In Search of Lost Time Aggregation

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In 1960, Working noted that time aggregation of a random walk induces serial correlation in the first difference that is not present in the original series. This important contribution has been overlooked in a recent literature analyzing income and consumption in panel data. I examine Blundell, Pistaferri and Preston (2008) as an important example for which time aggregation has quantitatively large effects. Using new techniques to correct for the problem, I find the estimate for the partial insurance to transitory shocks, originally estimated to be 0.05, increases to 0.24. This larger estimate resolves the dissonance between the low partial consumption insurance estimates of Blundell, Pistaferri and Preston (2008) and the high marginal propensities to consume found in the natural experiment literature.

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