# Unbiased Estimation of the Half-Life to Price Index Convergence among U.S. Cities

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## Abstract

Estimates of the half-life to convergence of prices across a panel of cities are subject to bias from three potential sources: inappropriate cross-sectional aggregation of heterogeneous coefficients, presence of lagged dependent variables in a model with individual fixed effects, and time aggregation of commodity prices. This paper finds no evidence of heterogeneity bias in annual CPI data for 17 U.S. cities from 1918 to 2006, but correcting for the "Nickell bias" and time aggregation bias produces a half-life of 7.5 years, shorter than estimates from previous studies.

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