Comments on Ali Dib, "Welfare Effects of Commodity Price and Exchange Rate Volatilities in a Multi-Sector SOE Model"

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Summary of the Paper

- Multi-sector new Keynesian model
- Curvature in preferences and technology: fluctuations on relative prices
- Estimation of structural parameters for the Canadian economy
- Empirical assessment of price setting for exporters
- Welfare analysis of ER Regimes

Main messages:

- Commodity prices shocks are a major source of RER fluctuations
- Welfare is better under flexible than fixed ER

Discussion of the features of the model

- Related literature (e.g. Mendoza, 95). Difference and similarities (commodity as intermediate input?) and their implications

- Curvature and the relative price movement:

  – This paper: imperfect substitution coming from preferences and technology

  – Another curvature: costly reallocation of factors across sectors

  – PTM vs. LCP and connection of RER with fundamentals

- Exchange rate regime tradeoffs:

  – Mundell-Fleming: what matter is the source of fluctuations (nominal vs. real)

  – What elements favors a fixed ER?

  – What elements favors a flexible ER?

    Examples:
    (i) Balance sheet effect on currency mismatch economies (see Cespedes, Chang and Velasco, 2004)
    (ii) Asset market segmentation (Lahiri, Singh and Vegh, 2003)
    (iii) Price setting (Devereux and Engel, 1998, 2003, 2006)

Estimation of the model

- Structural break in correlation between RER and Commodity prices?

- Data on production of each sector are measured in value-added terms? In the model Y_T and Y_N include the value of commodity used as intermediate goods. What is observable in the data: Y_T or $Y_T - P_X Y_{XT}/P_T$?

- Emphasize more that LCP model delivers better fit than PTM model. Comment more on the log-likelihood values. This is just a result that reduces the welfare gains of fixed ER.

- Inflation is not an observable variable: Can we estimate ϱ_π? Better calibrate it.

- Robustness of estimation: LCP and PTM delivers different values for ρ_{p_X}. $P^*_{X,t}$ is observable and has an AR process.

- Impulse Response function: use estimated standard deviation of shocks

- More discussion on the negative response of consumption to a positive commodity price shock [*Dutch disease; think of income and substitution effects*]

  – Value-added of manufacturing sector falls: input price rise and reallocation of factors

  – Link to monetary policy reaction

  – It is still true in the same model without nominal rigidities?

- Include total GDP in the impulse response graphs

- Show impulse response for fixed exchange rate [make clear that RER is constant]

About the welfare analysis

- Model nests some advantage of fixed exchange rate regime?
- How welfare differences are compared to other findings
- Even with PTM, flexible ER is better than fixed
- Using same parameter values, welfare gains of flexible ER doesn't depend on price setting assumption (contrast with work of Devereux and Engel)

Final Comments

- Interesting paper
- Multi-sector model: richer dynamics
- More discussion on what we can learn from the dynamics of this model
- More on the benefits and costs of flexible ER highlight for this model

Don't forget:

Central Bank Workshop on Macroeconomic Modelling to be held on September 28-29 at the Central Bank of Chile