

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.

LITERATURE CITED

Carrion-i-Silvestre, Josep L., Tomas Del Barrio, and Enrique Lopez-Bazo. (2004) “Evidence on the Purchasing Power Parity in a Panel of Cities. *Applied Economics*, 36, 961–6.

[Web of Science®](#) | [Google Scholar](#)

Cecchetti, Stephen G., Nelson C. Mark, and Robert Sonora. (2002) “Price Convergence among United States Cities. *International Economic Review*, 43, 1081–98.

[Web of Science®](#) | [Google Scholar](#)

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Choi, Chi-Young, Nelson C. Mark, and Donggyu Sul. (2004) " Bias Reduction by Recursive Mean Adjustment in Dynamic Panel Data Models. *Manuscript*, University of Auckland .

[Google Scholar](#) 

Choi, Chi-Young, Nelson C. Mark, and Donggyu Sul. (2006) "Unbiased Estimation of the Half-Life to PPP Convergence in Panel Data. *Journal of Money, Credit and Banking*, **38**, 921–38.

[Web of Science®](#)  | [Google Scholar](#) 

Culver, Sarah E., and David H. Papell. (1999) " Panel Evidence of Purchasing Power Parity Using Intranational and International Data." Mimeo, University of Houston .

[Google Scholar](#) 

Engel, Charles, and John H. Rogers (1996) "How Wide Is the Border *American Economic Review*, **86**, 1112–25.

[Web of Science®](#)  | [Google Scholar](#) 

Im, Kyung So, M. H. Pesaran, and Yongcheol Shin. (1997) " Testing for Unit Roots in Heterogeneous Panels." Working Paper, University of Cambridge .

[Google Scholar](#) 

Koo, Jahyeong, Keith R. Phillips, and Fiona D. Sigalla. (2000) "Measuring Regional Cost of Living. *Journal of Business & Economic Statistics*, **18**, 127–36.

[Web of Science®](#)  | [Google Scholar](#) 

Levin, A., and C. F. Lin. (1993) " Unit Root Tests in Panel Data: New Results. *Manuscript*, Board of Governors of the Federal Reserve System , Washington , DC .

[Google Scholar](#) 

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Phillips, Peter C. B., and Donggyu Sul. (2004) "Bias in Dynamic Panel Estimation with Fixed Effects, Incidental Trends and Cross Section Dependence. *Manuscript*, University of Auckland .

[Google Scholar](#) 

Sonora, Robert J. (2005) "City CPI Convergence in Mexico. *Review of Development Economics*, 9, 359-67.

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