

Discussion of “Beyond the Hump: Structural Change in an Open Economy” by Lidia Smitkova

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Disclaimer: the views expressed in this presentation are my own and do not reflect those of the Bank of Canada

Summary

Question: How does **openness** affect structural changes of different countries?

- Most papers study structural change in a closed economy context
 - e.g. Ngai & Pissarides (07), Boppart (14), Comin, Lashkari, & Mestieri (21)
- A few papers looked at role of openness focusing on a particular country
 - e.g. South Korea – Uy, Yi & Zhang (14), US – Kehoe, Ruhl, & Steinberg (18)

⇒ Lack of a systematic global approach

- Competitor: Sposi, Yi & Zhang (R&R Econometrica) – a slightly different focus

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 2. A structural trade model with international borrowing
 - decomposes the margins into fundamental shocks
- ⇒ Provide first evidence on the relative importance of the channels

Decomposition

Decompose country j 's expenditure share of products from country i and sector k as

$$\frac{X_{jik}}{Y_j} = \frac{X_{jik}}{\sum_i X_{jik}} \frac{\sum_i X_{jik}}{\sum_{i,k} X_{jik}} \frac{\sum_{i,k} X_{jik}}{Y_j} = \Pi_{jik} \alpha_{jk} D_j$$

- X_{jik} country j 's spending on products from i and k ; Y_j country j 's total income
- Π_{jik} trade share – where agents source goods from
- α_{jk} sectoral expenditure share – what goods agents buy
- D_j aggregate trade deficit – international borrowing/lending

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Contribution: show formally the decomposition holds with input-output linkages

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Comment 1: To what extent, does decomposition help identify the contribution of openness to structural changes?

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- no change in **trade specialization** as relative competitiveness remains unchanged
- small impact on **international borrowing** as no change in relative conditions
- most of the changes will be loaded into the “**sectoral demand**” term

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Example 2: keeping trade costs and openness constant $\tilde{\tau}_{jlk} = 0$:

$$\tilde{\Pi}_{jik} = \theta_k \left(\tilde{A}_{ik} - \tilde{\tau}_{jik} - \tilde{w}_i - \sum_l \Pi_{jlk} (\tilde{A}_{lk} - \tilde{\tau}_{jlk} - \tilde{w}_l) \right)$$

⇒ **trade specialization** may merely reflect idiosyncratic productivity changes and not relate to changes in trade integration and openness over time.

Model comments

This paper extends Eaton and Kortum (2002) to have international borrowing and carefully maps into the data to uncover the underlying shocks.

Comment 2: Model would work well without the decomposition

- Can conduct various counterfactuals to uncover the role of openness
 - Decomposition helps in labelling the components (but not necessary)
- ⇒ Clarify value added in labelling **trade specialization** and **international borrowing**
Welfare? Policy?

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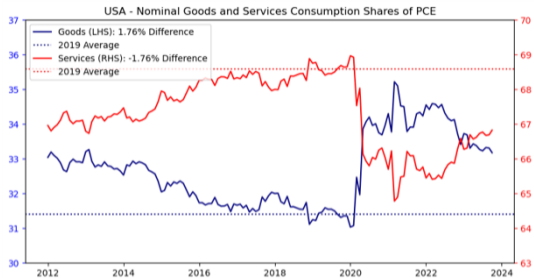
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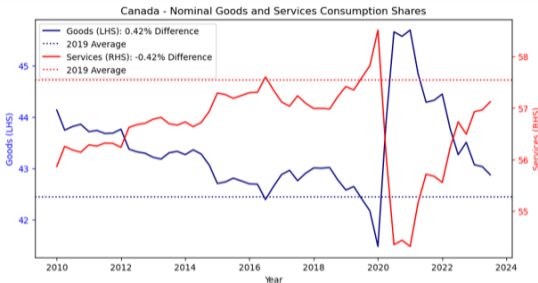
Comment 3: Role of investment

- Borrow only for consumption, driven by exogenous shift in consumer impatience
- Capital accumulation is an important channel in discussions of previous literature
- ⇒ Can you solve a version of model with capital? If not, a discussion on what is missing

Future work: Implications of temporary reversal of the trend during the pandemic?



(a) US – persistent deviation



(b) Canada – close to 2019 level by 2024

- Uncover reason behind differential evolution of goods shares across countries after pandemic and disentangle role of trade and supply chain bottlenecks

Very promising paper!

Other comments

- Dynamic model but solved statically
 - Is perfect foresight a reasonable assumption over a long time span (1965-2011)?
 - How is international borrowing solved needs more elaboration
- Page 17: Not clear why “model simulations are insufficient to tell apart the mechanisms of structural change, but the accounting decomposition achieves the task. ”
- China experiment is confusing to me. Not sure how you fix the endogenous variables for China and why it is necessarily.