

Comments on “How do Households
Respond to Income Shocks?”
by D. Krueger and F. Perri

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What is the goal of paper?

- Question:
 - What do households do when faced with income shocks?
 - Model 1 (Arrow-Debreu): Individual consumption depend on *aggregate* income process.
 - Model 2 (Friedman PIH): Consumption depends on *individual* income process.
 - Most models use income and consumption data
 - This paper uses detailed data on wealth to assess the response on both consumption and wealth.

So what?

- Use of wealth is important because models make opposing predictions about the size of short and long term response of wealth to income shocks.

What does the paper do?

- Document correlations between income and consumption and wealth
 - Positive correlation between income and consumption, but consumption does not react much
 - Positive and strong correlation between income and wealth, particularly real estate and business wealth
- Write down a standard PIH model with quadratic utility
 - Estimate consumption and wealth responses to income shocks using sample of households that do not own businesses nor real estate.
 - For this sample PIH does a good job
 - 23 cent change in consumption to 1 euro change in income
 - > Idiosyncratic shocks are important

What does the paper do?

- Write down a buffer stock model with precautionary motives and no borrowing
 - Response of wealth over different horizons suggest this model does not fit the data.

Where I'm less convinced

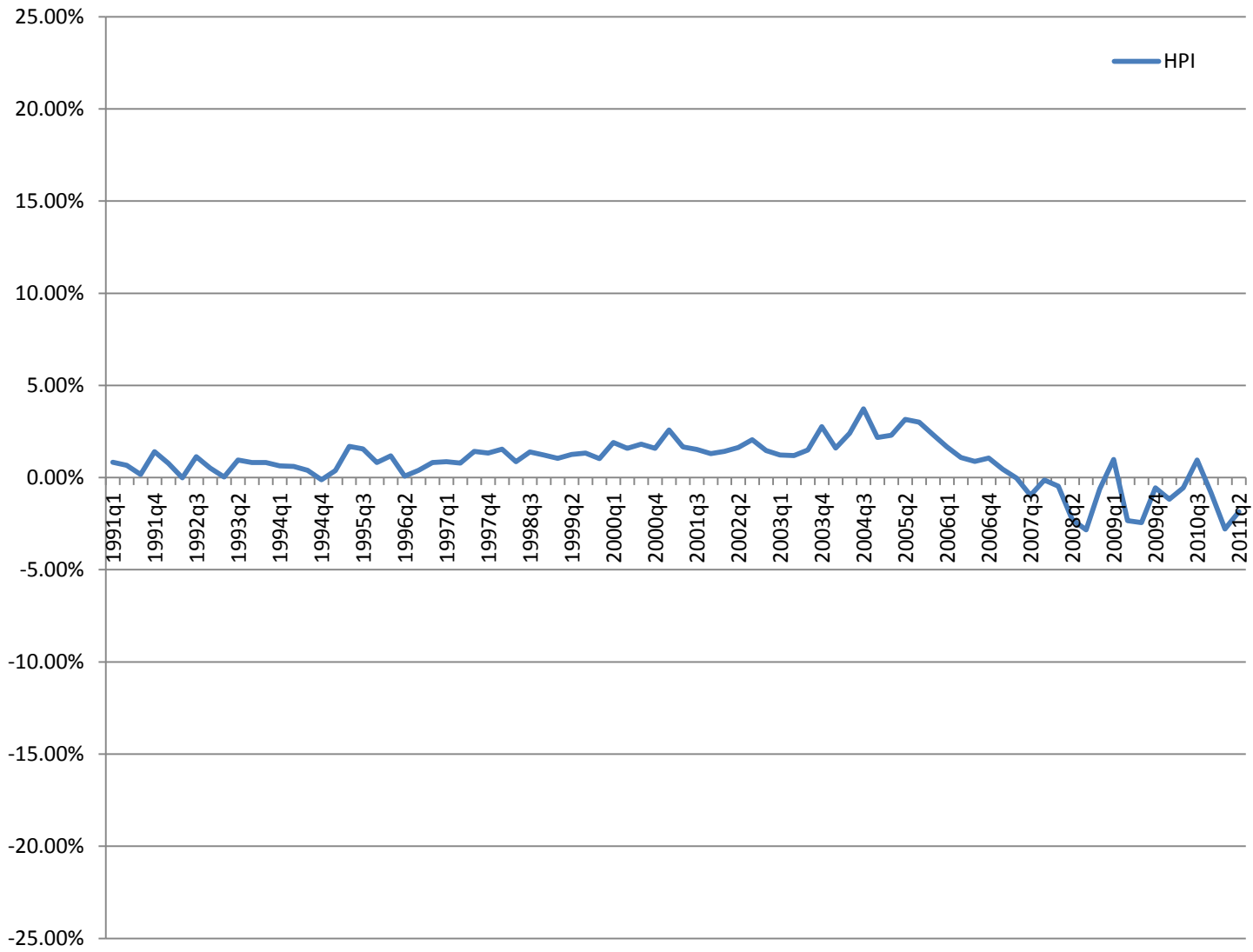
- Are income shocks exogenous?
 - Individuals with different taste for risk may select into occupations with different income profiles
 - Even within the same occupation, choice of income profile may be relevant.
 - In a sample of boatowners in Tamilnadu, CV of monthly catches from 2005-2010 related to wealth and education measured in 2004.
- Decision to own a house (or a business) is endogenous as well.
 - In some models owning a house or renting may not matter, but if there are frictions, it will.

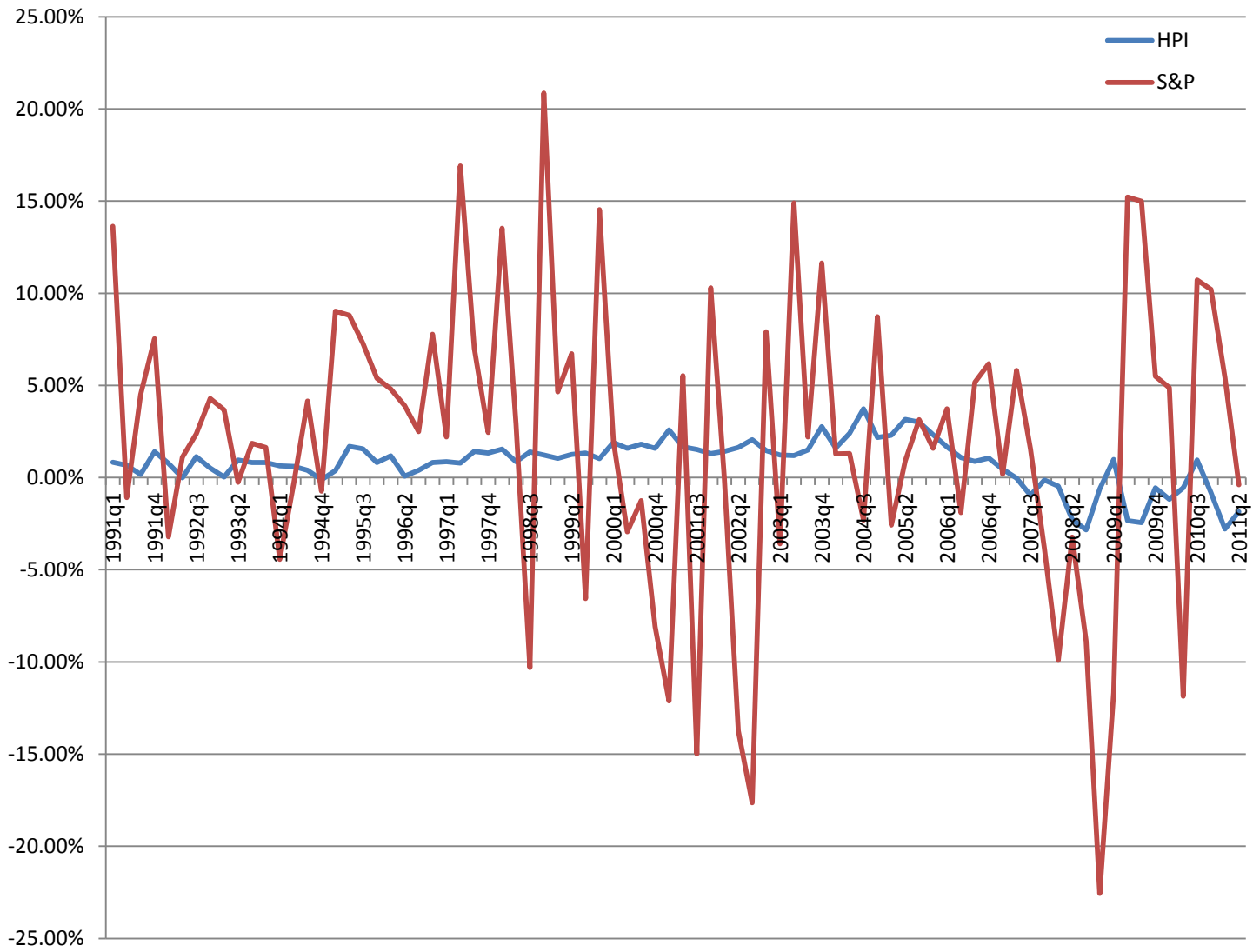
Where I'm less convinced

- Empirics
 - Bivariate regression may be misspecified for models other than the PIH.
 - In the presence of borrowing constraints, consumption is driven by the income shock as well as current wealth.
- Aggregate vs idiosyncratic shocks
 - The N=2 PIH estimates suggested that shocks were mostly idiosyncratic.
 - However, co-movements between real estate wealth and income suggest aggregate shocks could be important. So what is it?

Where I'm less convinced

- Real estate wealth
 - I would have expected changes in (more) liquid assets to co-move more with income, as they can be used as buffer
 - Result on business wealth may confirm this
 - Conjecture that value of real estate may be correlated with income.
 - But only 11% are homeowners and do not adjust the stock
 - Do self-employed work where they live, and are they more likely to adjust?
 - Price of housing units in the US exhibits fluctuations over time but they tend to be small





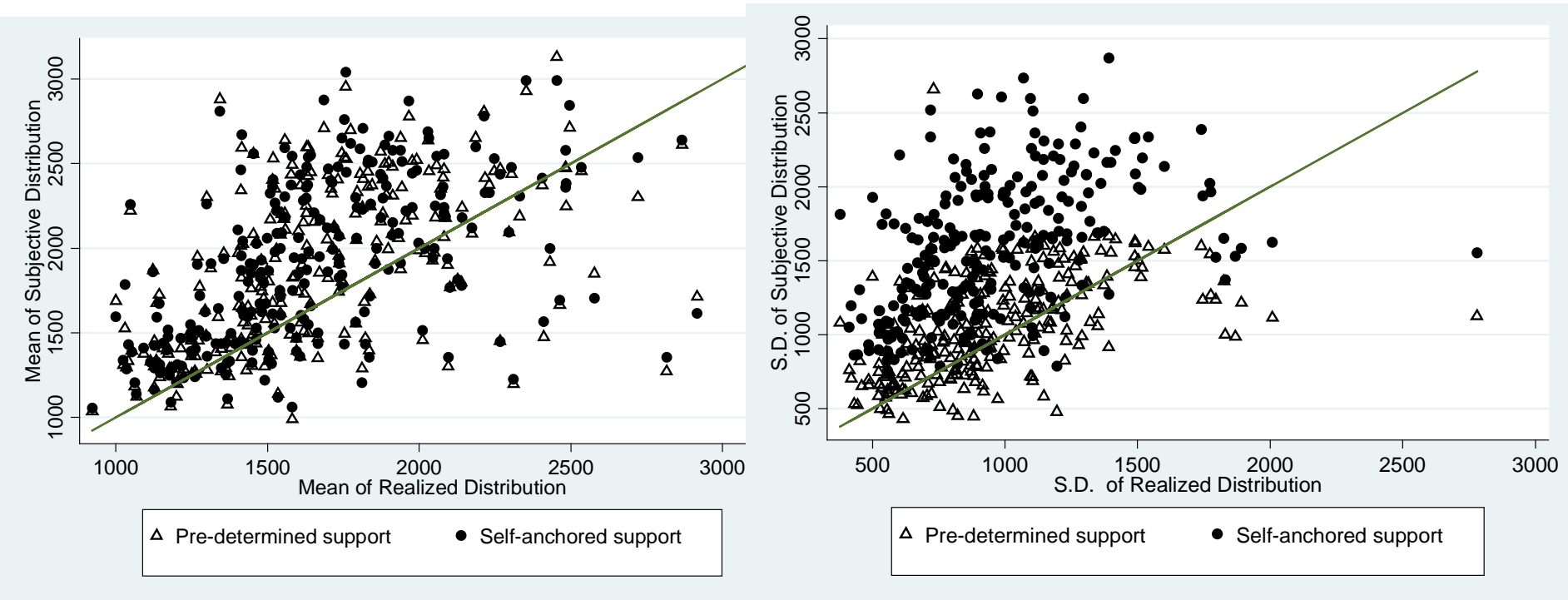
Other thoughts...

- What would a cohort analysis using the Italian data deliver?
 - Evidence of consumption inequality could be used as a test of the models
- Exploit higher N differences to estimate the parameters of interest.
- Use of confidence intervals to bound model predictions
- Are shocks unanticipated?
 - In the presence of borrowing constraints, savings and asset accumulation are sensitive to consumer expectations about the stochastic process governing income (Deaton 1991)
 - If labor income is iid, then assets play the role of buffer, so consumption is smooth. If labor income is autocorrelated, the less scope for smoothing.

Other thoughts

- More in general, estimates may confound “superior” information with insurance
 - Consumption may react little to income changes either because shock was anticipated and thus already incorporated in optimal plan or because the agent has the ability to smooth consumption
- Solution: Combine data on realizations with expectations (Kaufmann and Pistaferri)
 - Caveat: This assumes that expectations are unbiased

Mean and SD of Realized and Subjective Distributions



How could a development economist use this paper?

- Nice approach:
 - Use data to discriminate against two theories
 - Simple PIH model and a model with precautionary savings and borrowing constraints.
 - I would have liked a bit more discussion about the choice of the consumption model. PIH vs Buffer stock vs Insurance model
- There are data sets available in developing countries!

How could a development economist use this paper?

- But, policy implications are far less clear if people choose the income risk profile
- Build a model that takes occupational choice and housing into account to deliver precise welfare impacts