Discussion of Coordinating Business Cycles by Edouard Schaal and Mathieu Taschereau-Dumouchel

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- **This paper:** A quantitative theory of business cycles with coordination failures
  - Two key-ingredients
    1. **Non-convexity** in production side of the economy (discrete choice of technology with fixed cost)
    2. **Complementarity** due to CES production/utility

A number of sharp results

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   - Policy
     - (Constrained) First best
     - Government expenditure (Keynesian)

Some perspective on the literature

1. **Macro business cycle literature on coordination failures**
   - Early New-Keynesian literature (monopolistic competition and/or increasing returns)
     - Diamond 82, Weitzman 82, Hart 82, Solow 86, Blanchard/Kiyotaki 87, **Kiyotaki 88**, Cooper/John 88, Startz 89, Mankiw/Romer 91

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- **This paper**: Business cycle model + Global game
  - Quantitatively

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- Intermediate good producers (**monopolistic competition**)

$$Y_{jt} = Ae^{\theta_t} u_{jt} K_{jt}^{\alpha} L_{jt}^{1-\alpha}$$

  - Capacity utilization choice: $u_{jt} > 1$ high at cost f (per period fixed cost, units of final good), otherwise $u_{jt} = 1$
  - **Strong non-convexity**

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- **Hint** for dynamics: $K \uparrow \Rightarrow$ high capacity equilibrium more likely
- Endogenous TFP (increasing in m) ($\sim$ Hsieh-Klenow)
- Interesting normative result
  - Planner wants to eliminate multiplicity but also correct the unique low activity equilibrium (preexistent distortion)

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  - Threshold equilibrium form
  - Proof based on Euler equation as monotone operator

Result: multiple steady states

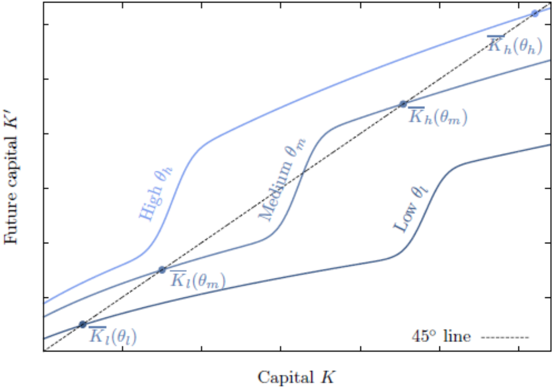

Figure 6: Multiple steady states as a function of θ

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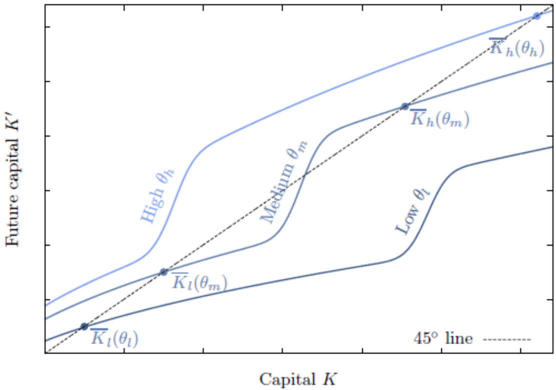

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- Poverty traps

Result: main mechanism

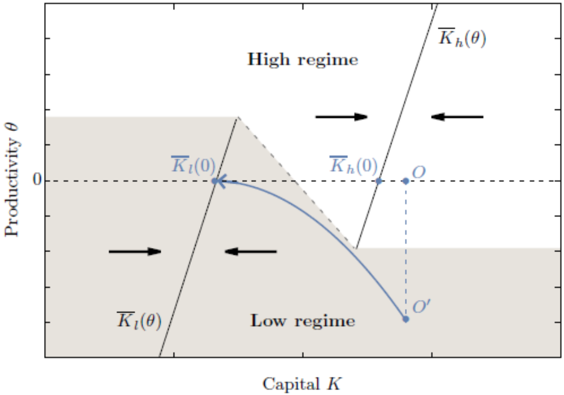

Figure 7: Phase diagram with basins of attraction

- Persistence

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     - Remark: Throwing G_t is somewhat extreme

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   - Well documented lumpiness in investment decisions (dynamic choices), but decisions aggregate smoothly
   - Will heterogeneity/dynamic behavior amplify or dampen the mechanism in standard sS investment model?
   - **Conjecture:** slowdown shift, but increase persistence?