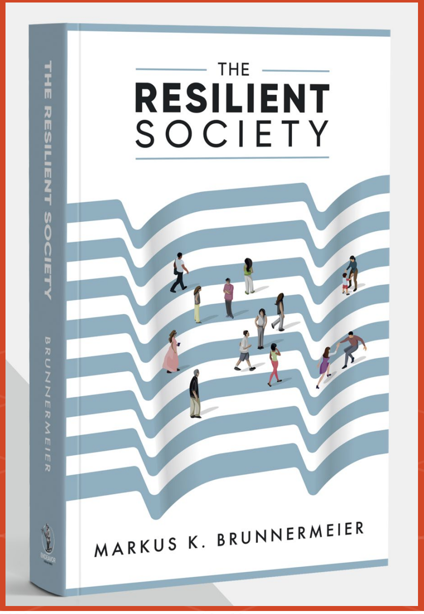
THE NEW INTERNATIONAL MONETARY SYSTEM: A SAFE ASSET PERSPECTIVE

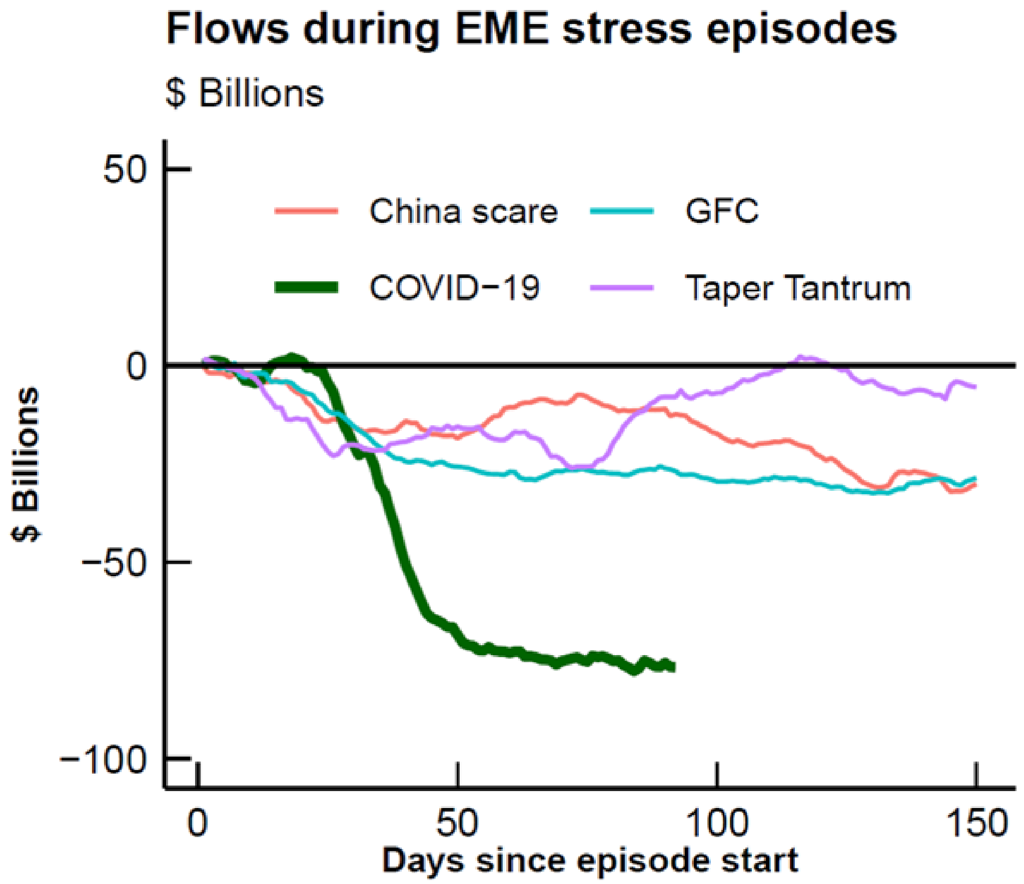
Based on
- A Safe Asset Perspective …
  (with Sebastian Merkel, Yuliy Sannikov)
- 

Markus Brunnermeier
Princeton University

Central Bank of Philippines
Reinventing Bretton Woods Committee
28. September 2021

CAPITAL OUTFLOWS

- March 2020: record outflow
- April 2020: stabilization



Source: National sources via Bloomberg.
Episode start dates: September 8, 2008 for Global Financial Crisis, May 22, 2013 for Taper Tantrum, July 26, 2015 for China Scare, and January 21, 2020 for COVID−19.
Excludes China. See panel 1 for list of countries included.

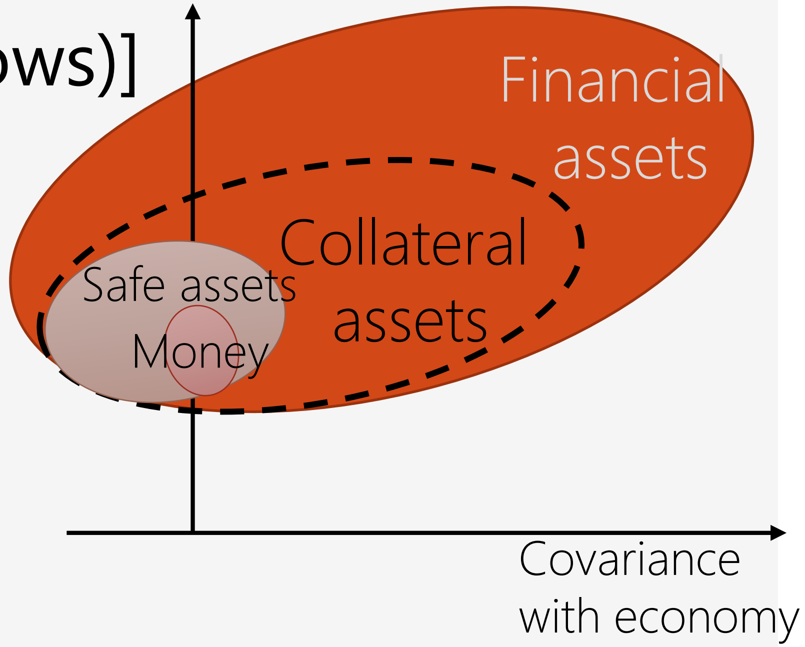
How to design a resilient
International monetary system

SAFE ASSET PERSPECTIVE

- Asset Price = E[PV(cash flows)] + E[PV(service flows)]

  dividends, interest payments

  - Service flows/convenience yield ⇒ **lowers r**
    1. Collateral: relax constraints (Lagrange multiplier)
    2. Safe asset: [good friend analogy]
       - When one needs funds, one can sell at stable price … since others buy
       - Partial insurance through retrading - market liquidity!
    3. Money (narrow): relax double-coincidence of wants



- Problem: safe asset + money status might burst like a **bubble**
  - Multiple equilibria if $r < g$: [safe asset tautology]

IF SAFE-ASSET-STATUS IS "WOBBLY"

- If government bond is risky

$$r^f \; - \; \text{safe asset privilege} + \text{risk premium} \; < \; g \qquad (1)$$

Risk premium

- Negative if safe asset appreciates in crises times (AE)
  - (1) easy ➡ Safe asset status easy to maintain
- Positive if safe asset status might burst (EMDE)
  - (1) fails occasionally ➡ loss of safe asset status

Self-fulfilling nature
(safe asset tautology)

- Capital controls: Gov. debt only safe asset
- Next, no capital controls: US Treasury competes as safe asset

COMPETITION WITH US TREASURY

- EMDE safe asset status is even more wobbly

$$\left.\begin{array}{r} r^f - \text{safe asset privilege} + \text{RISK PREMIUM} < g \\ r > r^{\$} \end{array}\right\} \text{Sandwiched}$$

- Note: risk is endogenous
  due to self-fulfilling expectations
  - So is the risk premium
    = price of risk * (exogenous + endogenous risk)
- Note: growth g is endogenous

➡ 2 layers of multiple equilibria (invites speculative attacks)
  - Rollover risk… Calvo (1988), Obstfeld (1996)
  - Loss of safe asset status (bubble bursting)

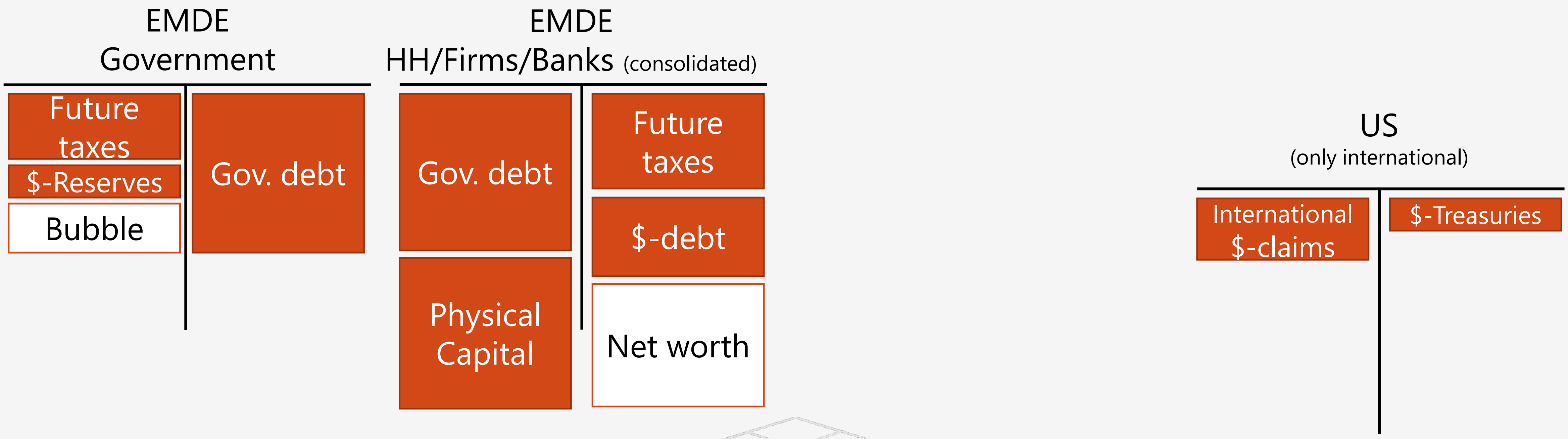
GLOBAL FINANCIAL CYCLE

- US Monetary Policy spillovers
  - Without capital controls
    US Treasury as competing safe asset

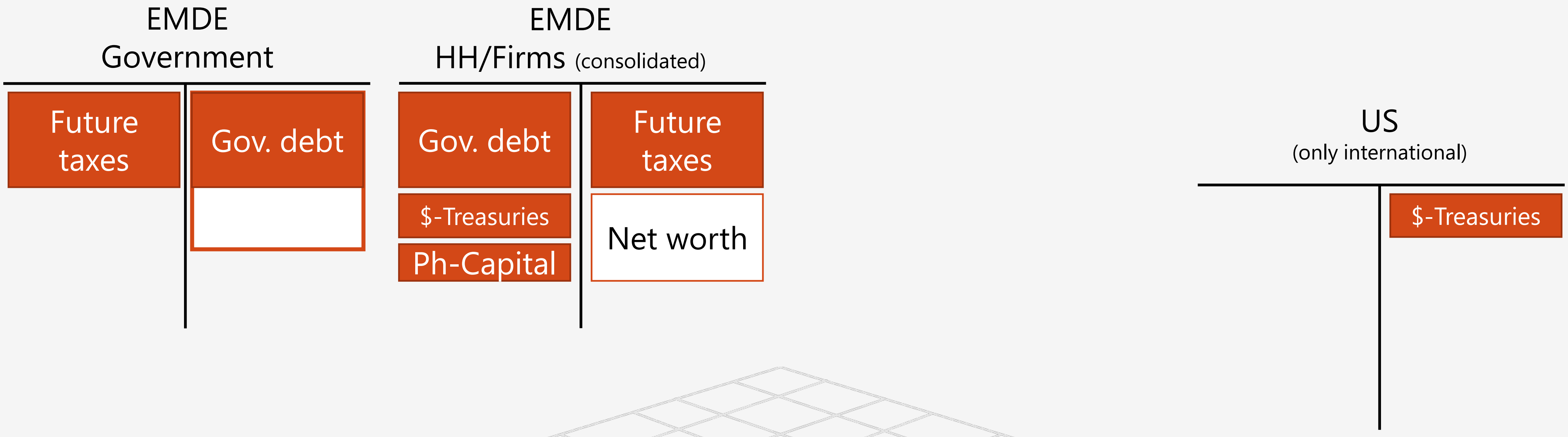
1. Initial phase
   - High $r^{\$}$
2. Temptation phase
   - Low $r^{\$}$
   - Issue safe asset at low interest
     - Due to bubbly convenience yield
3. Wobbly bubble phase
   - Increasing $r^{\$}$

- Risk-off risk-on cycles
  - Shifts in risk attitudes

2. TEMPTATION PHASE



3. CRISIS PHASE AFTER SUDDEN STOP



INTEGRATED POLICY FRAMEWORK

- Assess consistency of policy mix
  a. Monetary policy complements
  b. FX Intervention
  c. Capital Controls
  d. MacroPru

substitutes

POLICY MEASURES

<u>US:</u> Fed rate cut $r^{\$}$

<u>EMDE:</u>

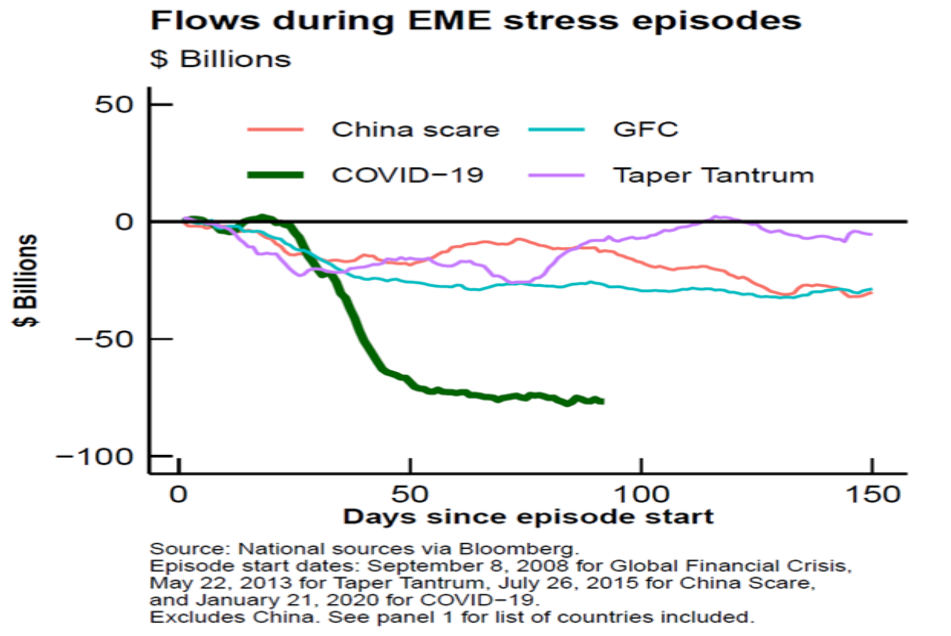
- Ex-post: Prop up fundamentals
- Ex-post: Support bubble
  - Capital control (outflows)
  - Market maker of last resort
  - FX intervention (with reserves)
- Ex-ante: Prevention
  - Capital control (inflow)
  - Reserves (signal/commitment)

POLICY MEASURES DURING COVID-CRISIS

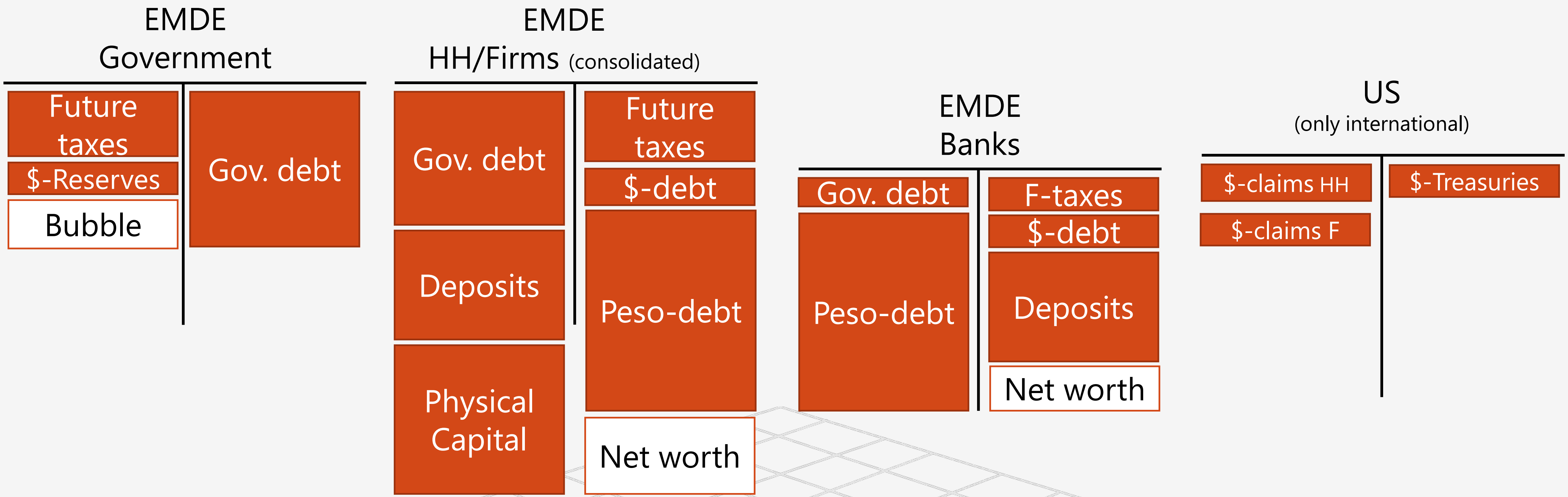
- 2020-03-03 US interest rate cut
- 2020-03-23 Swap lines (Fed, ECB, …)
- 2020-04-06 FIMA Treasury Repo facility (for EMDE)
- 2020-04-22 IMF short term liquidity line (SLL)

sandwich

FX inter-vention



2. TEMPTATION PHASE: WITH FINANCIAL SECTOR



AMPLIFICATION WITH FINANCIAL SECTOR

- Banks: diversifies of idiosyncratic risk
- Shock: $-debt appreciates
- Paradox of prudence among banks
  - Money/safe asset supply ↓
  - Money/safe asset demand ↑ (*gov. debt or $-Treasury*)
- Results into: inflation risk premium
  - AE or capital controls ➡ deflation negative ("I Theory" reasoning)
  - EM w/o capital controls ➡ inflation positive
- Twin crisis
  - If banks' assets are fixed interest (non-floating)
  - Catch-22:
    - price stability calls for tighter monetary policy, but
    - hurts banks' capitalization ➡ adverse amplification loop

INTEGRATED POLICY FRAMEWORK

- Assess consistency of policy mix
  a. Monetary policy complements
  b. FX Intervention
  c. Capital Controls
  d. MacroPru
     a. Tighter creates more policy space

substitutes

DILEMMA NOT TRILEMMA

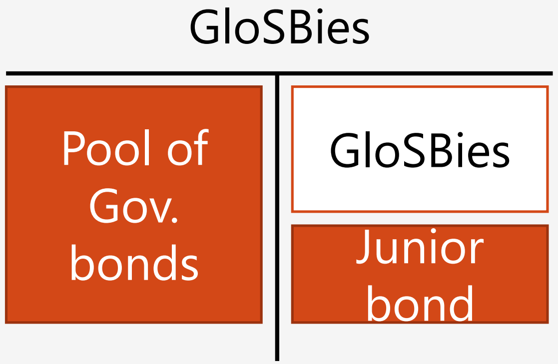
- Monetary policy is constrained/sandwiched
  - despite flexible exchange rates
  - unlike in Mundell-Fleming Trilemma
- Theoretical foundation
  - Complements empirical approach in Rey (2017)

SELF-STABILIZING GLOBAL FINANCIAL ARCHITECTURE: GLOSBIES

- EMDE safe asset status is even more wobbly

$$r + \text{RISK PREMIUM} < g$$

$$r > r^{\$}$$



- Tranching: to concentrate risk premium on junior bond
  eliminate risk premium on senior bond
- Real bond: to remove inflation risk from senior bond
- Pooling: to overcome commitment problem
  not to create a supersenior bond later

CONCLUSION – RESILIENCE THREATS

- MoPo affects risk premia
- Fragile "safe asset status"
  - $r + \text{risk premia} < g$
  - Self-fulfilling expectation feature (safe asset tautology)
- Sandwiched by $r^{\$}$
- Policy mix
  - MoPo, Capital Control, FX Intervention, MacroPru
- Global Financial Architecture: GloSBies