Comments on
“Foreign Reserves and Capital Controls: Role of Financial Development”

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Overview

- Interesting and important work to think about the relationship between rolling-over risk, fire-sale externality, and international capital flows.

- Key assumptions
  - Small open economy
  - Three assets in the model
    1) International borrowing b_t with varying rate R_t
    2) Foreign reserve s_t with fixed rate R
    3) Productive assets a_t with international price q_t
  - Only when liquidity shock hits, θ portion of productive assets needs to be sold (not rolled over), and only foreigners buy those "liquidated" productive assets a_t^l (→ I call this *capital*)

- I have only five comments, more like clarifications.

Dealing with a liquidity shock

- When a liquidity shock hits, capital a_t^l are assumed to be liquidated. The amount of liquidation is declared in (5), creating liquidity at least to compensate the liquidity shock

$$(5) \quad q_t a_t^{\ell} \geq -\theta_t b_{t-1} - s_{t-1}$$

- However, the budget constraint is given in (2)

$$(2) \quad c_t + \frac{b_t}{R_t} + \frac{s_t}{R^s} + z_t = a_t + b_{t-1} + s_{t-1} + q_t a_t^{\ell}$$

- Here seems other way of responding to the liquidity shock, that is, lowering consumption c_t and investment z_t, instead of handling liquidity shock solely by liquidating capital a_t

Why not buy foreign fire sales?

- In (6), the authors assume the liquidation occur only domestically and the liquidated capital a_t^l is sold to the international market at price q_t.

(6) $$q_t a_t^{\ell} \geq 0$$

- However, why not buying any “cheap” capital from abroad, if the international price of capital is lowered? Note that this capital from abroad this period may originate from this country, which sold them before.

Small or Big country?

- Capital price q_t is internationally determined, yet still subject to the supply of domestic liquidated assets, through (8), that is FOC of (7), foreign firms' profit maximization problem.

(8) $$q_t = (1-\zeta)\left(\frac{a_t^*}{a_t^\ell}\right)^\zeta$$

- This seems that this country affects "international price." Is this small open economy? Maybe better to work out in a two-country model?

What is productive assets?

- Capital price q_t is internationally determined, yet still subject to Foreign firms distinguishing domestic and foreign assets differently in production and profit maximization in (7).

(7) $$\pi_t^* = \max_{a_t^\ell} (a_t^*)^\zeta (a_t^\ell)^{1-\zeta} - F a_t^* - q_t a_t^\ell$$

- What is productive assets a_t?
  - Machine and equipment: Should not work differently across countries like in (7)
  - Knowledge (patent etc): Should not work differently across countries like in (7)
  - Land: Indeed country specific. However, it cannot be sold to other countries (even though its ownership can). Therefore, it cannot enter foreign firm's production like in (7).
  - Country specific intermediate products?: Better specify so, even for domestic production. (If so, I would go back to the second question, why not buy foreign assets?)

International liquidation market?

- productive assets a_t → International liquidation market
  - Machine and equipment → market for the second use?
  - Knowledge (patent etc) → market for intellectual property
  - Land: Indeed country specific. However, it cannot be sold to other countries (even though its ownership can). → only domestic market?
- In any case, ownership (FDI, M&A) market seems closest.
  - Rather than general financial development variables, why not focus on such market variables? (e.g., capital control for FDI, foreign ownership of equity market, etc.)