Discussion of Brunnermeier, Krishnamurthy and Lorenzoni's CONTINGENT DEBT CURRENCY

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Introduction

- I like the paper
- Structure
  - Remarks on contingent debt
  - Comment 1: peso effect
  - Comment 2: runs

Contingent debt

- Introducing macro-contingencies in debt makes a lot of sense
  - theoretical case relatively well understood
- Many forms of macro-contingent debt exist, e.g.
  - variable interest rate
  - inflation-indexed
  - currency denominations
- But certain important contingencies are missing (Shiller):
  - GDP-indexed debt
  - real estate price indexation (mortgages)
- We do not really know why

Contingent debt

BKL propose a "vague" contingency

- the central bank declares the state ex post (presumably a "debt crisis")
  - "break the glass"
  - example: suspension of the gold clause in the 1930s
- possible justification: a debt crisis is difficult to describe ex ante, but the central bank knows when it sees one ex post
- but do lenders and borrowers know when the central bank will see one?
  - maybe, if the central bank communicates clearly about its decision-making ("jurisprudence")
  - however the redistributive implications make it a politically-charged decision
- On balance, more or less uncertainty?

Contingent debt

- BKL discuss a number of possible objections
- I discuss two ways in which their proposal might increase risk
  - "peso effect"
  - runs

Comment 1: The peso problem

- Based on Jeanne (2005)
- Entrepreneurs finance investment with debt
- Investment yields stochastic return
- Costly default (Townsend)
- Perfect competition between lenders
- Call the cash currency "dollar" and the debt currency "peso"

Comment 1: The peso problem

- Investment costs 100 dollar (peso) today
- Riskless dollar interest rate $r^* = 3\%$
- Stochastic return in dollar given by

	dollar return	
aggregate state	90	105
Good $(1-\pi)$	0 %	100 %
Bad (π)	30%	70%

- Peso devalued to avoid default in bad state
- Interest rate on peso and dollar debt increasing in risk π
- Higher interest rate on peso debt than on dollar debt
  - devaluation premium $>$ default premium
- If π very small (so that peso interest rate $< 5\%$), first best
- If π is higher, the entrepreneurs cannot finance the investment with peso debt
- Imposing peso debt is suboptimal, leads to credit rationing

Comment 1: The peso problem

- Now, stochastic return in dollar given by

	dollar return		
aggregate state	90	105	110
Good $(1-\pi)$	0%	10%	90%
Bad (π)	30%	0%	70%

- Peso devalued to avoid default threatening $> 25\%$ of firms
  - peso devalued in bad state, not good state
- Now, borrowing in peso may imply default for 10% of the firms in good state
- Peso borrowing may increase default risk, and decrease welfare
- Those pbs would disappear of one could devalue the peso only for low-return firms
  - or, use less debt and more equity
  - but why do we see debt in the first place?

Comment 2: Runs

- Assume the debt-currency is expected to be devalued tomorrow
- There will be a run on all demandable debt
- If lending-in-last resort in cash currency, there will be incentives to make debt demandable (Rogoff)
- Twin crises

Conclusions

- I like the paper
- The proposal raises more issues than discussed in the paper