Discussion of Session II

●M. Brzoza-Brzezina, M. Kolasa & K. Makarski: 'International Spillovers under Foreign Ownership of Banks'

● P. Cavallino & D. Sandri: 'Expansionary Lower Bound'

● G. Adler, R. Lama & J.P. Medina: 'Currency Wars at ZLB'

By: Robert Kollmann (ECARES-ULB & CEPR)

BoE-ECB-IMF Conference on Global Spillovers, Frankfurt, April 26 2016

I.) M. Brzoza-Brzezina, M. Kolasa & K. Makarski: 'International Spillovers under Foreign Ownership of Banks'

Summary

● Interesting contribution to post-crisis literature that analyzes global banking using DSGE models

● DSGE literature has focused on transmission of a foreign shock to domestic economy via <u>foreign assets</u> held by domestic banks

E.g. Devereux & Yetman (2011), Kollmann et al. (2011, 2013), Kamber & Thoenissen (2013), Nguer (2015)

● This paper analyzes **transmission via <u>foreign liabilities</u> of banks** operating in a small open economy

● Model calibrated to Poland. Polish banking system largely owned by foreign (Euro Area) banks.

● This model suggest that foreign ownership magnifies transmission of foreign shocks to Poland, compared to situation with <u>domestic bank ownership</u>: a negative foreign shock induces foreign parent banks to withdraw equity from Polish branches.

● Model predicts: by <u>limiting dividend payments of branches</u> to parent banks, the Polish authorities can dampen negative spillover to Polish real activity.

● Polish gov't did in fact limit bank dividend payments in 2008-09

● Based on DSGE simulations, authors argues that this NBP policy was <u>effective</u>

● Government <u>injection of capital</u> into Polish branches would have been less effective (as it leads to increase of dividends)

Comments

● This model uses a model with a starkly simplified banking structure that abstracts from key international financial linkages

Therefore, the key predicted effects are probably overstated

► Model structure overstates the effectiveness of dividend limits

Polish branches of foreign banks collect deposits from domestic and foreign HOUSEHOLDS, and only invest in Polish production capital.

Role of foreign parent banks ONLY provide equity to Polish branches.

In reality: Polish branches BORROW from parent banks & LEND to parent banks. When gov't imposes limit on dividend payments, the parent can transfer resources from branches by

reducing parent lending to branches or by

increasing branch lending to parent

► Model overstates the stabilizing property of locally-owned banks

● **In reality locally-owned banks would also rely on international interbank funding.**

● **Locally-owned banks would be affected negatively by freeze in international interbank market.**

● **Model abstracts from this channel**

● In model, Polish households & non-financial firms cannot hold foreign assets or issue debt abroad. Thus, model overstates insulation permitted by domestic banks.

Intertemporal trade-offs & welfare effects

Even if dividend limits are effective at stabilizing domestic lending by branches, it would be useful to investigate whether this macro-prudential tool raises welfare.

While this tool may be effective in the short term, it may lower willingness of foreign banks to invest in Poland $\Rightarrow$ higher cost of funds in Poland, lower investment & growth $\Rightarrow$ lower welfare

Model could be used for studying this intertemporal trade-off.

II.) P. Cavallino & D. Sandri: 'Expansionary Lower Bound'

● **Nominal exchange rate depreciation may lower domestic output if domestic banks borrow in foreign currency & lend in domestic currency (currency mismatch).**

●**Then exchange rate depreciation reduces bank net worth $\Rightarrow$ lending spread $\uparrow$**

$\Rightarrow$ **<u>may</u> trigger demand & GDP $\downarrow$**

● **This negative effect operates when bank capital requirement binds & foreign debt accounts for high share of total bank debt.**

Comment:

● **Very intuitive idea. Very elegant model. Closed form solution.**

● **Empirical evidence for non-monotonic relation between exchange rate & GDP ?**

● **Empirically, bank capital requirement is binding (or almost): banks have incentive to maximize leverage**

● **Occasionally binding constraint complicates analysis a lot**

● **Would be easier to assume that constraint binds always**

● **Model assumes cashless economy; interest rate is policy instrument.**

Except in last period: suddenly there is money in this economy. Money supply rule & quantity equation: M=P∗C.

To make point that exchange rate depreciation can be contractionary as simply as possibly: might assume money (supply rule) in each period.

III.)G.Adler, R. Lama & J.P. Medina: 'Currency Wars at ZLB'

Standard 2-country New Keynesian model

● **Reserve currency country & emerging market economy**

● **Only internationally traded asset is a bond denominated in 'dollars' (or euro)**

► **The main novelty:**

●**Private sector in EME faces an interest rate on foreign bond that equals the US policy rate + premium that <u>is decreasing function of PRIVATE net foreign assets</u>**

● **The EME central bank (government) by contrast borrows or lends at the US policy rate (NO PREMIUM).**

Gov't can borrow more cheaply than private sector!

► Would like to see empirical support for this key assumption

► Departure from <u>standard</u> assumption in previous literature that assumes that country faces a premium that depends on country's NET FOREIGN ASSETS

(eg Senhadji, 1997; Kollmann, 2002; Schmitt-Grohé & Uribe, 2003)

THE KEY MECHANISM:

► Assume that the government of the EME purchases foreign bonds (financed by selling domestic bonds to the private sector).

► In a frictionless world, private sector will offset change in currency exposure of government by holding LESS foreign bonds (or by issuing MORE foreign currency debt)

This does not affect NFA or the country's borrowing rate: no effect on real economy & real exchange rate
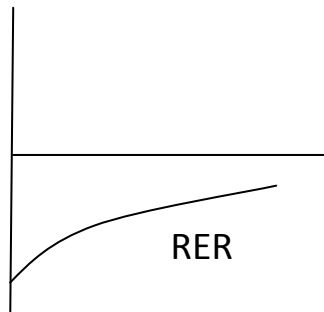
►But in the world assumed in this paper, the private sector faces a <u>higher</u> interest rate on foreign currency bond

► This DEPRECIATES the EME's exchange rate (from interest parity condition)

$$r_{t+1}^{EME} = r_{t+1}^{US} + \psi_t - E_t \Delta rer_{t+1}$$

(Notation: $RER \uparrow$ Home RER appreciation)

$\psi_t \uparrow$: EME RER depreciates on impact

RER

► DEPRECIATION of EME's exchange rate raises EME output but lowers US GDP ('currency war')

► Negative effect on US GDP is especially strong when ZLB binds in US

► **Simulations in paper suggest that effect of Forex Reserve accumulation is powerful**

►**Comment: paper assumes <u>enormous sensitivity of private sector foreign borrowing</u> rate w.r.t. private sector debt.**

In calibration, a 1% rise in private sector foreign debt raises the QURTERLY private borrowing by 0.60 percentage points, i.e. by 2.4 percentage points (240 basis points) !

This is orders of magnitude than the sensitivity of borrowing rate to net foreign debt (Kollmann, JME 2002)!

Also, the paper here assumes that the import share between the reserve currency country and the EME is 30%. This <u>trade share seems much too big</u>.

Conclusion: this paper overstate the foreign transmission of Foreign Exchange Interventions