Discussion of:
On the Desirability of Capital Controls

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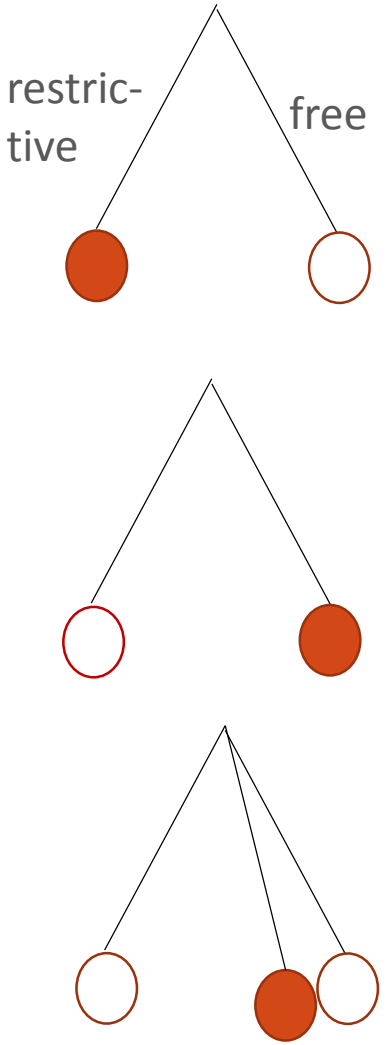
Capital Flows: IMF's Attitude - Pendulum

- 1940s
  - IMF's Founders
    J.M. Keynes & H. Dexter White
  - Capital flows are responsible for interwar instability
- 1970/80 Washington consensus
  - De Larosière, Camdessus, DeLores, Lamy
  - Free trade: free flow goods and services
  - Free finance: free flow of capital
- 1999/2000 After SE Asia crisis
  - Ostry, Ghosh, Habermeier, Chamen, Qureshi, Reinhardt (2010)



Desirability of Capital Controls

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  - Heathcote & Perri:
    - “It depends”
    - Only in particular circumstances

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- Rationales for capital controls
  1. Terms of trade (ToT) manipulations
  2. Financial stability reasons (endogenous risk, runs)

Desirability of ToT Manipulations

- Keynes (Costinot et al.) ex-post
  - Coordinate domestic firms to
  - Extract monopoly rent
  - Problem: typically
    - at the expensive of other country
    - No global welfare improvement

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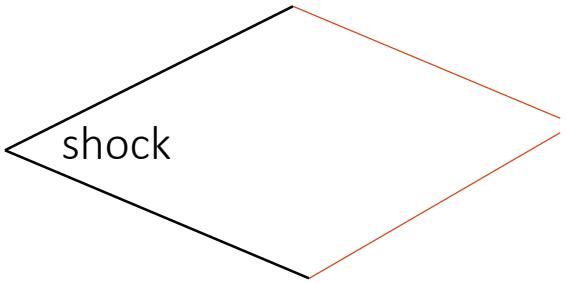
- "Terms of Trade hedge", Cole & Obstfeld 1991
  - Friction: incomplete markets, no equity trading



Initial endow-ment shock

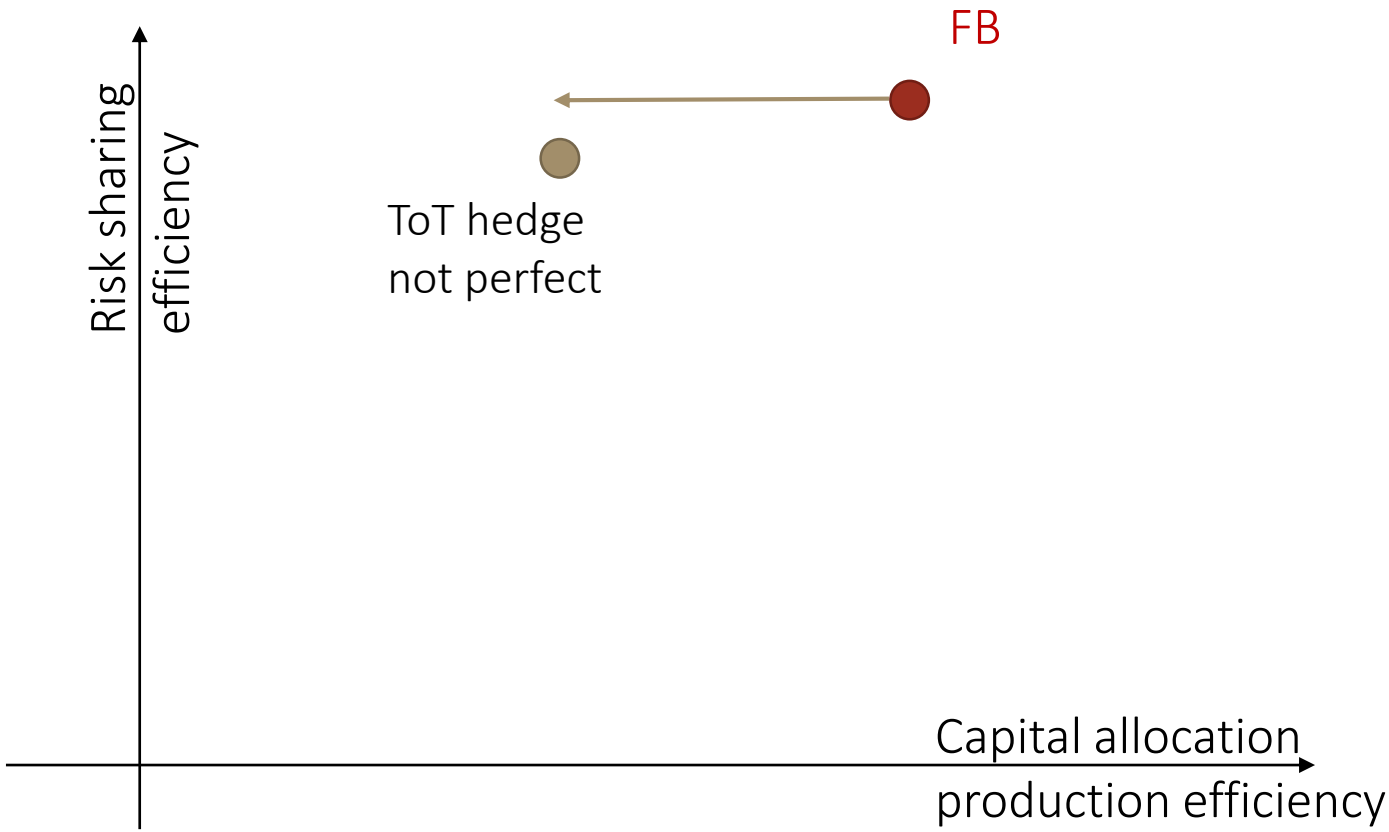
ToT hedge

Initial endowment shock is offset by ToT movement

Markets are quasi-perfect/complete

Desirability of ToT Manipulations

- BruSan2014
  - Friction: incomplete markets (no equity)
  - With production
  - 2 forms of inefficiencies (can't be controlled independently)



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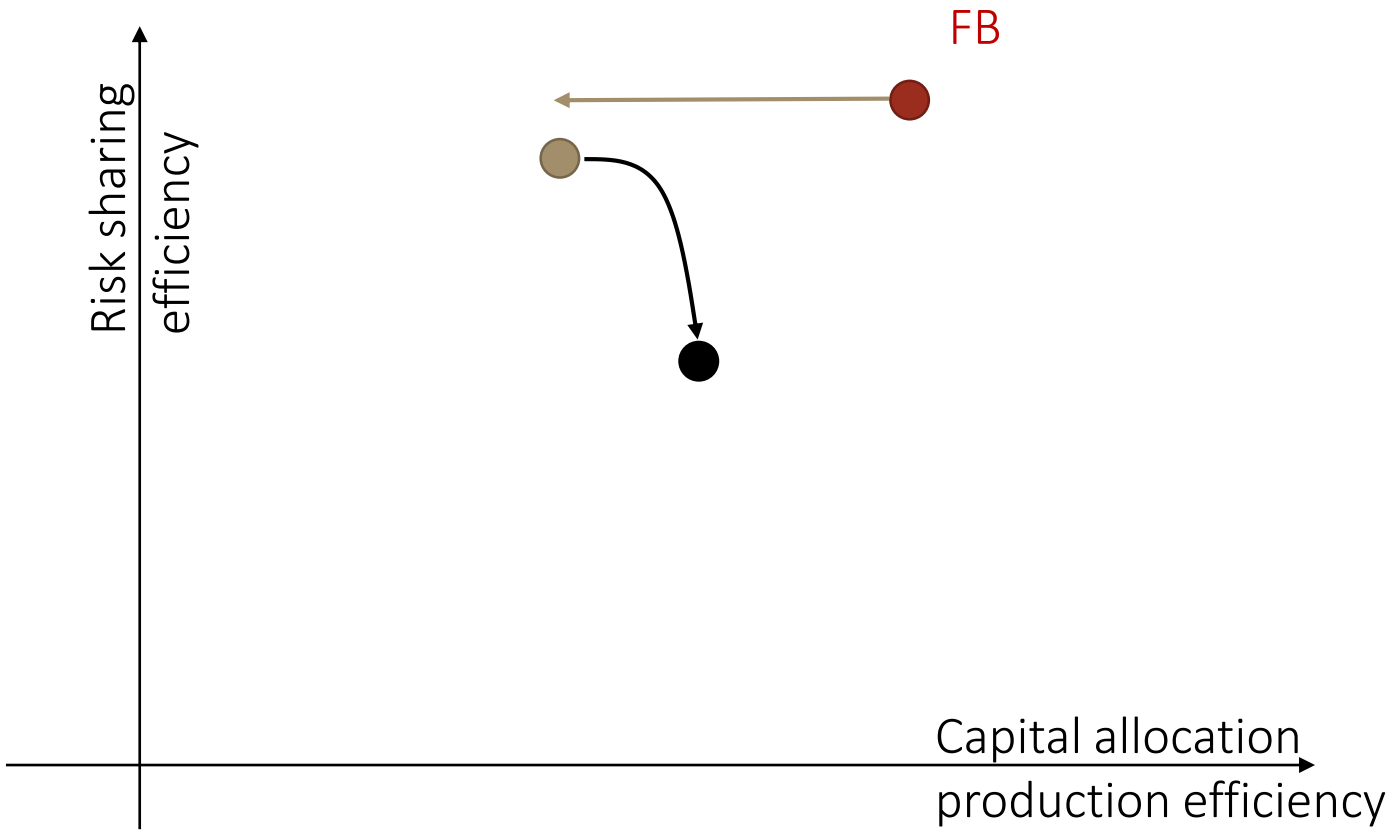

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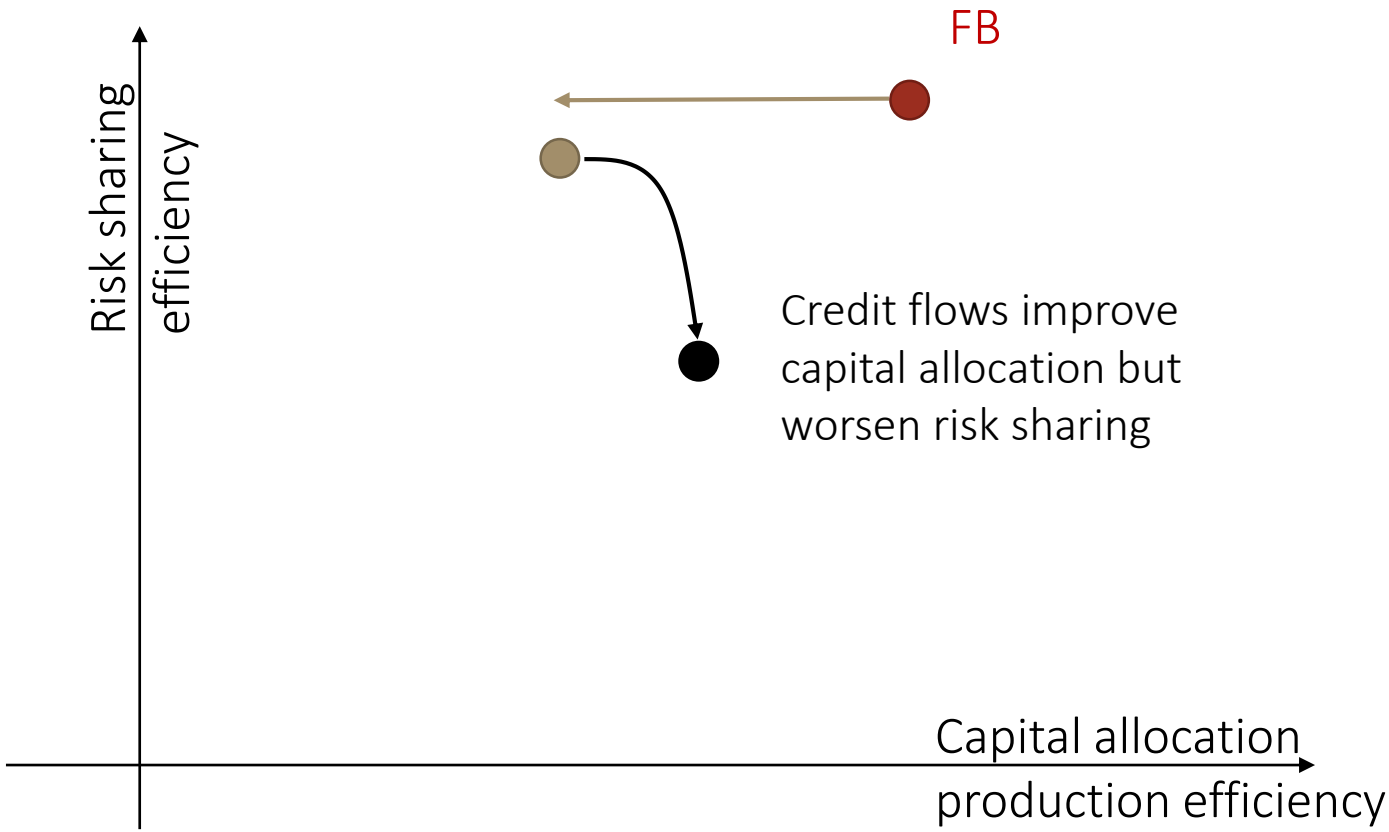

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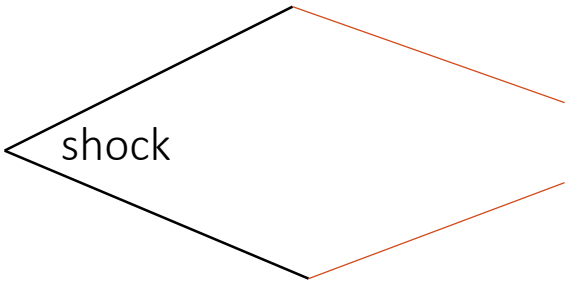

Initial shock "capital shock"

ToT hedge

  - Too much "investment" (capital reallocation) funded with "hot money"
  - Constrained inefficient due to pecuniary externality
    - Agents take prices as given and don't internalize that they partially destroy "ToT hedge"

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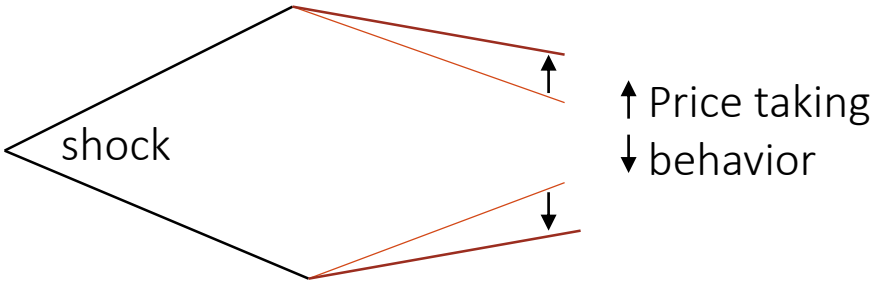

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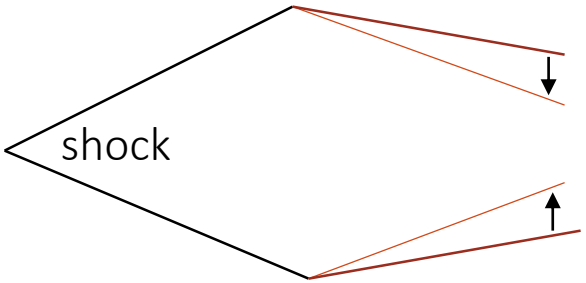

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Capital controls reduce pecuniary externality

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ToT Manipulation in Heathcote & Perri

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  - TFP Productivity shocks (persistent)
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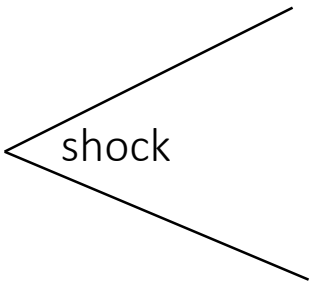
- HP-Scenario 1: (+ve shock is bad and good for others)
  - Strong home bias, strong ToT reaction ($\sigma < 1$)
  - 1's productivity increase funding with credit inflow
  - 2's ToT improves and becomes richer
  - (Home bias leads to extra demand of good b)



Initial shock
"TFP shock"

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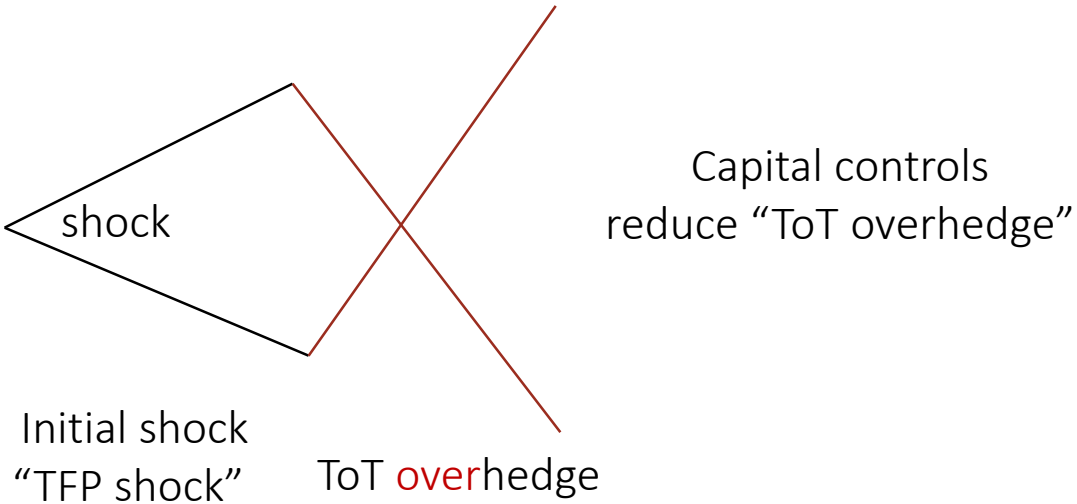

Capital controls
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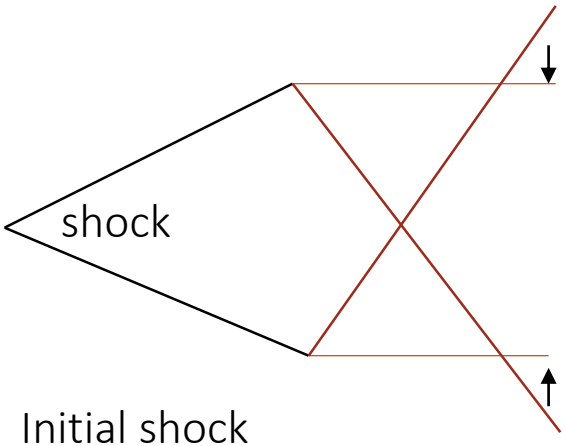


Capital controls
reduce "ToT overhedge"

ToT Manipulation in Heathcote & Perri

- HP-Scenario 2: (+ve shock is good, very bad for others)
  - Strong anti-home bias, weak ToT reaction ($\sigma > 1$)
  - 1's productivity increase + credit outflow
  - Fund country 2 to produce more of good b
  - Credit outflow indebts country 2
    (just to produce more of good b which country 1 wants)

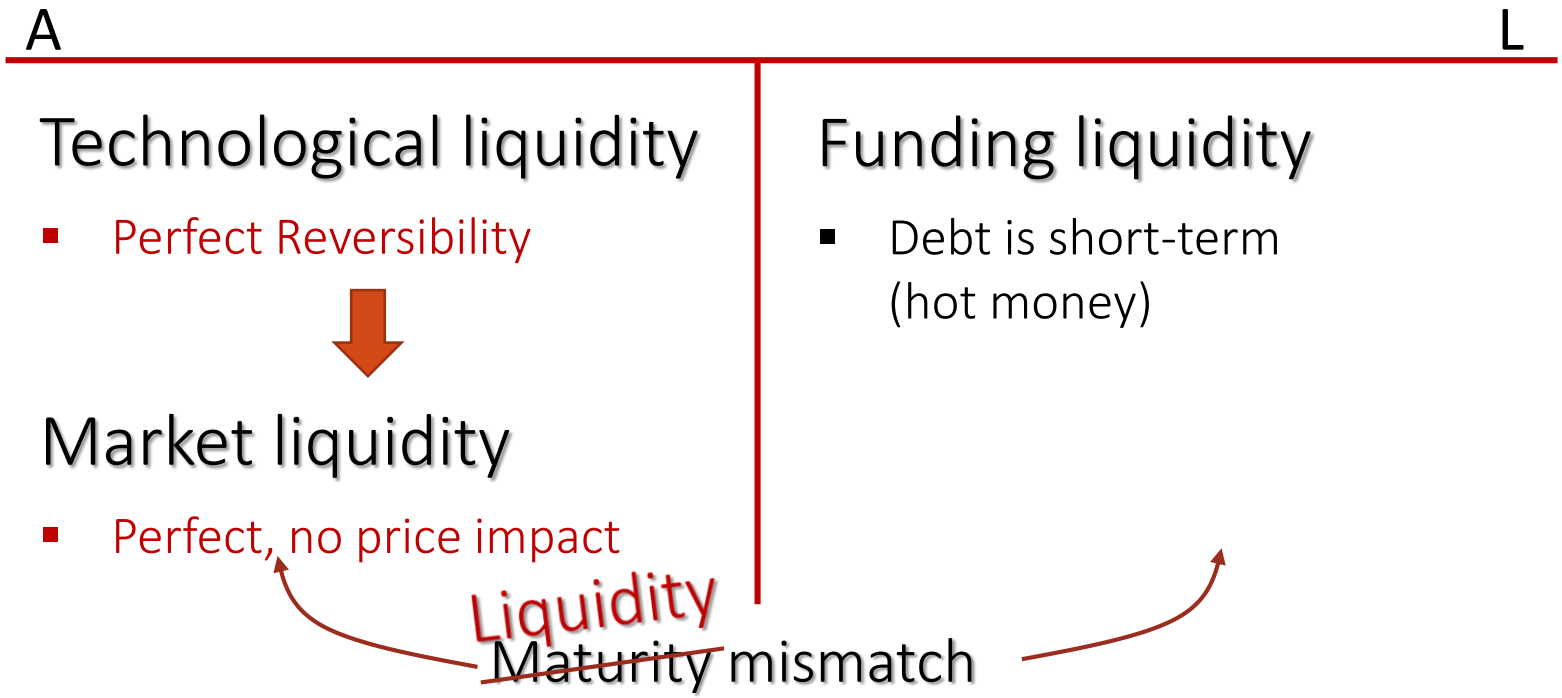
  - Evaluation of "foreign bias"
  - Import share for small country is high ≠ foreign bias is high
    - Theory: 2 countries of equal size
    - Important share depends on country size

Bond Denomination

- HP: Bond is denominated in
  - ½ domestic consumption and ½ foreign consumption basket
- Quibble: … but intermediate good is not tradable
  - Only input goods a and b are tradable
- Extension:
  - Analysis with foreign denominated bond market (Dollar bonds)

Financial Instability

- No liquidity mismatch problems



- No drop in asset prices, no fire sales
- No endogenous risk, no time-varying risk premium
  - Amplification
  - Multiplicity (runs/sudden stops)

Financial Instability

- 2 types of runs/sudden stops
  - Creditor run a la Diamond & Dybvig
  - Debtor run (BruSan2014)
    - Fellow country men get cold feet, fire sell physical capital
    - Asset price drop
    - Loss in net worth ⇒ forced to join the run
- Risk premium is time varying
  - Depends on net worth of constrained actors

Within Country Stability & Global Factors

No frictions	Perfect risk sharing Perfect investment	→	Single global risk factor (weighted sum of local factors)
Cross-country frictions	Imperfect risk sharing	↗ ↘	Global risk factor Local risk factor

Relative importance depends on frictions

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Relative importance depends on frictions

- Importance of global vs. local factors depends on
  1. Degree of global risk sharing
  2. Whether within-country frictions are aligned/MoPo aligned
     - Divergent MoPo → global factor less important
       - Recent events: Euro long-term interest rate decouples from US rates (structure break)

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Why Discriminate Against Foreigners?

- Model could be a domestic economic model
  - Reinterpretation of home bias is needed
- Political Economy Aspects:
  Danger of Abuse - protectionism
  - Lobbying against foreigners for competitive advantage
- Underlines importance
  to have well founded justification for intervention
  - This paper makes an important step in this direction.

Conclusions

- Capital controls affect production scale & risk sharing
- Free market can be inefficient due to pecuniary externality
  - Credit flow (hot money) can be excessive – in both directions!
  - Manipulation of ToT can improve in very specific circumstances
    - Be aware of political economy problems!
  - Financial instability issues seem first order
    - Illiquidity (irreversibility)
- Why bond denominated in "average currency"?
- Global & local risk factors
  - Within country frictions lead to MoPo reaction ("I Theory")
  - Frictions can push in same or opposite direction
  - Strong reaction in credit flows (due to carry trades)

Quibble

- Approximation around
  - deterministic SS – could be far away from stochastic SS
- Third order approximation – only around SS
  - Different away from SS