE, rose much less
  - e.g., Slesnick (2001), Krueger and Perri (2006)
- Use budget constraint and CE data on savings to check consistency
- Use Engel curves across goods for alternative measure
  - Corrects for systematic errors by good or income
Implied Consumption Inequality

Log Change from 1980-82

After Tax Income
Implied Consumption Inequality

Graph showing the log change from 1980-82 for After Tax Income and Reported Expenditure.
Implied Consumption Inequality

Log Change from 1980-82

After Tax Income

Y-S

Reported Expenditure

Two Good Examples: Food and Entertainment

![Graph showing relative spending over years for different categories: Nondurable Entertainment, Total Expenditure, and Food at Home.](image-url)
Implied Consumption Inequality

Log Change from 1980-82


After Tax Income
Estimated Expenditure
Y-S
Reported Expenditure
Description of Data Used

● Panel feature of data
  — to match expenditures to income
  — to instrument across surveys to address measurement error

● All available years (including 1972-73) to uncover long-term trends

● Interview files: Family, ITAB, and MTAB files
  (MTABS for finer disaggregation, for unit prices for durables)
Suggestions for CE Survey and Products

For many questions aggregate household consumption is key

- Exploit household budget constraint as check

- Begin with estimate aggregate expenditures
  - bring records of check, credit spending, estimate currency flow

- Then drop number of questions that generate little expenditure share
For many questions need CE’s short panel

— match income/spending, estimate life cycle or allow fixed effects

● Reductions in attrition would be great

● Bring in households only for full cycle

● Make existing years easier to use as panel
  — e.g., consistent set of ID’s across census changes
  — perhaps produce panel version