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When Is It Optimal to Abandon a Fixed Exchange Rate?

Discussion by

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Comments on: Rebelo and Vegh's "When is it Optimal to Abandon a Fixed Exchange Rate?"

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11/07

The main reason I like this paper is that it is the first I know that begins to link two literatures I like a great deal:

(1) speculative attacks

(2) optimal currency areas.

I think this paper may be more useful to the OCA than to the SA

R&V find: “From a positive standpoint the KFG model is at odds with many episodes in which the central bank has plenty of reserves at the time of abandonment.”

This is not a substantive point in their work, but I do not see their data showing the “at odds” part in their introduction to their work. Indeed, I think their data-based motivation, while not necessarily wrong, is clearly inappropriate.

Reminder of KFG Model

$r(pre) + d - s(pre) = 0$ Fixed Rate regime – pre crisis

vs.

$r(post) + d - s(post) = -\alpha\mu$ Post Crisis Float

The KFG model says:

$$[r(pre) - r(post)] - [s(pre) - s(post)] = \alpha\mu$$

The reserve loss plus the exchange rate increase sums to a fixed number. (In applications, e.g., Blanco and Garber, the right hand side is more complicated.)

The KFG theory experiment sets

$$[s(pre) - s(post)] = 0$$

so the reserve loss is big, $\alpha\mu$.

Indeed, that's how one figures the timing of the final attack in KFG,one finds the date on which final reserves , $R(T) = \alpha\mu$

Since reserves decline at the rate the fiscal deficit forces them out:

$$T_{KFG} = \frac{R(0) - \alpha\mu}{\mu}$$

R&V ask whether T_{KFG} is optimal.

To me, the interest in their question is not really to find the optimal time to abandon – it is to sharpen our hypotheses about when regimes are abandoned in data.

This makes lots of sense their option value theory seems sensible and

is not what I want to discuss.

I want to go back to their motivation

R&V choose crises in which
[s(post) – s(pre)]> 10% .

I am not making this up

"... we choose those episodes in which the devaluation in the month of abandonment is at least 10%...." (R&V sect 7.1, p. 34)

According to KFG, this should give small reserve loss.

If they wanted to check the KFG theory , they

would have looked at cases in which the exchange

rate change is small – not big.

If they look at small exchange rate change and see small reserve changes then this motivates their work.

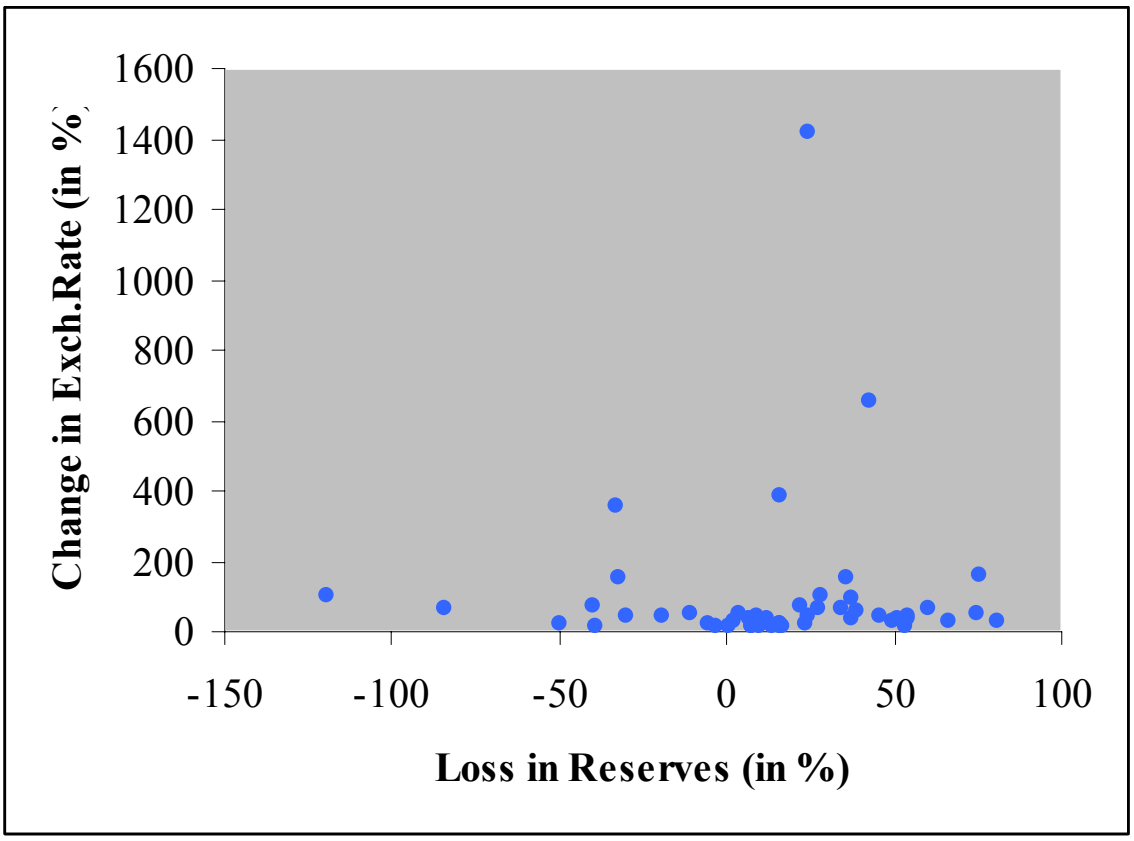
Looking at big exchange rate changes and finding small reserve changes is relevant neither to their work ($\Delta s = 0$) nor is it a critique of KFG.

The KFG idea is:

Big devaluation, small reserve loss – small devaluation, big reserve loss.

In fact, in the model and in the world, if the devaluation is big enough, there will be a reserve gain.

R&V Data (From Table 1)



In fact, the data in Table 1 is far from persuasive about reserve losses and exchange rate changes

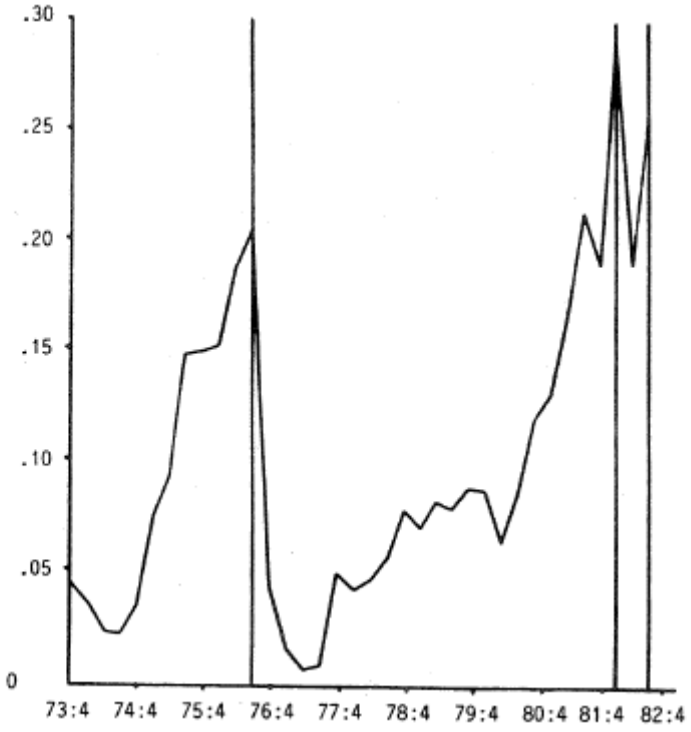
It is no surprise to the KFG model that in the R&V sample, post crisis reserves are plentiful compared to the KFG theory case where they are small.

This was the whole point of the KFG model.

Indeed the first application of KFG to data was done by Blanco and Garber – to Mexico. It's kind of fun that the Mexican devaluations are in the R&V sample and illustrate one case of looking at all the right stuff.

Of course KFG works like a charm.

Blanco & Garber JPE (86) "Recurrent Devaluations and Speculative Attacks on the Mexican Peso"



So, my comment is simple:

I know what R&V are doing, but I don't know – from their paper – why they are doing it.

The motivation needs work.

Where they claim the data they present contradicts the KFG model, in fact, it does no such thing.

Suggestions

I. Go look at cases where $\Delta s < 10\%$. For those cases:

1. look at reserve losses at abandonment

2. contrast with reserve losses in $\Delta s > 10\%$ case

If reserve loss for the small exchange rate change is not bigger than for the big exchange rate then you've got an actual anomaly wrt the KFG model.

Right now they've just looked at the wrong case for their motivation.

II. If not suggestion I, then at least plot all the exchange rate crisis data and show the correlation between the exchange rate change and reserve change. (This is actually pretty tricky and if done right will end up looking like a panel version of Blanco and Garber.)

III. R&V characterize optimal exit strategy, but they never tie their optimality condition back to the data. The optimality condition is interesting to the extent that it sharpens our forecasts concerning regime change. From my reading, their results sharpen the Blanco & Garber probability estimation by including some (additional) nonlinearity wrt the state variables.