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)

household real nondurable consumption (in logs)
Figure 5

The scatter plot shows the relationship between the quality slope and 1980-1996 unit price inflation. The correlation coefficient (corr) is 0.51.
"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

Log Change from 1980-82

After Tax Income

Reported Expenditure
Implied Consumption Inequality

The graph illustrates the log change from 1980-82 in After Tax Income, Reported Expenditure, and Y-S from 1980 to 2005. The X-axis represents the years, while the Y-axis shows the log change. The data points indicate trends and changes in consumption inequality over the years.
Two Good Example: Food and Entertainment

![Graph showing relative spending on food and entertainment over time.]

- Nondurable Entertainment
- Total Expenditure
- Food at Home
Implied Consumption Inequality

Log Change from 1980-82

After Tax Income

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