CCK107.tex

## Calvo, Celasun and Kumhof A Theory of Rational Inflationary Inertia

Discussion by Lars E.O. Svensson

- Model of inflation inertia, with better microfoundations
- Small open economy, tradeable and nontradeable goods
  - Tradeables: Law of one price
  - Nontradeables: Sticky inflation
  - Exchange rate stabilization experiments
    - \* Unanticipated reduction of currency depreciation/tradeables inflation implies recession
- Empirical estimation of derived Phillips curve on Mexican data

Model of inflation inertia

- Calvo 83
  - Firms set optimal constant prices, exogenous Poisson process, arrival rate  $\delta$ , expected time between changes  $1/\delta$
- Inflation jump variable, no inertia
- Credible disinflation implies boom (Ball)
- Yun 96
  - $-\operatorname{Firms}$  set optimal initial price, indexed to steady-state inflation
- Calvo, Celasun and Kumhof 01
  - Firms set optimal initial price and optimal constant firm-specific inflation
  - Inflation inertia: Distributed lag of previous firm-specific inflations

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#### • Comments

- Improvement: Inflation inertia with better microfoundations
- Incentive-compatible, higher profit
- Why stop at *constant* firm-specific inflation?
- Why not firm-specific price path?
- (Why not index to price level?)
- Why exogenous price change instead of state-dependent?

# Stabilization experiments

- Unanticipated permanent and temporary reduction of currency depreciation/tradeables inflation from 40%/yr to 10%/yr
- Initial nontradeables recession: Nontradeables inflation inertia, relative price of nontradeables too high
- $\bullet$  Dynamics of consumption and inflation depends on anticipated future depreciation/inflation
- $\bullet$  Comments
  - Drastic stabilization, normal price changes, incentives?
  - Perfect foresight after initial surprise?
  - Reason for stabilization?
  - $-\operatorname{Optimal\ stabilization?}$ 
    - \* Announce well in advance
    - \* Credible gradual disinflation optimal?

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## Empirical evidence (preliminary)

- Discrete-time version
- Mexican data 98:1–99:1
- "Errors in variables", RE, GMM
- $\bullet$  Constant parameters, dummy for Tequila crisis
- $\delta = 0.8$  (0.04), expected time between price changes  $\approx 5$  qtrs

## Additional comments

- Discrete vs. continuous time
- $\bullet$  Compare with literature
- $\bullet$  Stochastic difference equations
- $\bullet$  LQ-model, optimization (discretion and commitment) and estimation, Söderlind EEA 99
- $\bullet$  Optimal policy, inflation targeting, etc.

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