Discussion of “Does Moving to a Flexible Exchange Rate Regime Reduce Currency Mismatches in Firms’ Balance Sheets,” by Herman Kamil

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Overview

- Firms are exposed to exchange rate risk through their choice of currency-denominated debt.
  - How do firms make this choice?
  - Is the empirical allocation sub-optimal?

- Does the exposure vary across exchange rate regimes? (*)
  - Does this tell us anything about how firms make choices?
  - Are there welfare consequences (Policy Implications)?
Empirical Results

- Share of debt denominated in foreign currency declined in the late 1990s (Figure 2).
- More sensitivity to export share. (*)

\[
\frac{b^*}{b + b^*} = \alpha_0 + \alpha_1 Flex + \alpha_2 \frac{X}{S} + \alpha_3 \left( \frac{X}{S} * Flex \right) + \ldots 
\]

- \( \alpha_3 \) is positive. What does this mean?
Framework

- Consider a simple model in which there are costs to firms of raising money externally (e.g. Froot, Scharfstein, and Stein JF 1993).
- Two periods
- Firms enter the second period with cash on hand $x$ and undertake investment to maximize profits:

$$V(x) = \max_{I} f(I) - I - C(I - x),$$

where $f$ is a concave production function and $C$ is a convex cost of raising external financing.
- FOC: $f' - 1 = C'$. Here, $C'$ is a wedge between the marginal product of investment and the frictionless (internal) cost of funds.
Suppose in period one, firms decide on currency composition of debt. Fix total debt at one.

\[ x = z - (b^*\tilde{e} + 1 - b^*), \]

where \( z \) is the realization of sales in period two and \( \tilde{e} \) is the exchange rate (with \( E(\tilde{e}) = 1 \)).

Period one problem:

\[ \max_{b^*} EV(x) = \max_{b^*} V(z - (b^*\tilde{e} + 1 - b^*)) \]

FOC:

\[ EV_x(1 - \tilde{e}) = 0 \]

Envelope condition \( V_x = C' \).

\[ Cov(C'\tilde{e}) = 0. \]

Hedge the friction in financing.
Implications for Exporters

- Suppose that a depreciation means an increase in sales $z$.
  
  \[ \tilde{e} \uparrow \implies z \uparrow \implies I - x \downarrow \]

  \[ C' \downarrow \implies x \downarrow \]

  \[ b^* \uparrow. \]

- Suppose that a depreciation means an increase in the returns to investment.
  
  \[ \tilde{e} \uparrow \implies I \uparrow \implies I - x \uparrow \]

  \[ C' \uparrow \implies x \uparrow \]

  \[ b^* \downarrow. \]
One possible interpretation

- (Real) exchange rates are more persistent under a fixed exchange rate. There is some evidence for this.

- A depreciation raises future investment opportunities for exporters, leading them to reduce exposure to foreign debt (relative to some benchmark, like export to sales).

- Real exchange rates are more transitory under flexible regimes.

- A depreciation is a temporary windfall, with relatively less improvement in investment opportunities.

- Exporters increase foreign debt exposure

- Consistent with the facts.

- *Which regime is better?*
• Author’s preferred alternative: Firms become “more aware of exchange risk” in a flexible regime.
• May be true.
• Important Point: Cannot draw policy/welfare conclusions from the exercise.
• Delete such sentences as...
  * More generally, results provide support for the view that floating exchange rate regimes can reduce financial vulnerability in the medium-term in emerging markets.
  * From a policy perspective, these findings suggest that policy makers in highly dollarized economies should consider moving to a flexible exchange rate regime as part of a long-term de-dollarization strategy.
• Similar issue arose with short-term debt in the Asia crisis.

• Short-term debt may be mitigating a deeper inefficiency in the capital markets.

• For example, Diamond and Rajan (Carnegie-Rochester 2001) argue:

  ... our approach implies that one must be cautious about using the bad realized outcome to argue that the original capital structures were too fragile.
Wrapping Up

- Interesting fact
- Need a more rigorous model to gain deeper insights into firm-level decisions
- We need to understand the deeper frictions before we can draw policy implications