Manufacturing - Finance Comparative Advantage and Global Imbalances

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ABFER Inaugural Conference

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Do you think it is necessary to have a static model which predicts \( CA = 0 \) in a paper on global imbalances?

- Merge the two models into a single one that has CA predictions

I don’t understand some aspects of the modeling setup

You seem to have an externality in the model: households choose to give capital, but for 0 direct return

- The return comes in the form of a higher wage next year
- "wage return" = 1 + \( r \) to facilitate the existence of two assets in a risk-free world
- This is not a standard competitive equilibrium setup with price-takers
- It seems you may be solving some kind of central planner’s problem, which in your case doesn’t equal the competitive allocation.
- In a competitive allocation, households would choose \( K = 0 \)
Comments: Model

- Is this a well-defined steady state?
  - The within-generation problem has consumption smoothing and growing $|CA|
    - Consumption is constant in each generation: $C = \frac{1}{1+\beta} \left( Y_1 + \frac{Y_2}{1+r} \right)$
    - But with a constant interest rate and no risk, your model seems to have a unit root in NFA ($NFA \rightarrow \pm \infty$), possibly as a fraction of output

- Schmitt-Grohe & Uribe 2003 JIE show that SOE models with incomplete asset markets exhibit dependance on initial conditions, and so are inconsistent with a steady state growth path

- Stability which prevents transient shocks from having permanent consequences needs to be induced by, e.g., debt-elastic interest rate, convex adjustment costs, etc.

- What are the stability properties of your model?
The point you are making with the model is very intuitive and simple.

In a two-country world with perfect specialization, one country will end up making manufacturing stuff, the other will produce financial services.

Do you really need a very complex model to say this and bring idea to the data?
Empirical exercise very similar to Chinn and Prasad (2003, JIE)

- One new variable: Relative labour productivity
- They cover 89 countries, you cover 24: probably can increase sample?
- Results are mostly consistent with Chinn and Prasad (2003)
Why this country selection?

- Two-country model, but data only for small open economies.
  - The main feedback loop in your model – the dependance of interest rate on country characteristics (productivity) – need not be satisfied in the data.
- There are no CA-creditor countries in the sample except for Korea and Germany (Canada in a some years)
- Would be nice to see more Asian economies and the US, especially since the usual paradigm in explaining global CA imbalances is ”East vs. West”
Comments: Empirics

Why this country selection?

- Another reason why it would be nice to see more Asian countries:
  - Singapore, Hong Kong: world financial centers
  - Also very important manufacturing centers
  - But my guess is that their comparative advantage is in finance, not manufacturing
  - Singapore and Hong Kong run large CA surpluses
  - May not support the theory
Comments: Empirics

- **Link between Fiscal and CA balances**
  - "Twin deficit" literature concludes no long-term relationship (some decades +, some −)
  - This is because both CA and FB driven by shocks
  - Persistence and the degree of commonality across countries matter for results
Output per worker is an imprecise measure of what you mean by “productivity”

- Imprecise measure of TFP: Both $Y$ and $L$ respond endogenously to $TFP$
- On the flipside, $Y/L$ can also move when TFP doesn’t:
  - non TFP induced changes in $K$
  - policy changes
  - tax change
- These are particularly relevant issues when looking at long (growth) horizons
I use a panel of constructed sectoral TFP levels from another project. 

$TFP_{Man}/TFP_{Fin}$ levels do not suffer from the above issues.

Should give clearer evidence of link between $TFP$ and $CA$.

No other variables, but that may work against me.

Smaller sample: only half of your countries, plus UK, Belgium and Slovenia.
$TFP_M / TFP_F$ vs $CA$: no clear link
$T F P_M / T F P_F$ vs $C A$ in cross-section

Cross sections

TN2
### Pool vs Fixed effects panel

Dependent Variable: CA (constant not reported)
Sample: 1995 2007
Total panel (balanced) observations: 195
Period weights (PCSE) standard errors & covariance (d.f. corrected)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFP_M / TFP_F</td>
<td>-0.035</td>
<td>0.024</td>
<td>-1.459</td>
<td>0.146</td>
</tr>
</tbody>
</table>

R-squared 0.011923  
Adjusted R-squared 0.006803  
F-statistic 2.328872  

Dependent Variable: CA (constant not reported)
Method: Panel EGLS (Cross-section random effects)
Total panel (balanced) observations: 195
Swamy and Arora estimator of component variances
Period weights (PCSE) standard errors & covariance (d.f. corrected)

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</thead>
<tbody>
<tr>
<td>TFP_M / TFP_F</td>
<td>0.078</td>
<td>0.030</td>
<td>2.567</td>
<td>0.011</td>
</tr>
</tbody>
</table>

Weighted Statistics
R-squared 0.040284  
Adjusted R-squared 0.035311  

Unweighted Statistics
R-squared -0.108925  
Sum squared resid 0.363481  

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Comments: Empirics

- Results go in opposite direction from yours: pool insignificant, CFX significantly positive
- Time-series drive the results
- But with only 15 years of data, your growth story should really come through in cross sectional results
- This does happen when using $Y/L$ but not when using $TFP$