Discussion of

Trade Integration and the Trade Balance in China

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Introduction

• China is intriguing:
  1. Extremely fast sustained productivity growth
  2. Even faster increase in international trade
     — surprisingly large role of the extensive margin
  3. Very high savings rate and large trade and CA surpluses
  4. Active capital controls policy and “financial repression”

• Questions:
  • Why savings and CA surplus given the growth rate?
  • Export-led growth? Would growth be different without trade surplus?
  • The role of misallocation/relocation and financial frictions?
  • Is home goods market underdeveloped?
  • Is China’s exchange rate undervalued?
  • Is China growing due to policies or despite policies?
  • China and world savings glut
This paper

• Two-country DSGE model with:
  — incomplete markets
  — pricing-to-market
  — heterogeneous producers and trade participation decision
  — persistent shocks to trade barriers, technology and tastes

• Multiple sources of shocks, somewhat akin to CKM wedges
  — in particular, rich on trade shocks

• Bayesian estimation
  — yields simultaneously parameter estimates and shock realizations

• Model solution: linearization around the steady state
What this approach can accomplish?

• Model-based decomposition of the within-sample outcomes into the contribution of shocks/wedges

• Two main insights from this exercise:
  1. Reduction in trade costs was important for the size of the current account surpluses
  2. Slow down in trade growth is due to the end of transition, not a new negative shock

• What should not be done with this approach?
  1. Counterfactuals: requires structural interpretation of wedges
  2. Out of sample predictions: due to possible misspecification of the model
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Shocks

• Discount factor shock:

\[ \log \beta_t = (1 - \rho_\beta) \bar{\beta} + \rho_\beta \log \beta_{t-1} + \varepsilon_\beta \]

• Productivity \( Z \): mixture of two AR(1) processes

• 5 trade cost shocks:
  — sunk and fixed costs of exporting \((f_0 \text{ and } f_1)\)
  — 3 iceberg trade cost shocks \((\xi)\): import and export transitory shocks plus a common growth rate shock
Figure 6: Deviations from Steady State of Exogenous State Variables
Shocks

• The data does not look stationary
• Chinese productivity does not look mean reverting
• Iceberg trade costs do not look mean reverting
• Log-linear approximation of a model around a steady state?
• Predictions out of sample?
• In the model, agents behave as if all shocks are mean reverting
• How much does misspecification matter for within-sample decompositions?
Questions

• Does understanding the macro trends require a detailed trade model?
  — as opposed to a simple macro model with intensive margin of trade only

• Does the broad macro data require pricing to market?
Current account surplus and growth

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- Productivity evolution:
  \[
  \begin{align*}
  \dot{A}_N &= \kappa \cdot \pi_N^\nu, \\
  \dot{A}_T &= \kappa \cdot (1 - \pi_N)^\nu,
  \end{align*}
  \]

  where \( \pi_N \left( \frac{C}{C^*}, \frac{W}{A_N}, \frac{A_T}{A_N} \right) \)
  
  and CA deficits induce a non-tradable productivity tilt, while CA surpluses leave the domestic market underdeveloped.