Country Insurance and Corporate Risk-Taking

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Question

Explanation of reserves accumulation by emerging countries :

War chests to face future shocks

Better handling of macro risk and sudden stops

However, recent crisis :

Countries with large reserve stocks didn't fare better

Possible explanation :

Improvement in ability to deal with macro risk $\Rightarrow$ Risk-taking by firms
($\simeq$ "overborrowing syndrome", McKinnon and Pill 1996)

Investigated empirically here

Methodology and Results

Main issue :

– Reverse causality (Risk-taking $\Rightarrow$ Accumulation of reserves)
– Common cause : capital inflows both increase risk-taking and generate reserve accumulation (especially with a fixed exchange rate regime)

Solutions :

– Difference-in-difference : exploit the asymmetric response of firms to the diminution of macro risk due to reserve accumulation (financial dependence)
– Instrument : cumulated trade surplus

Results :

Robust causal effect

The motivation

Uselessness of reserve accumulation during the crisis

Idea :

1) Additional risk-taking by firms compensates precautionary accumulation of reserve

2) Causality goes from reserves to risk-taking

The paper is about 2)

But what about 1) ?

For this to be a credible channel, we should observe a positive **cross-country** correlation between corporate risk-taking and reserves

The instrument

$$TB = \Delta R - KI$$
$$\Rightarrow R = \sum TB + \sum KI$$

$\sum TB$ is a component of R unrelated to $\sum KI$?

But depends on the shock and on exchange rate policy

The instrument

Example : Fixed exchange rate regime + saving glut

$S = \Delta W$ with $W = B + F$

Portfolio allocation :

$$F = \gamma(\Delta e)W$$
$$B = (1 - \gamma(\Delta e))W$$

To maintain the exchange rate constant ($\Delta e = 0$), the central bank has to increase the domestic bond supply to domestic private agents by $(1 - \gamma)S$

It achieves this by selling its domestic bonds against foreign reserves :
$\Delta B = \Delta R = (1 - \gamma)S$

$\Rightarrow$ Shock that affects ΔR and TB

The instrument

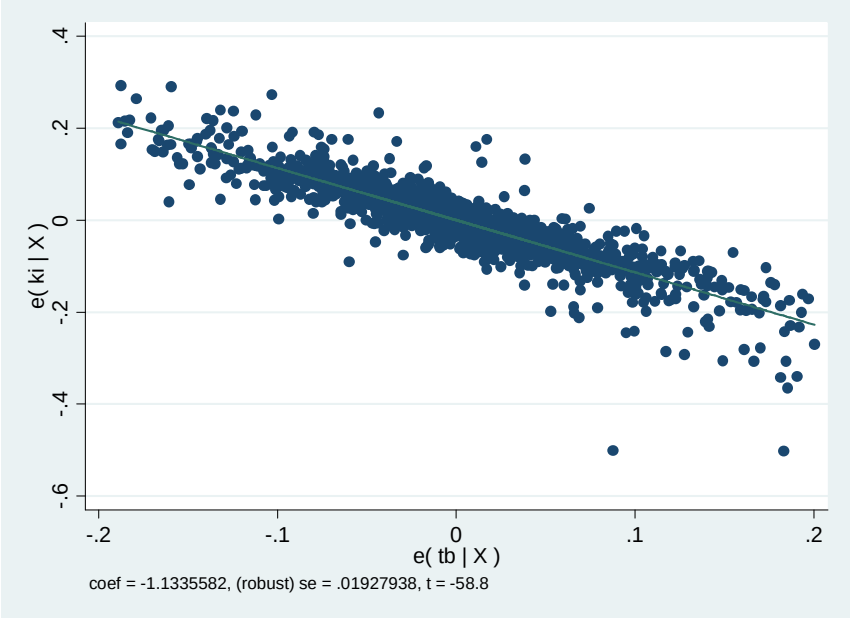
However, $KI = -\Delta F = -\gamma S$

$\Rightarrow TB = \Delta R - KI = S$

$\Rightarrow$ Savings drive reserve accumulation, capital inflows and trade balance in the same time

The instrument

FIGURE 1: Correlation between the trade balance and capital inflows



Source : World Bank, CEPII.

Suggestions

Focus on countries with **flexible exchange rate regimes :** reserves stem from a "pure" precautionary motive

Valuation effects on reserves : another potential instrument ?

$\Rightarrow$ Exploit the currency composition of reserves and the exchange rate variations of the reserves currencies

Problem : Bilateral exchange rate of reserve currencies with domestic currency are endogenous if the country has a fixed exchange rate

Solution : Price of gold or currency to which the country is not pegged ?

Implications

Are reserves really useless ?

Do not affect the severity of the crises

But might still reduce the probability of sudden stop (Milesi-Ferretti and Razin 2000)