Monetary Policy and Resilience

FLAR - Latin American Reserve Fund

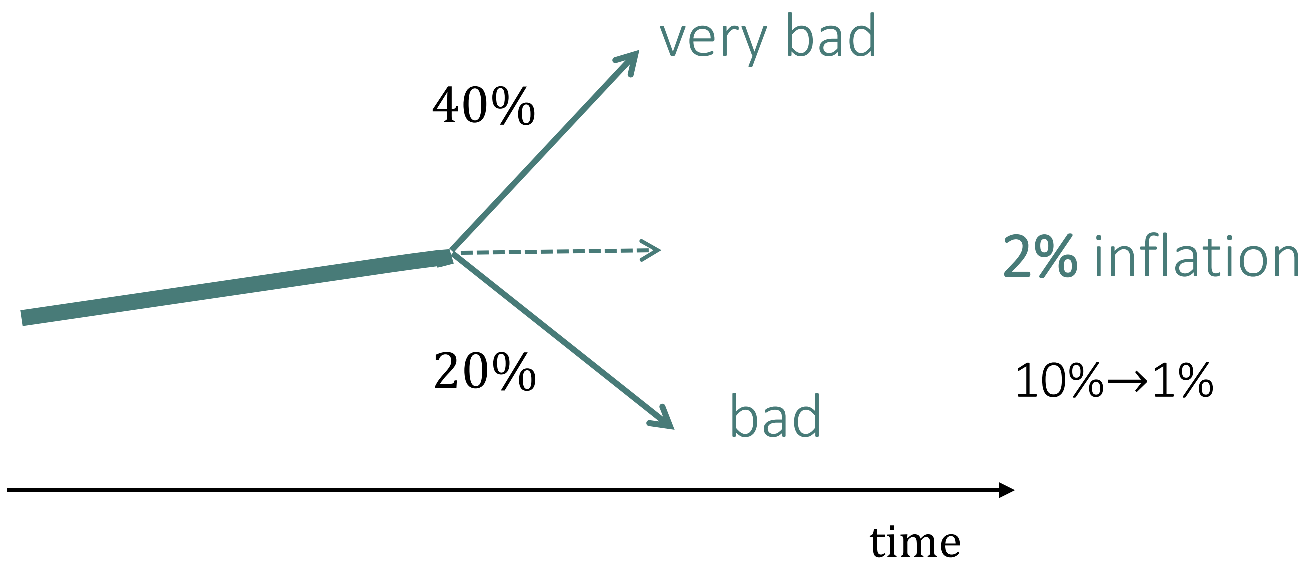
Cartagena, 2023-08-11

Monetary Policy: Risk vs. Robustness Approach

- Deterministic thinking (outdated)

- **Risk** approach
  - probability
  - + impact (disutility) of contingency events

Asymmetric Risk



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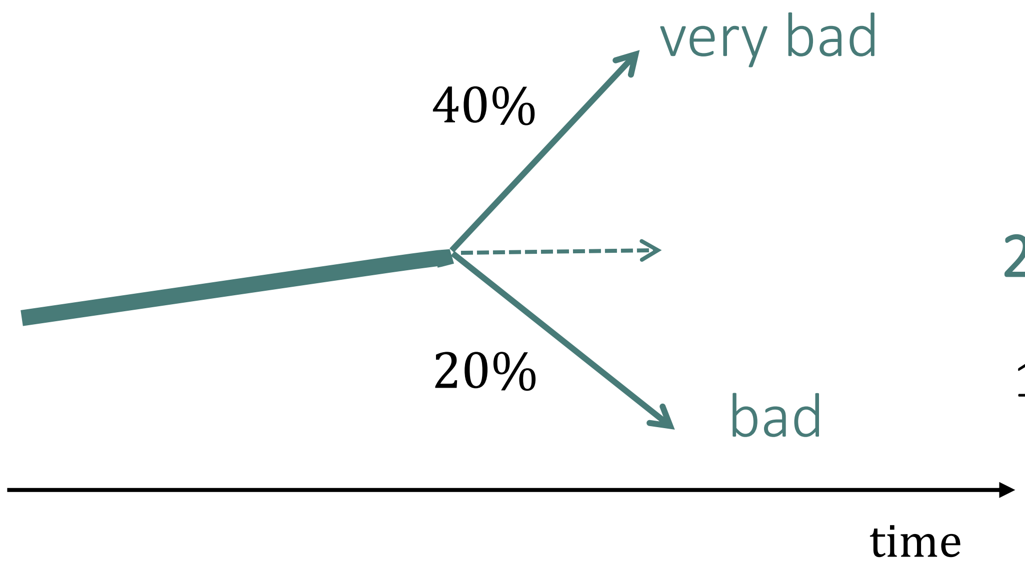

2% inflation

10%→1%

- **Robustness** approach
  - Avoid “worst” and bad outcomes
    but robustness barrier (tipping point)

the oak

Very restrictive rigidity (low growth)

Rigidity ≠ stability

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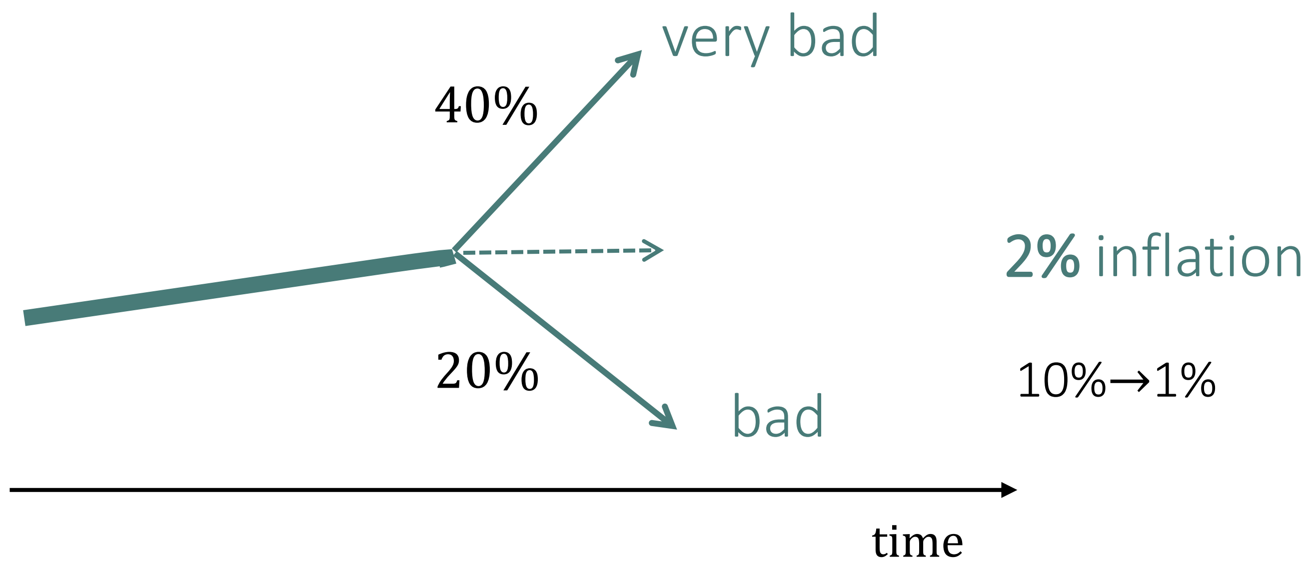

- **Resilience** approach
  - Inflation bounced back (is “anchored”)
  - Avoid traps

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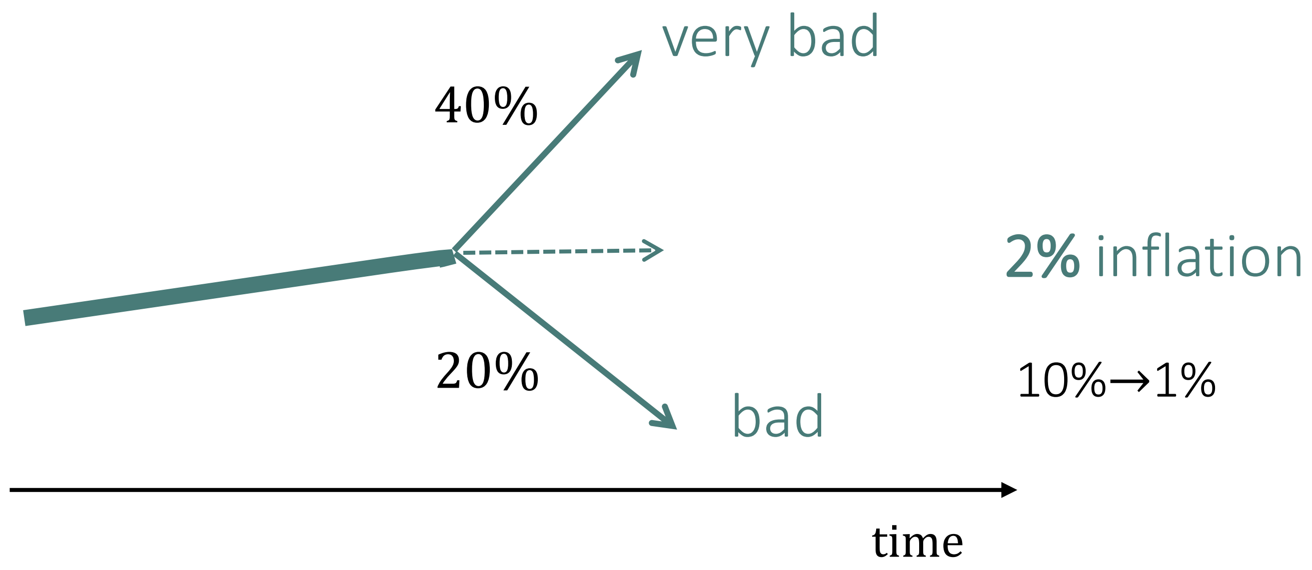

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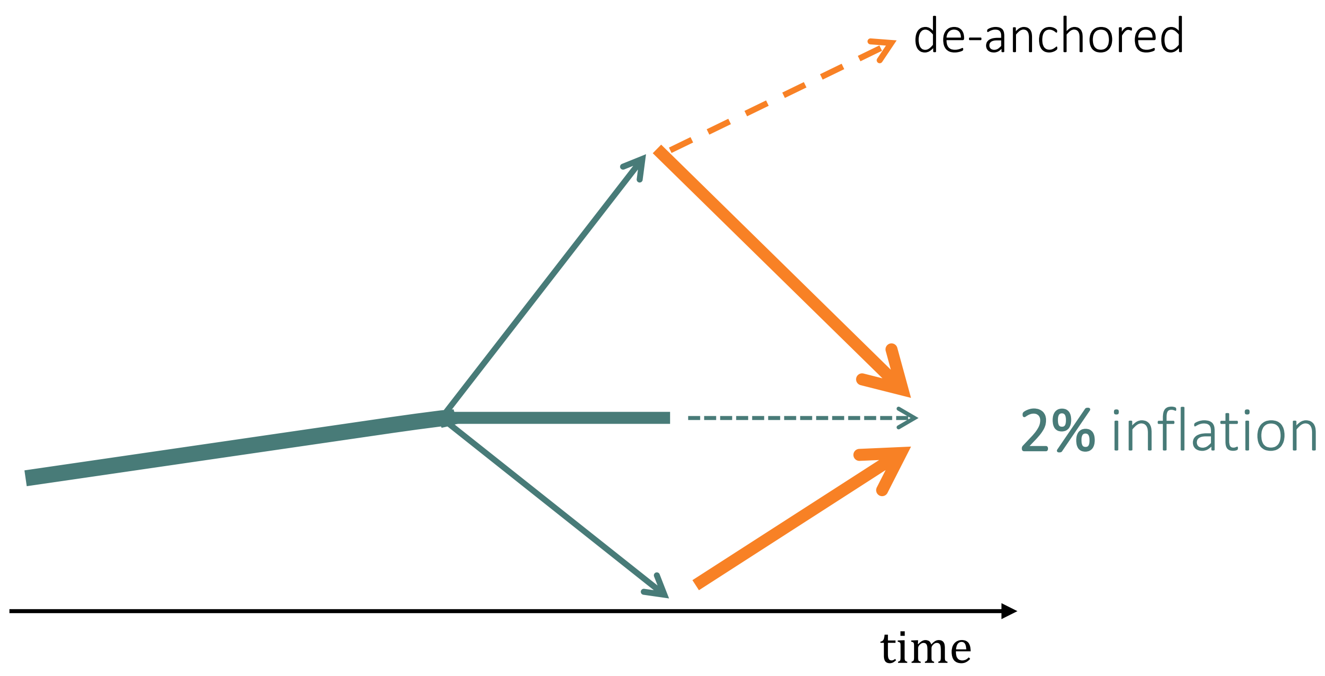

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Roadmap

- Monetary Policy:
  Risk, Robustness, Resilience Approach

- **Resilience Management**
  - Distance Tipping points: Buffers, …
  - Reaction: via rules or discretion

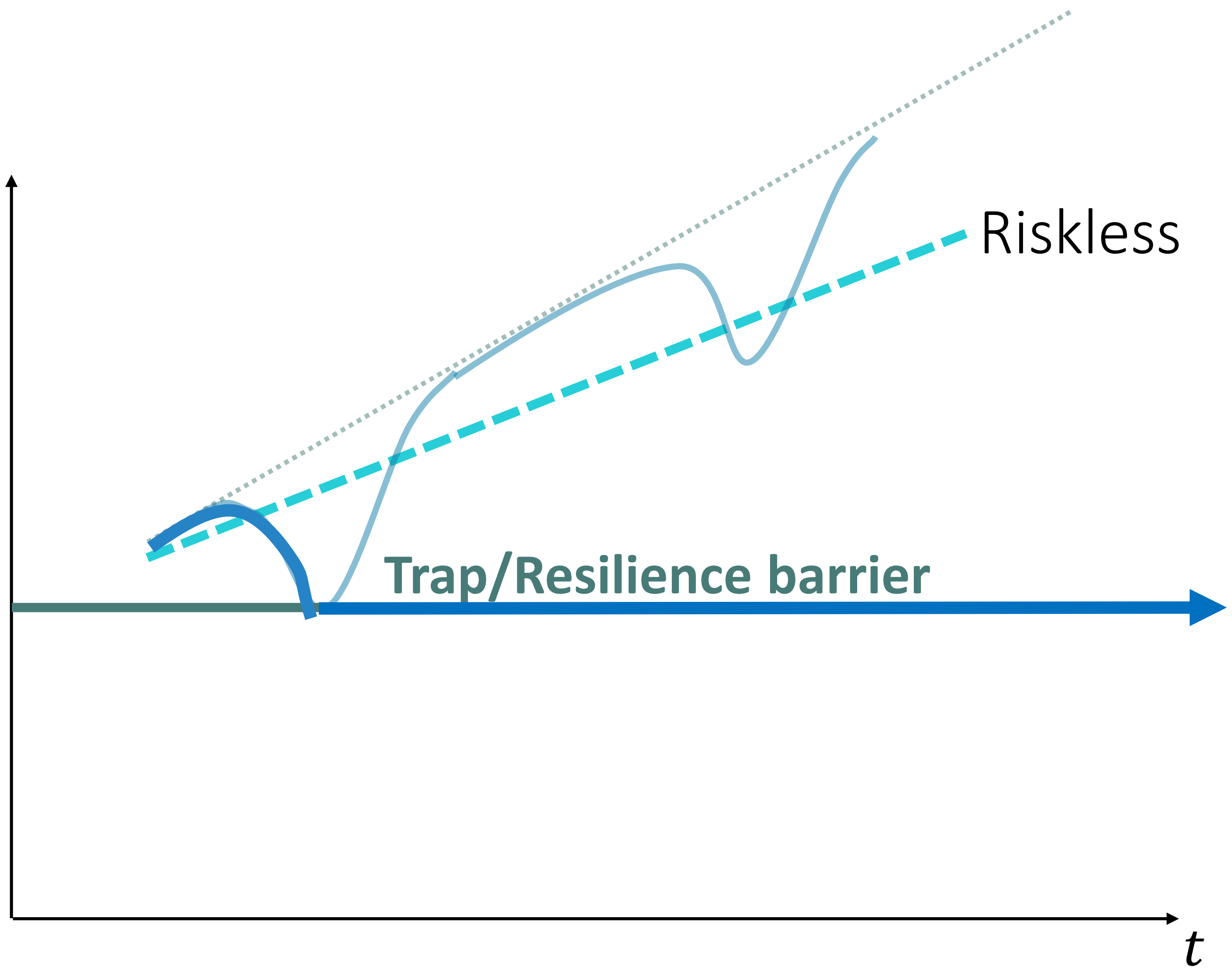
- Traps
  - Forward Guidance
  - Fiscal Dominance: Central Bank independence
  - Financial Dominance

- Structural Changes

- International Resilience

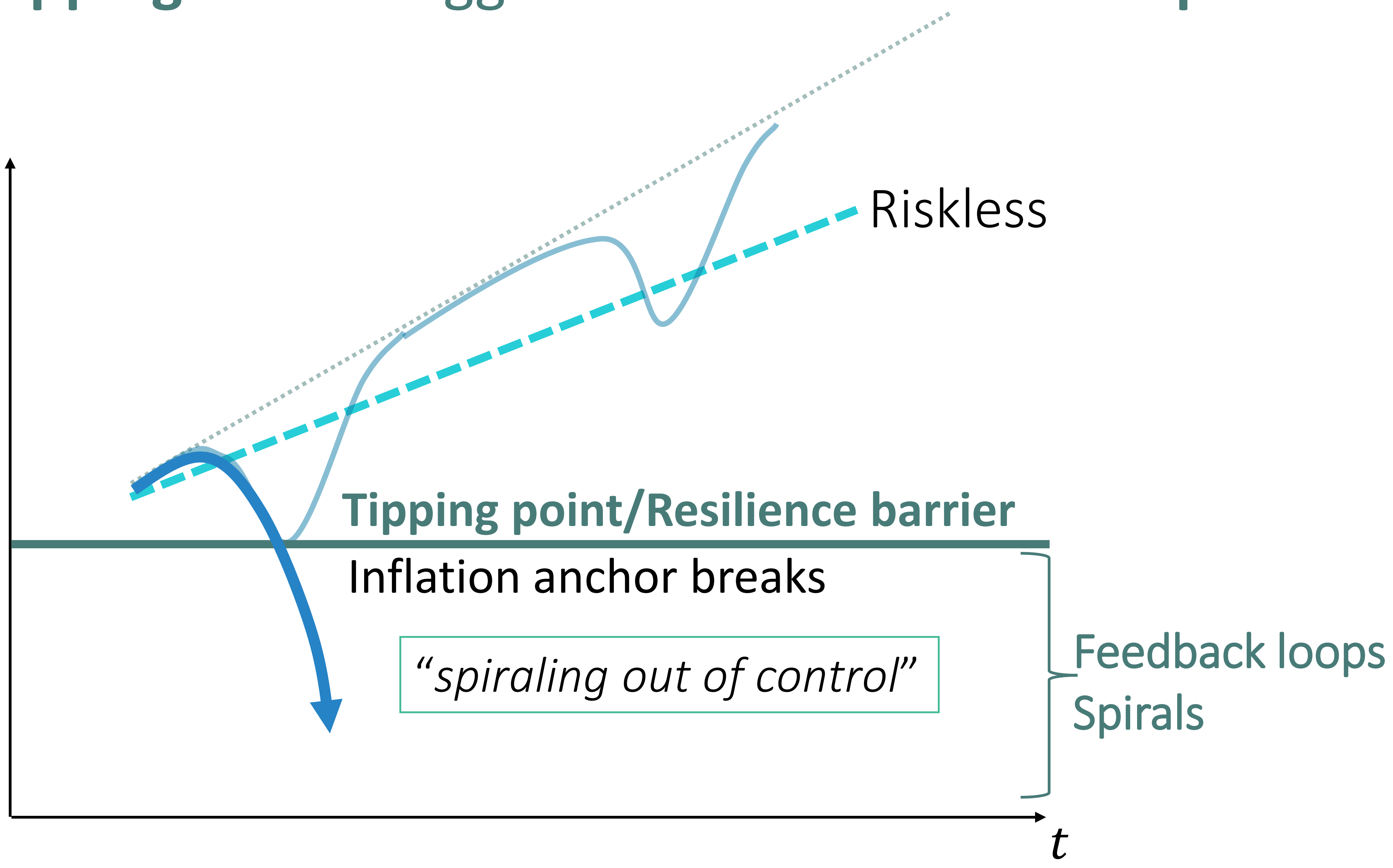
Resilience Barrier path dependencies, “points of no return”

- **Traps**



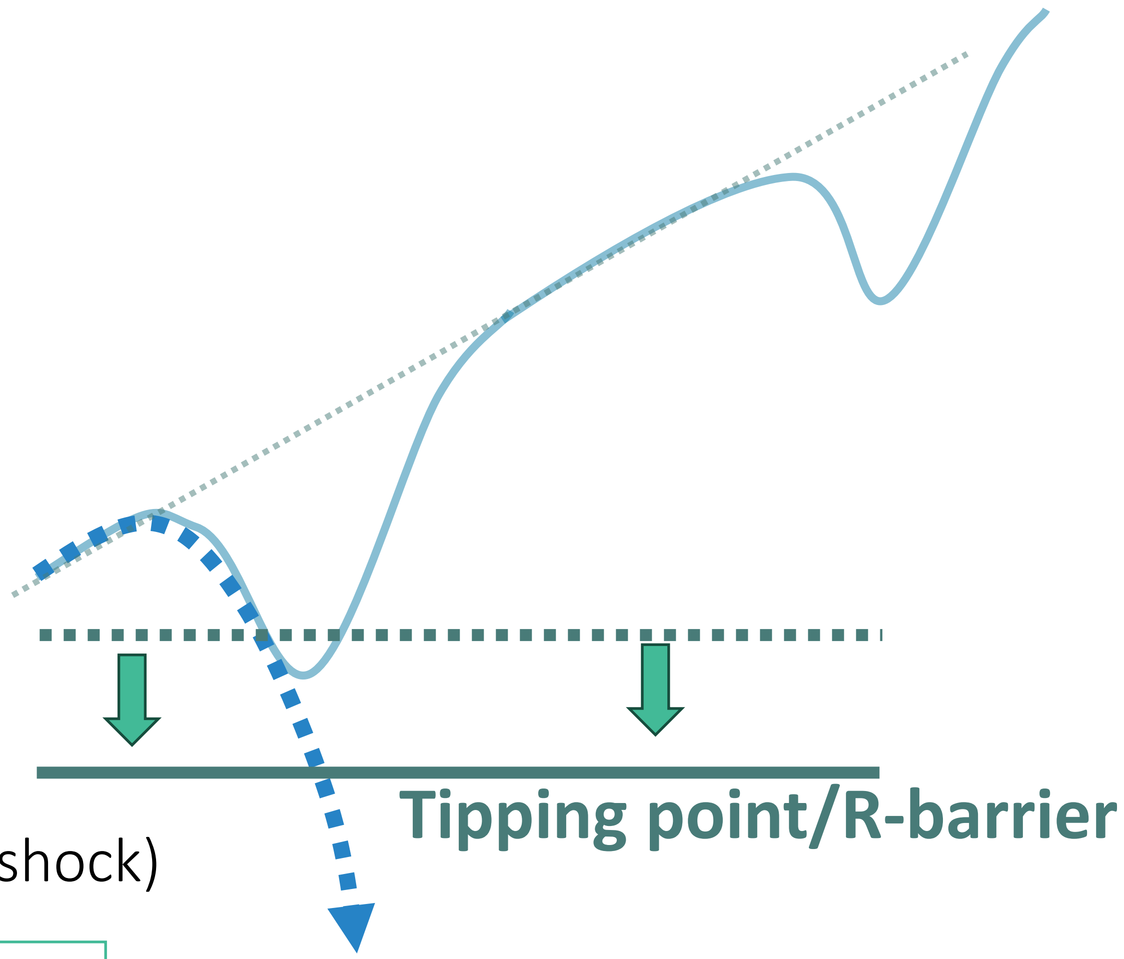
Resilience Barrier path dependencies, “points of no return”

- Traps
- **Tipping Points** triggers adverse **feedback loops**



Resilience Management

1. **Push barrier**/tipping point further **away**
   - *ex-ante* investment
   - **Buffers**, reserves, war chest, (specific) redundancies
   - No overheating of the economy
     - Like moving ahead without keeping tipping point at a distance
       Sahm Rule: if $u < u^* - .5\%$, then unemployment jumps (after a shock)



When does rubber band break? Thicker rubber band

Also for robustness

2. **Agility: react *earlier*** to turn around

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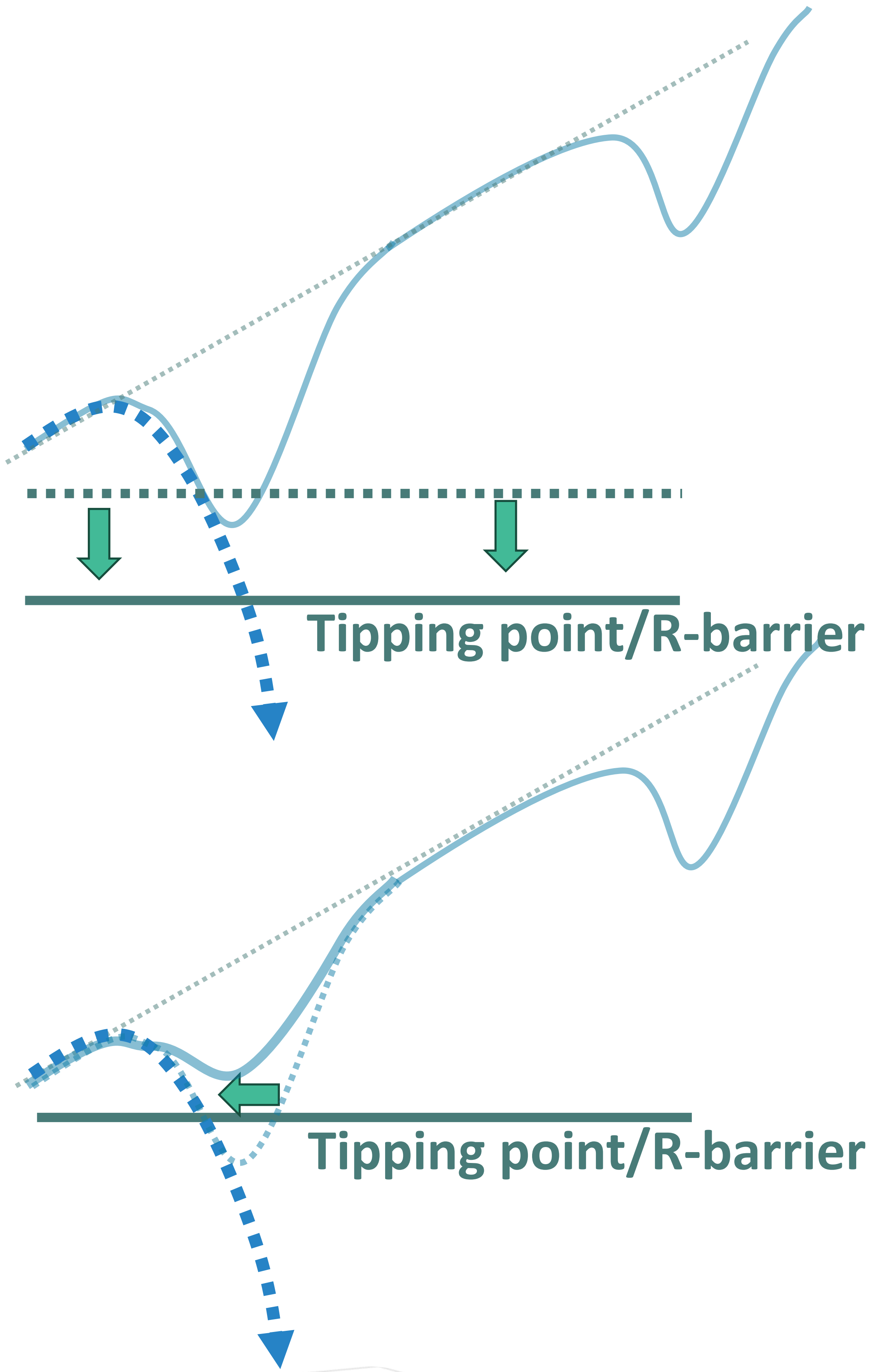


2. **Agility: react *earlier*** to turn around (≠ rigidity)

a. **(Re)action** (of CB) in timely fashion
   - ex-post discretion vs. ex-ante rule (automatic algo)

   Large shock vs. a sequence of shocks

b. **Expectations of others**: Re-re-actions

2a. Reaction: Prediction and Time

Challenges for CB’s reaction:

- **Predictability** of inflation declines ↓

- **Reaction time**
  Monetary Policy acts with long and variable lags

⇒ “behind the curve”

<u>Lesson:</u>

More responsiveness to data   (higher Taylor coefficient)

2b. Expectations of Others: Inflation Anchor

- Strength/credibility of inflation anchor
- De-anchoring = spiraling out of control (or simply limited amplification (price-wage spiral))
- Higher order **beliefs coordination** (convention, common knowledge (David Lewis))
  - *Uncertainty* what others' belief (about others' beliefs …)
  - *Disagreement*
  - *Opaqueness whether wage increase is compensation for*
    - *past price increase*
    - *expected future price increase*
- Strengthening the inflation anchor:
  - **Focal point** on anchor
  - **+ no other focal point:** creates confusion/uncertainty about alternative beliefs
  - Narrative is key

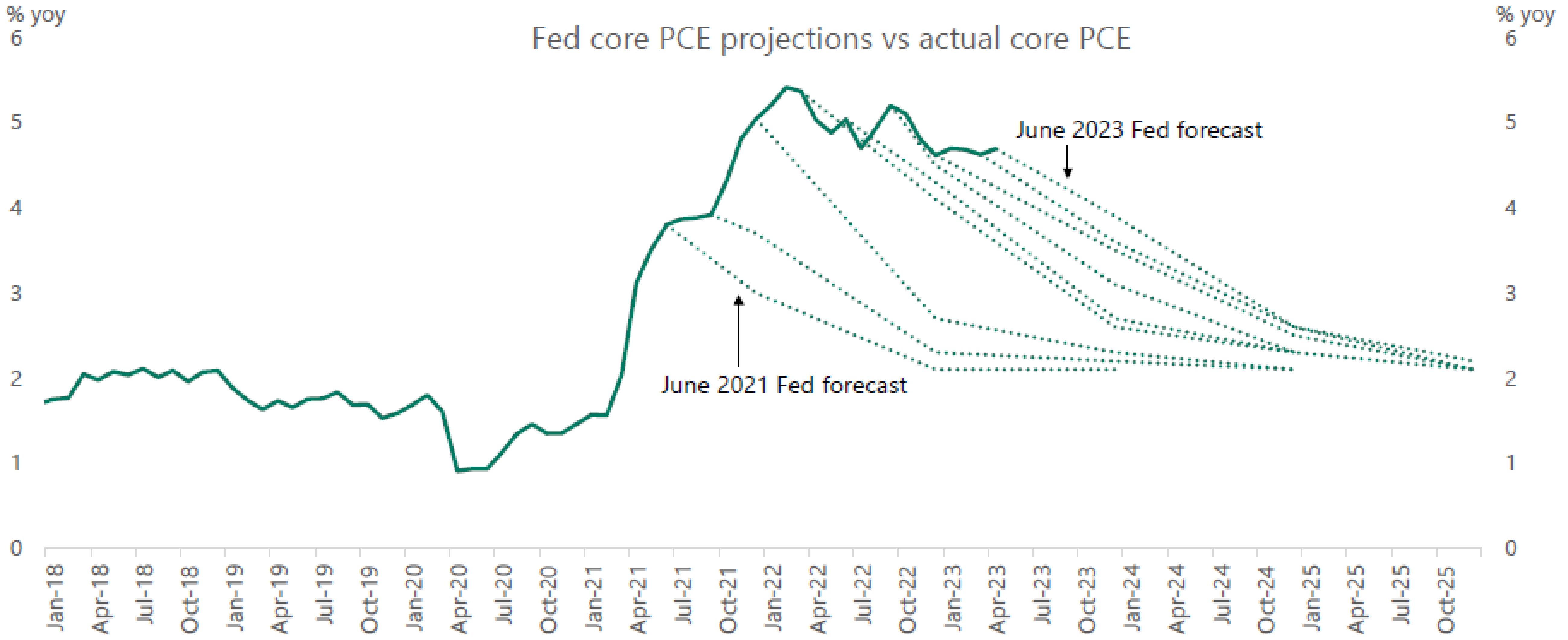
- Re-anchoring at 3%
  - How to create common knowledge at different level?

Danger: "Anchor Assumption"

- **Inflation anchor** implicitly assumed
  - VAR, stationary DSGE
  - ⇒ transitory bias

Rubber band can't break by assumption

➡ Resilience is assumed



Source: Federal Reserve Board, BEA, Bloomberg, Apollo Chief Economist.

Roadmap

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- Resilience Management
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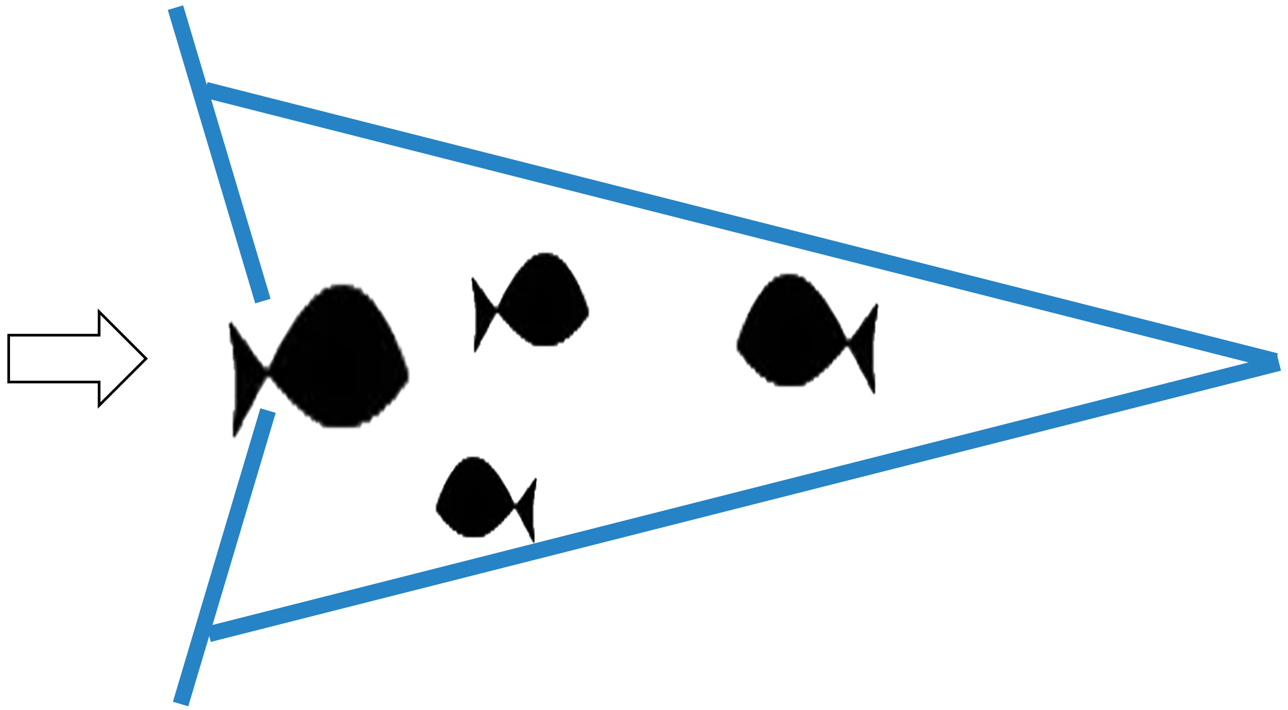
- **Traps**
  - Forward Guidance
  - Fiscal Dominance: Central Bank independence
  - Financial Dominance

- Structural Changes

- International Resilience

Trap thinking

- Trap = "no bouncing back" = no resilience
- Avoiding traps requires ex-ante thinking
- Limit Odyssean **forward guidance**
- How to avoid "**fiscal dominance trap**"?
  - Central Bank **Independence**
  - Communication and backing by general public
    - Political pressure
- How to avoid "**financial dominance trap**"?
  - **Macro-pru**dential regulation
    - Ensure that financial sector does not constrain monetary policy room



Trap 0: (Hidden) Forward Guidance

- Explicit Odyssean Forward Guidance “traps” future MoPo

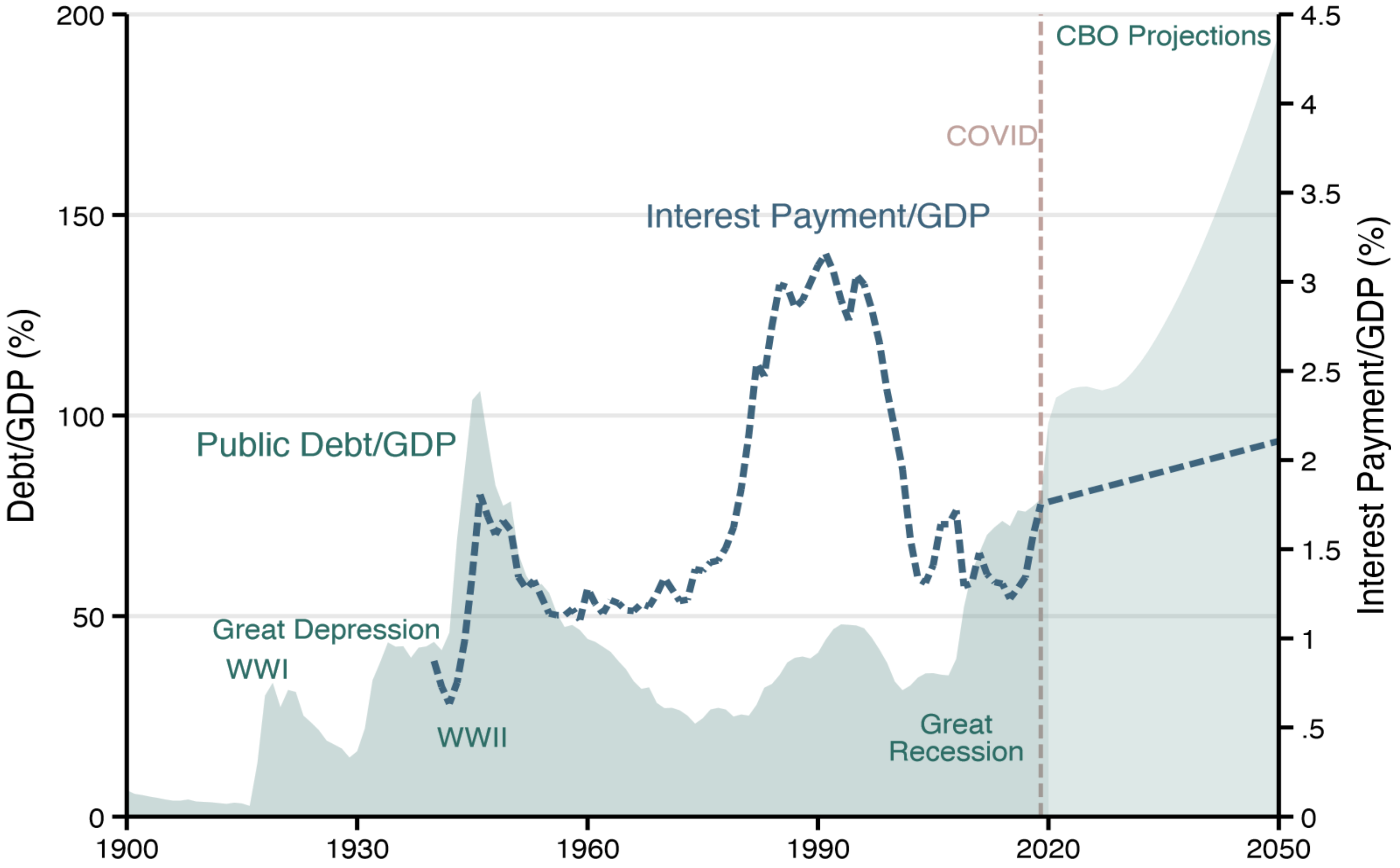
- Hidden Forward Guidance
  - “Data driven approach”
  - Sequencing
    - Only raise interest after QE is completed

Trap 1: Fiscal Dominance (over Monetary)

- Fiscal policy impacts on inflation. 2 views: (i) aggregate demand (ii) FTPL+
- Monetary tightening has much large fiscal implications
  - Due to high debt level
- Central Bank-Government tensions/political pressure

FTPL vs. Sargent-Wallace

- Budget holds out-of-equi-librium or not



Trap 1: Fiscal Dominance – Central Bank Independence

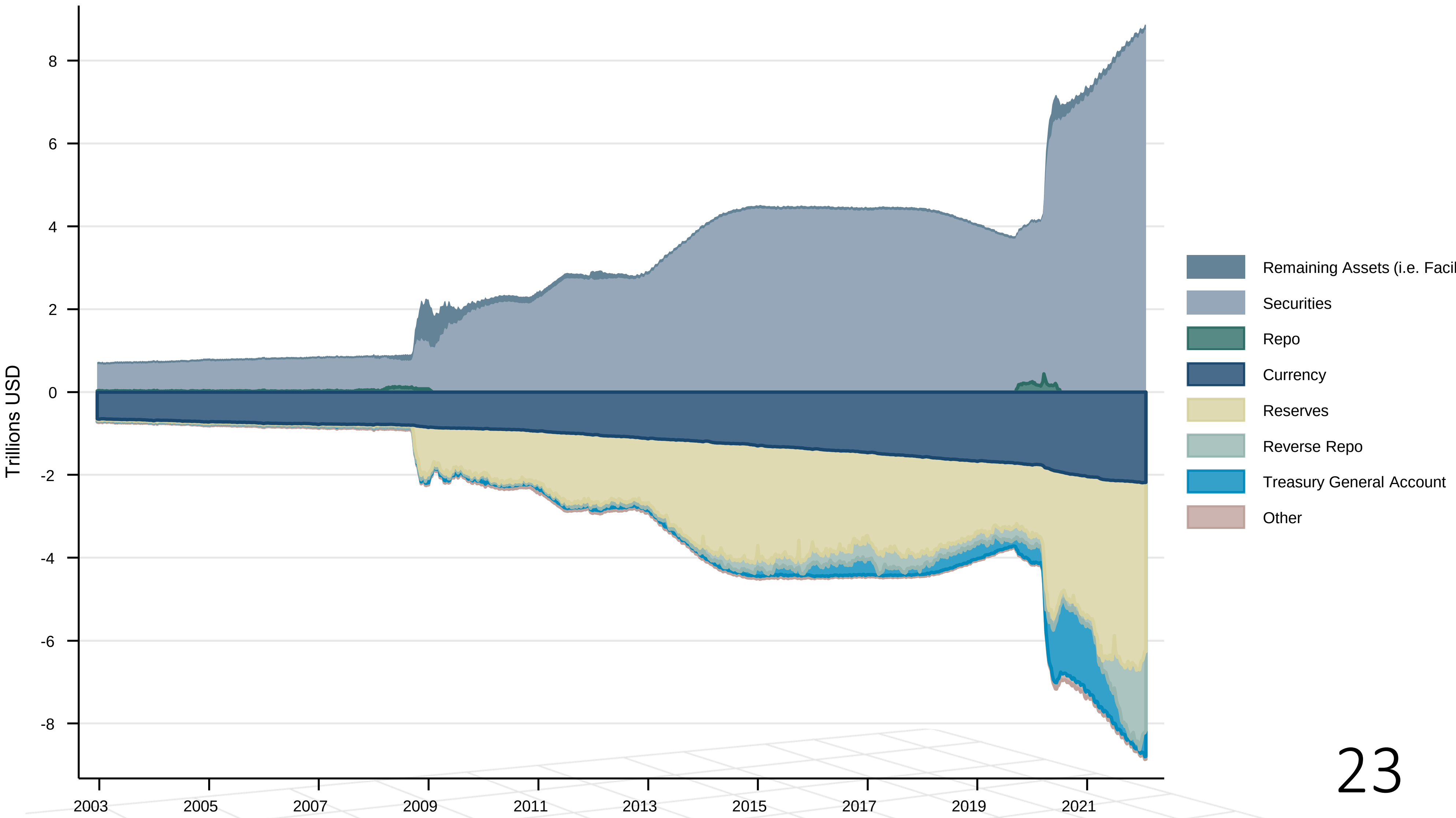
- Legal, international treaty
- **Capitalization** of CB's balance sheet
  - Interest rate payments on reserves to private banks
    - CB funding cost has doubled (BIS bulletin)
    - Loss on long-dated assets due to QE
  - Headline risk
    - Delay QT to avoid realizing capital losses Trap
  - Lesson: **Risk-focus** (not size-focus) of CB balance sheet

- Monetary Dominance & Sovereign **debt restructuring** costs
  - Ultimate subgame as shifter of bargaining power in game of chicken

- Monetary Dominance and **CB communication**
  - Narrative + blame game

Trap 2: Financial Dominance (over Monetary)

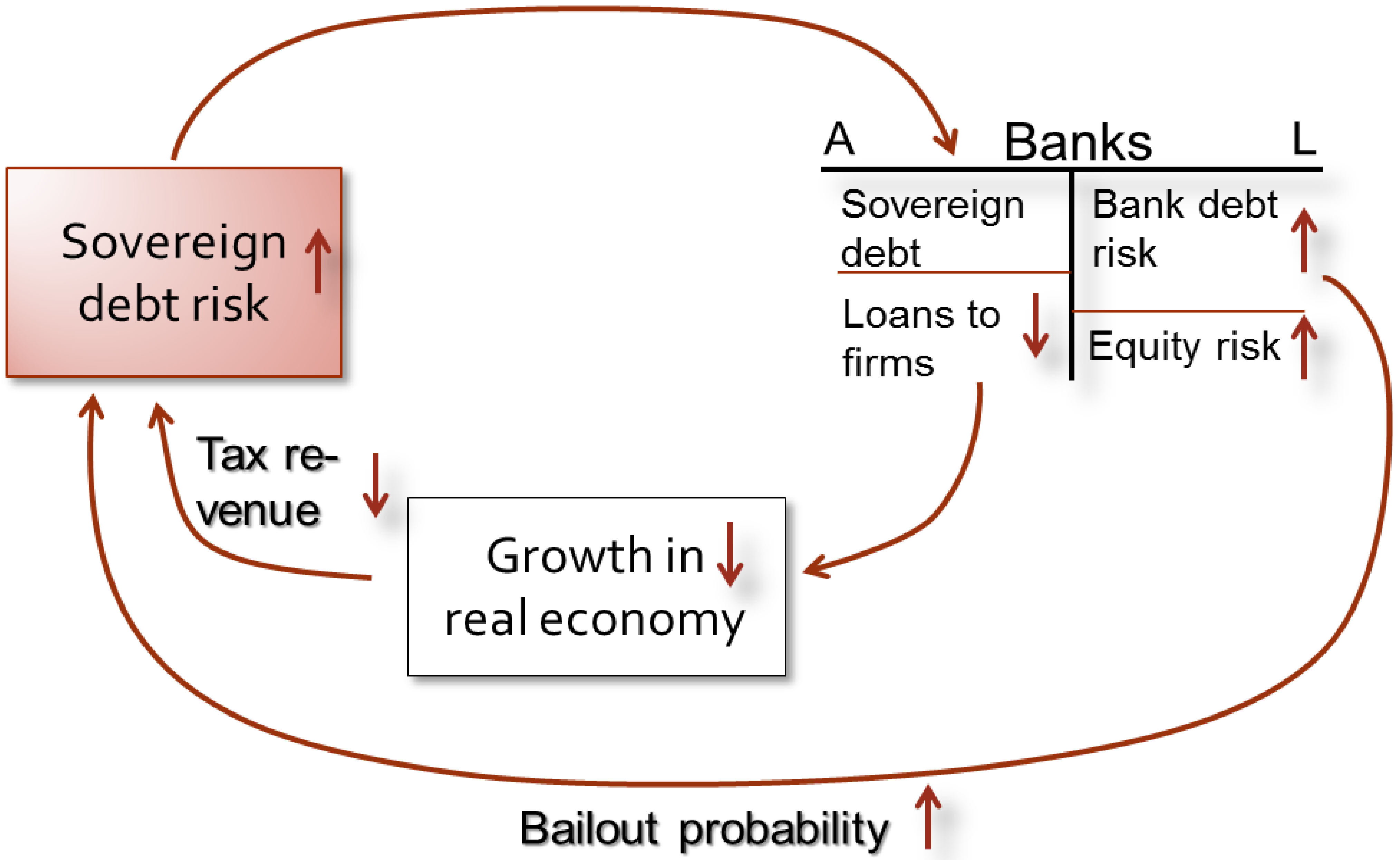
- Low inflation environment: **concurrence** btw price and financial stability
  - Monetary loosening boosts demand and financial stability
  - "Whatever it takes" approach is feasible
- High inflation environment: **trade-off**
  - Price vs. financial stability
  - Expect less intervention
    ⇒ higher inflation expectations
- CB distorted asset price signals
  - <u>Short</u> vs. pro-longed <u>intervention</u>



Trap 2: Financial Dominance – Doom/Diabolic Loop

- Doom/Diabolic Loop

<u>Risk-weights</u>



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- **International Resilience**
  - Risk sharing vs. Beggar-Thy-Neighbor
  - US Monetary Policy Spillovers
  - Global Flight to Safety: GloSBies

Resilience via Flexible Exchange Rates vs. Buffers

1. Exchange Rate Devaluation
   - Implicit "transfer" at the expense of other countries
   1. **Global risk sharing arrangement** (ex-ante perspective)
      - Temporary & mutual
      - Helps to bounce back (Phoenix miracle)
        - If debt is denominated in domestic currency (no "original sin")
   2. **Beggar-Thy-Neighbor**
      - Continuously

2. **Fixed Exchange Rate** & Buffers via **Reserves**
   - Foreign reserves push resilience barrier further away
   - … but private sector issues more foreign denominated debt
   - Push risk into the tails

Risk-on, Risk-off – Resilience-on, Resilience off

- Resilience on vs. off
  - Resilience on ⇒ temporary shock ⇒ arbitrage investors smooth out temporary shock ⇒ amplitude is smaller ⇒ more resilience

- 2 Forms of Sudden stop/capital flow reversal (multiple equilibria)

  a. **Default risk premium** higher r ⇒ higher default prob. ⇒ higher r

  b. **Loss of (local EM) safe asset status**
  gov. debt bubble ($r < g$) can't be supported anymore

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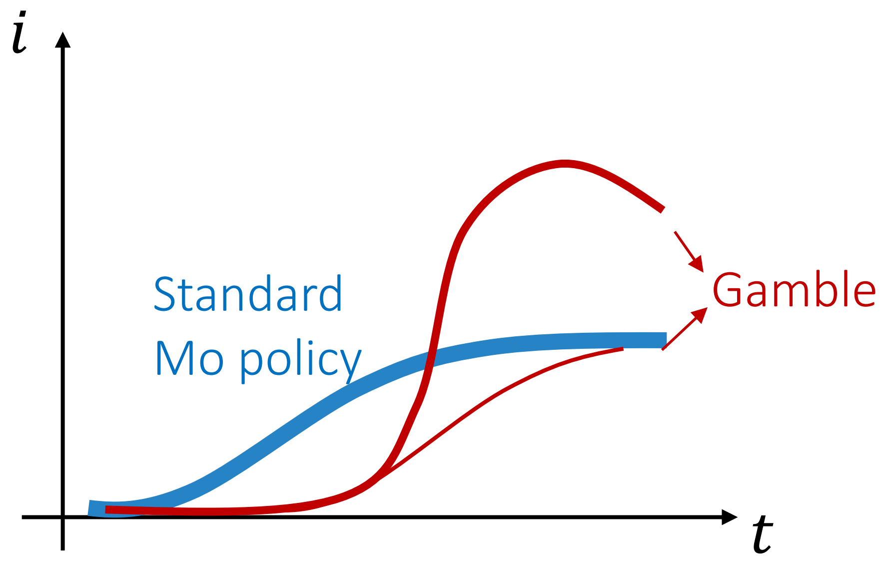
- Relative attractiveness (interest rate r^{EM} vs. $r^{\$}$) matters

$$r^f + \text{RISK PREMIUM} \begin{array}{l} < g \\ > r^{\$} \end{array} \Bigg\} \text{Sandwiched}$$

US Monetary Policy Spillovers of late response



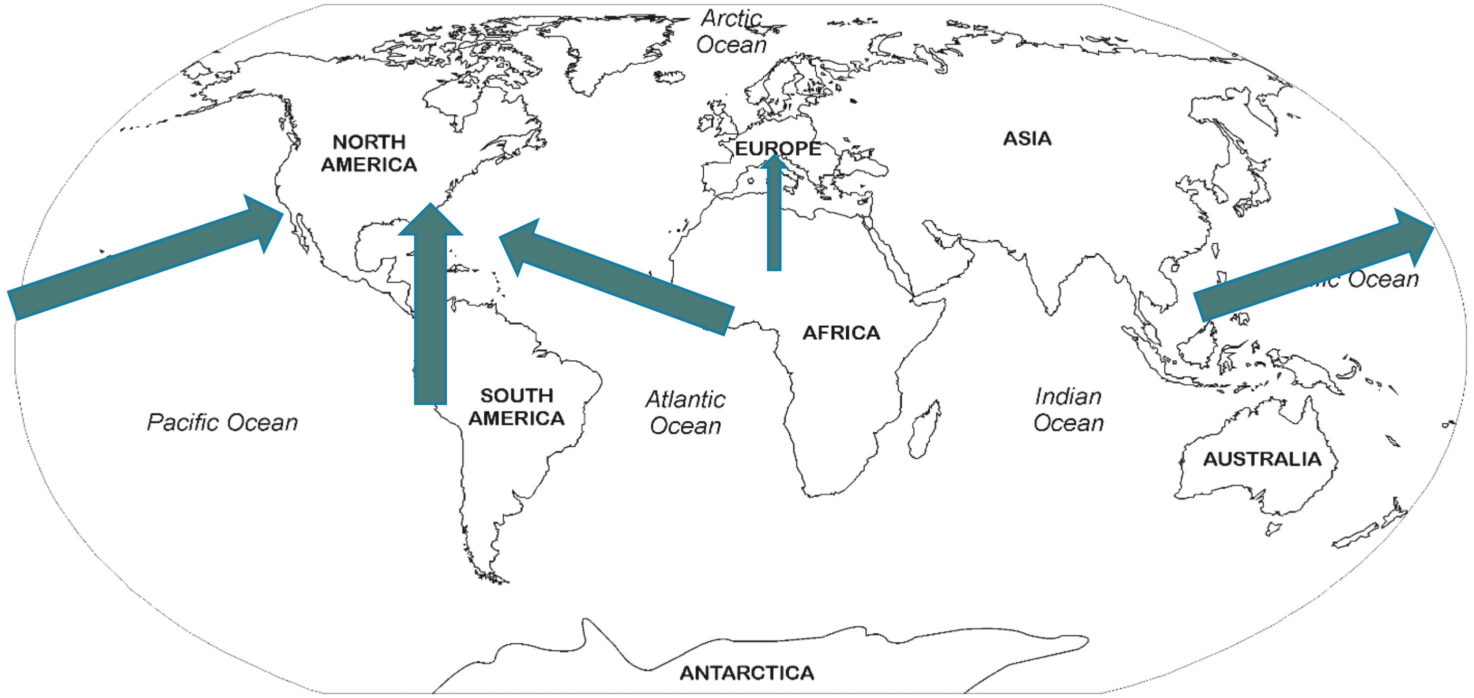
for social cohesion within US
backward-looking MoPo

- US MoPo can late as it enjoys own resilience (red curve)
  - Hike rate sharply if inflation spikes
  - Taylor Principle $\phi_\pi > 1$, i.e. real rate $r^\$$ increase
- … But MoPo spillovers to EMDC $\Rightarrow$ Sudden Stop (loss of (local) safe-asset status)

- Global planer's MoPo for US (blue curve)

International: Flight to Safety

- Risk-on, Risk-off   Flight-to-safe asset



- Problem: Safe asset is *asymmetrically supplied* by AE

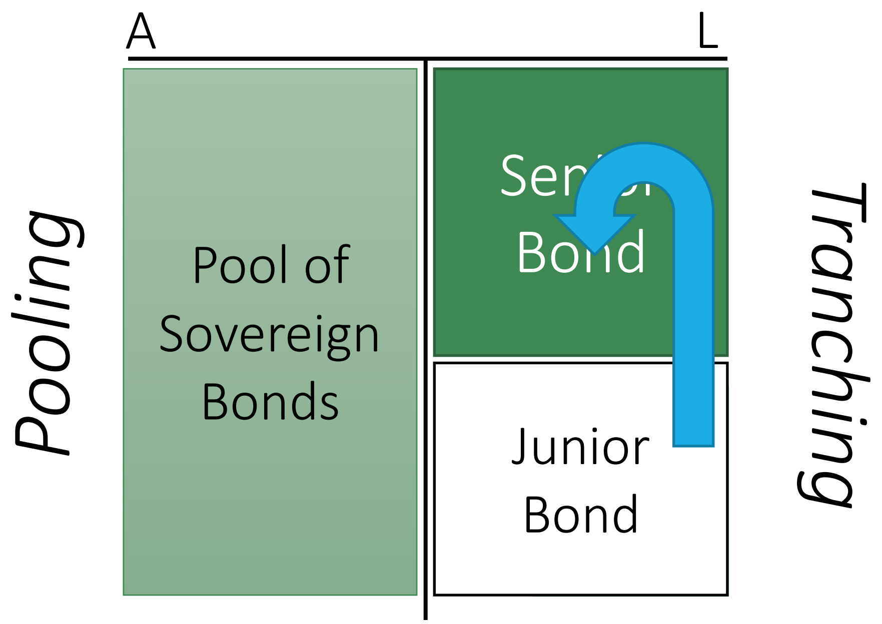
  Flight-to-safety ➡ cross-border capital flows

- Debt issues at times of global crisis
  - For AE   at inflated prices   eases conditions
  - For EM   at depressed prices   worsens conditions
- *Paradox: "Poor insure rich Paradox"*

A Safe Asset for EM: Rechanneling Approach

- Address root cause: Safe asset is supplied asymmetrically

- Create globally supplied safe asset for EME via pooling & tranching



Rechannel:
Instead of cross-border
Across asset classes

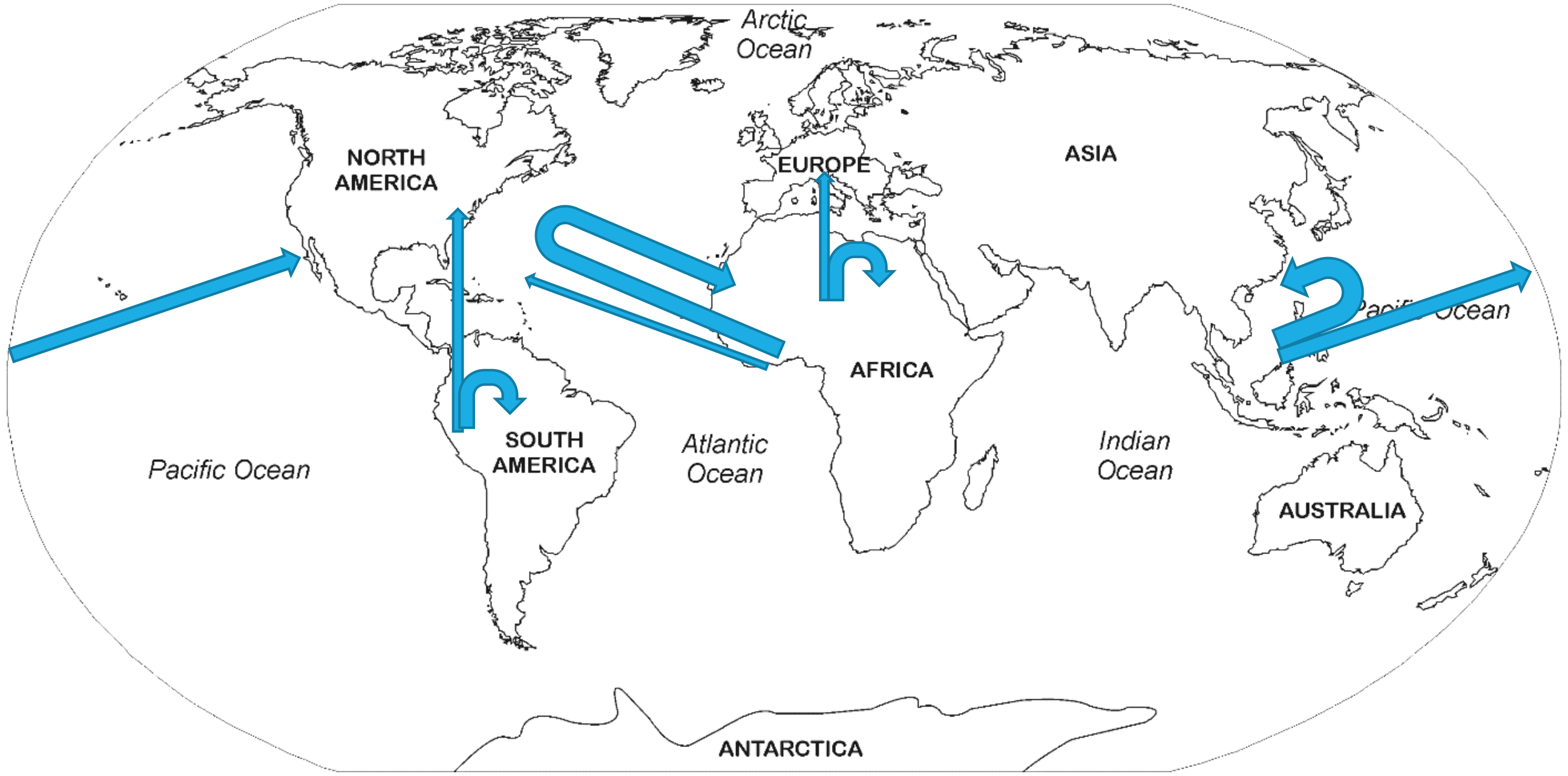
- Expand ESBies idea for euro area to EME:
  "SBBS (Sovereign-Bond Backed Securities) for the world"
  Euro-nomics group 2011, 2016, 2017

International: Flight to Safety

- Risk-on, Risk-off ➡ Flight to safe asset

- Channels back some of flight-to-safety capital flows

  fewer cross-border capital flows



Conclusion: Resilience and Monetary Policy

- **Risk** management approach
  - probability
  - + impact (disutility)
    of contingency events

- **Resilience** management approach
  - Inflation bounced back
    - Temporary adjustment helps to manage shocks/transition phases
    - Maintaining “inflation anchor” is key (Common knowledge)
  - Avoid traps
    - Forward Guidance
    - Financial dominance
    - Fiscal dominance
- **International** Resilience

Extra Slides