EUROPEAN CENTRAL BANK

EUROSYSTEM

Discussion of “The International Propagation of News Shocks” by P. Beaudry, M. Dupaigne and F. Portier

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Overview

- Contributions:
  - Novel empirics and theory on international business cycle (IBC)
- Brief summary:
  - Empirical identification scheme and theoretical mechanism
- Some observations:
  - Closer link between empirics and theory
  - Role of risk sharing in IBC

Key contributions

- Important and growing literature on news shocks, both theoretical and empirical
- This very fine paper by Beaudry, Dupaigne and Portier (hereinafter BDP) extends their innovative and highly relevant work to open-economy:
  - Novel evidence on propagation of anticipated technological changes from US and Germany to Canada and Europe
  - Source of international business cycles / cross-country co-movements of macro aggregates
  - Theoretical framework consistent with both NBC and IBC

The paper’s empirical framework

- VAR evidence based on same identification strategy as BP (AER, 2006):
  - Current signals on future technology level affect stock prices but are orthogonal to currently observed TFP
  - In small VARs BP (2006) show these shocks broadly similar to shocks explaining all of long-run variation in TFP (Galí, 1999)
- This paper: 3-variable VARs to show that these shocks generate economic expansions abroad:
  - M, and Y*, I*, C*, N*, X* also increase

The paper's theoretical framework: NBC

- 2-country extension of BP (JME, 2004) 2-sector model to account for IBC on top of NBC
- Preventing wealth effects from initially driving down I, N and Y:
  - Vertical structure with intermediate and final C,I production
  - K and L strongly complement in C production
  - Costly input reallocation between C,I intermediate production

The paper’s theoretical framework: IBC

- Trade in both (C,I) intermediate goods
- Same mechanism as NBC at the heart of IBC before news materializes as risk sharing high:
  - Foreigners also benefit from wealth effects of country-specific news
  - Generally difficult to generate IBC without global TFP shocks in neoclassical model
- Strong complementarity between domestic and foreign tradables yields IBC when TFP increases – BKK (1994,1995)

Some issues for discussion

- Excellent work, nicely linking empirics and theory
- Why not making this connection a bit tighter?
- First, could shed more light on empirical support for the paper's propagation mechanism?
  - Many competing mechanisms with potentially different implications – e.g. role of preferences vs technology, adjustment costs, etc…
- Second, is assumed role of risk sharing in causing IBC warranted?
  - Full risk sharing at the heart of many puzzles in standard IRBC models

The domestic dimension of news shocks

- Which litmus tests for competing hypothesis?
  - Some emphasis on stock prices, but this is assumed to some extent in identification
- What predictions regarding other asset prices, like real interest rates?
- Or relative prices like intermediate consumption and investment, real wages?
- What about role of nominal frictions and monetary policy?

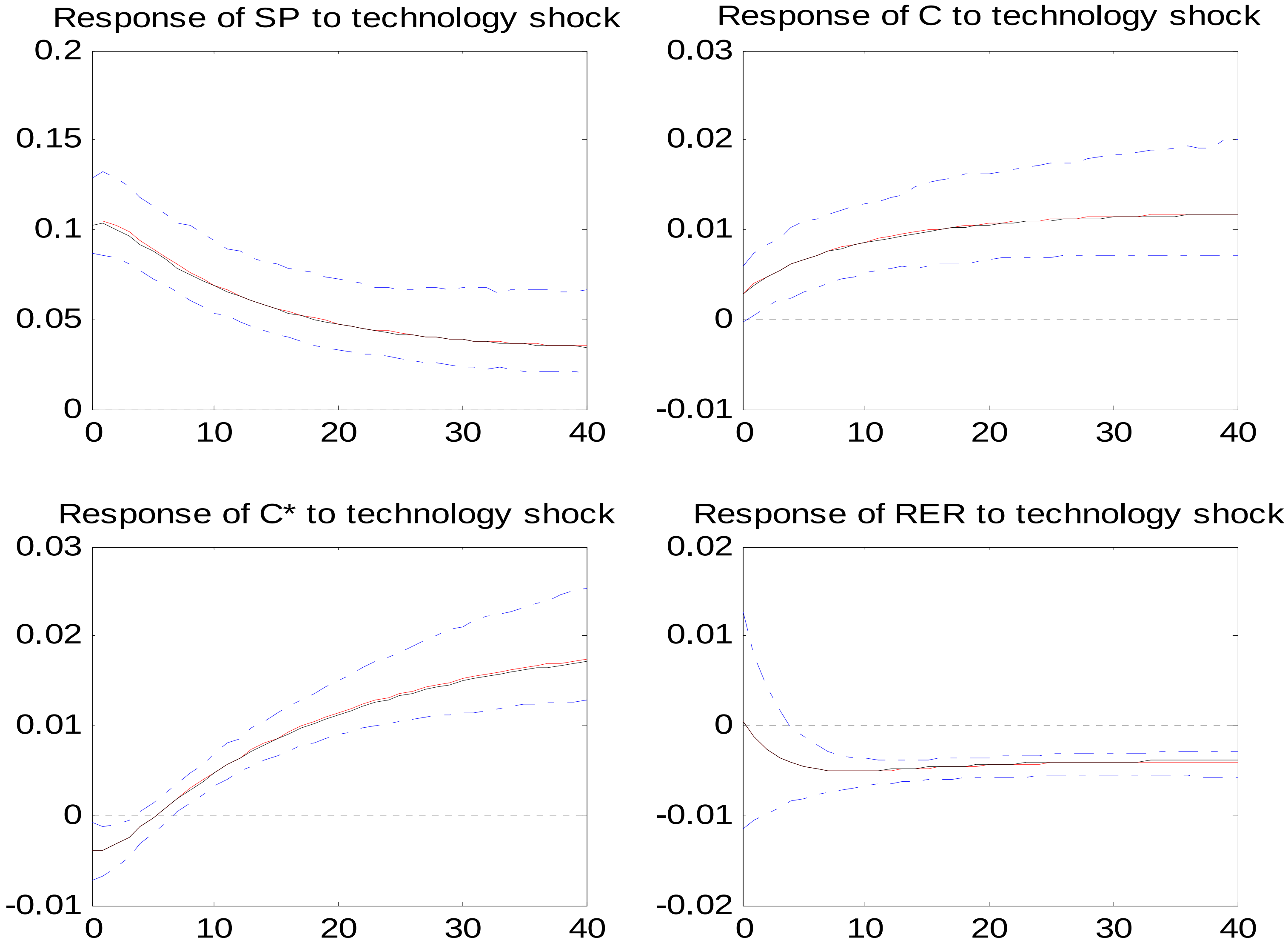
The international dimension of news shocks

- High risk sharing goes against IBC with TFP shocks – Y, I and N increase but Y*, I*, N* decrease because of positive wealth effects
  - Even with high complementarity of tradables, corr(C,C*)>>corr(Y,Y*)
- Propagation of news shocks hinges on high risk sharing – Foreigners expect to benefit from future technology boom in other country
  - With assumed preferences, real depreciation and corr(C/C*,RER)>>0
- Yet strong <u>unconditional</u> evidence against this even between US, Canada: corr(C/C*,RER)<<0

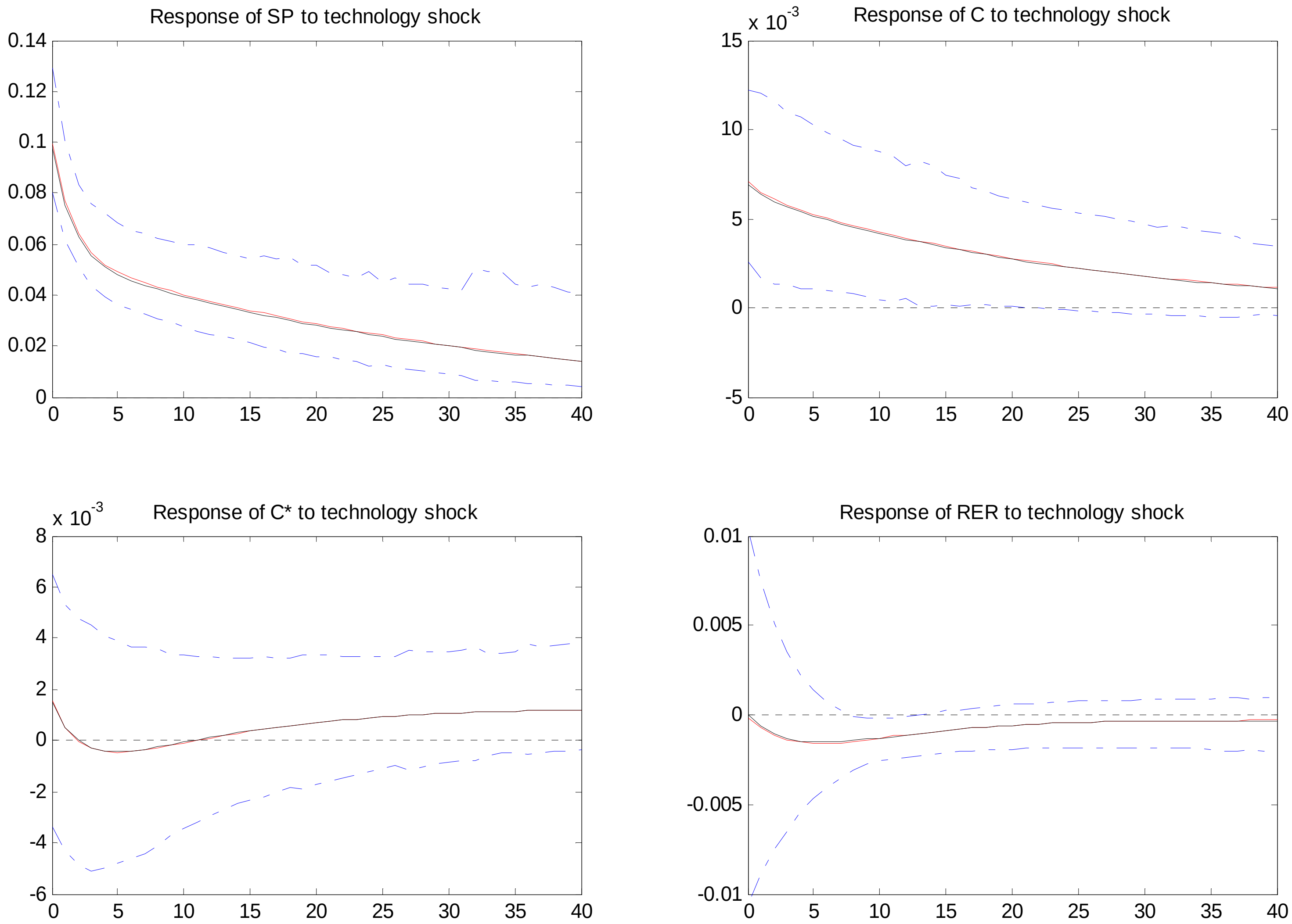
Int. dimension: Conditional risk sharing

- Evidence against high risk sharing conditional on standard technology shocks is accumulating –Enders & Muller (2007), Neri et al. (2007), CDL (2006,2007)
- Consistent with domestic wealth effects much stronger than abroad
- What about news shocks? Some results from quick & dirty VAR exercise
  – US-Canada annual data 1960-2004 (1960-1996 with corrected TFP from Basu et al. (2007))
  – News shocks orthogonal to measured TFP – level-variables specification, 1 lag

IRF with conventional TFP



IRF with BFK corrected TFP



Concluding remarks

- Very nice paper, contributing to both empirics and theory of international business cycle
- Important and interesting to further explore the coherence between empirics and key theoretical predictions and implications