Price-level Convergence:
New Evidence from U.S. cities

M. Ege Yazgan and Hakan Yilmazkuday

Economics Letters

2011; EL

Volume 110, Issue 2, 76–78.
Bilateral price-level convergence are tested among 52 U.S. cities at the good level.

Real exchange rate persistence

- Literature using international data has half-life estimates between 3-5 years
  - Choi et al. (2006), Murray and Papell (2005), Frankel and Rose (1996)
- Literature using U.S. city-level price data has lower half-life estimates
  - Parsley and Wei (1996) have half-life estimates ranging from 4 to 15 quarters
  - Crucini and Shintani (2008) have half-life estimates around 6 quarters.

This paper has the following half-life estimates using U.S. city-level price data:

- About 1.64 quarters for all goods
- About 1.37 quarters for perishable goods
- About 1.45 quarters for non-perishable goods
- About 2.76 quarters for non-tradable goods
Estimation

- Pair-wise approach by Pesaran (2007) is used to test convergence of relative prices.
- The data:
  - cover 48 final goods and service prices
    - 16 perishable, 16 non-perishable, 16 non-tradable (service)
  - cover 52 U.S. cities (from 28 U.S. states)
  - are provided by the American Chamber of Commerce Researchers Associations (ACCRA)
  - are quarterly covering the period 1990q1 through 2007q4
- This paper has the following half-life estimates using U.S. city-level price data:
  - About 1.64 quarters for all goods
  - About 1.37 quarters for perishable goods
  - About 1.45 quarters for non-perishable goods
  - About 2.76 quarters for non-tradable goods
- Connection to the existing literature, half-life estimates are:
  - much lower compared to other U.S. city-level evidence.
  - in line with other city-level evidence from Canada and China:
    - Ceglowski (2003) estimates half life as about 2.2 quarters
    - Fan and Wei. (2003) estimate half lives ranging from 0.25 to 1.25 quarters