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

Discussant Mark Aguiar
University of Rochester

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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

- Data on Latin American economies post-1992.
- Share of debt denominated in foreign currency declined in the late 1990s (Figure 2).
- More sensitivity to export share. $(*)$

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

- α_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.

$$\begin{aligned} \tilde{e} \uparrow \quad &\Rightarrow \quad z \uparrow \Rightarrow I - x \downarrow \\ C' \downarrow \quad &\Rightarrow \quad x \downarrow \\ b^* \uparrow. & \end{aligned}$$

- Suppose that a depreciation means an increase in the returns to investment.

$$\begin{aligned} \tilde{e} \uparrow \quad &\Rightarrow \quad I \uparrow \Rightarrow I - x \uparrow \\ C' \uparrow \quad &\Rightarrow \quad x \uparrow \\ b^* \downarrow. & \end{aligned}$$

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