Future Proofing Central Bank Financial Strength

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Rethinking Central Bank Independence: Updating Empirics and New Challenges

Outline of presentation

- Start: CB key mandates: price, economic and financial stability
  - With associated tasks and tools (monetary policy, regulation and supervision, payments system oversight)
- Why is CB financial strength important?
  - What is it? What shapes it? What is it today?
- What trends challenge CB financial strength?
- How to future proof CB financial strength?

Why is CB financial strength important?

- Credibility and independence of a CB, and thus its effectiveness, depends on its <u>financial strength</u>, both in flow and stock, since:

1. CB needs income for operational autonomy (e.g., to hire people
2. Overall financial strength affects credibility and independence

- CB financial strength is closely linked to public finances
  - CB is part of the consolidated public finances
  - Most CBs transfer “excess” profits to the Ministry of Finance/Treasury
  - CB can operate with negative capital at times
  - But Ministry of Finance/Treasury must be ready to recapitalize

What is CB financial strength?

- ➢ CB financial strength **is not synonymous** with commercial bank balance sheet strength and related solvency calculations
- ➢ Definitions, from narrow to all-inclusive:
  1. **Accounting Capital** (basic solvency): Assets - Liabilities
     - Measurement of value of assets (and liabilities). But: Book or Market/Fair value?
  2. **Comprehensive Net Worth**: Accounting Capital + PV (Future Income-Expenses- (<u>automatic</u>) Dividends + “Callable Resources”)
  3. **CB Financial Strength:** Comprehensive Net Worth + PV (Other transfers to and from TRE/MOF)

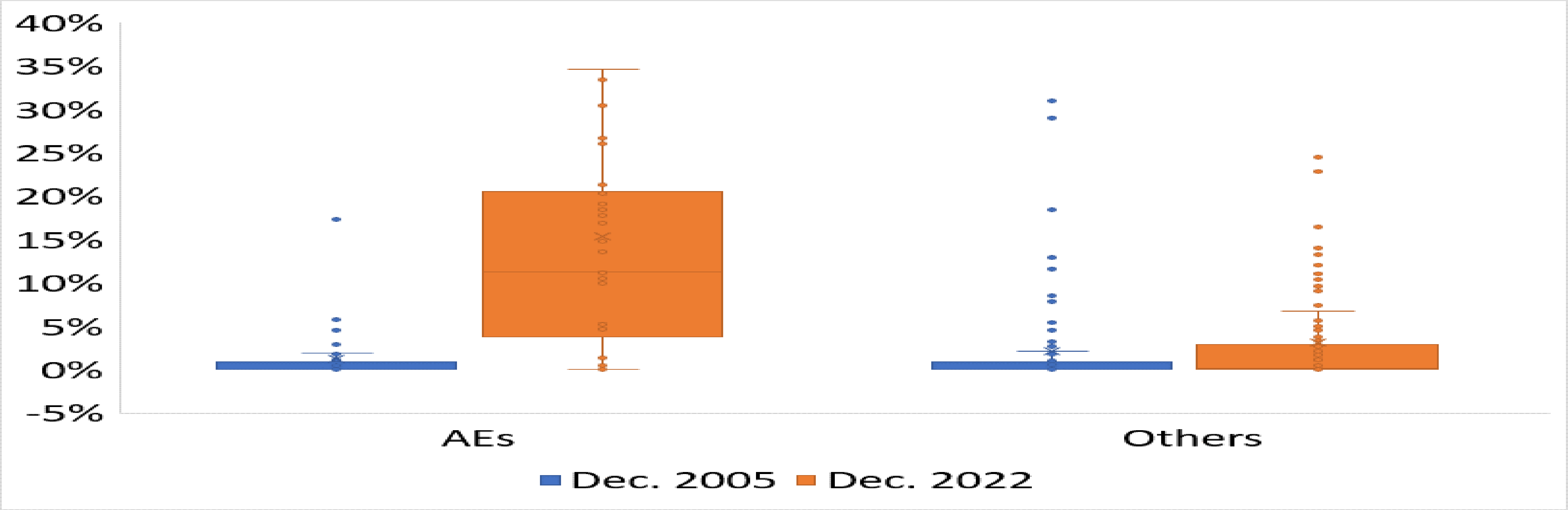
Various policies shape a CB's balance sheet

Stylized Central Bank Balance Sheet

Assets	**Liabilities**
Net Foreign Assets	Currency in Circulation
Foreign Reserves (net)	Commercial Banks' Reserves
Monetary Gold	Required Reserves
Other Foreign Assets (net)	Excess Reserves
Domestic Assets	Government Deposit
Government Securities & Advances	Central Bank Securities
Domestic Securities	Other Liabilities
Loans to Financial Institutions	**Equity**
Other Assets	Statutory Equity
	Revaluation Reserves
Total Assets	***Total Equity and Liabilities***

CB balance sheets grew fast post GFC and Covid, especially in advanced economies via sovereign debt

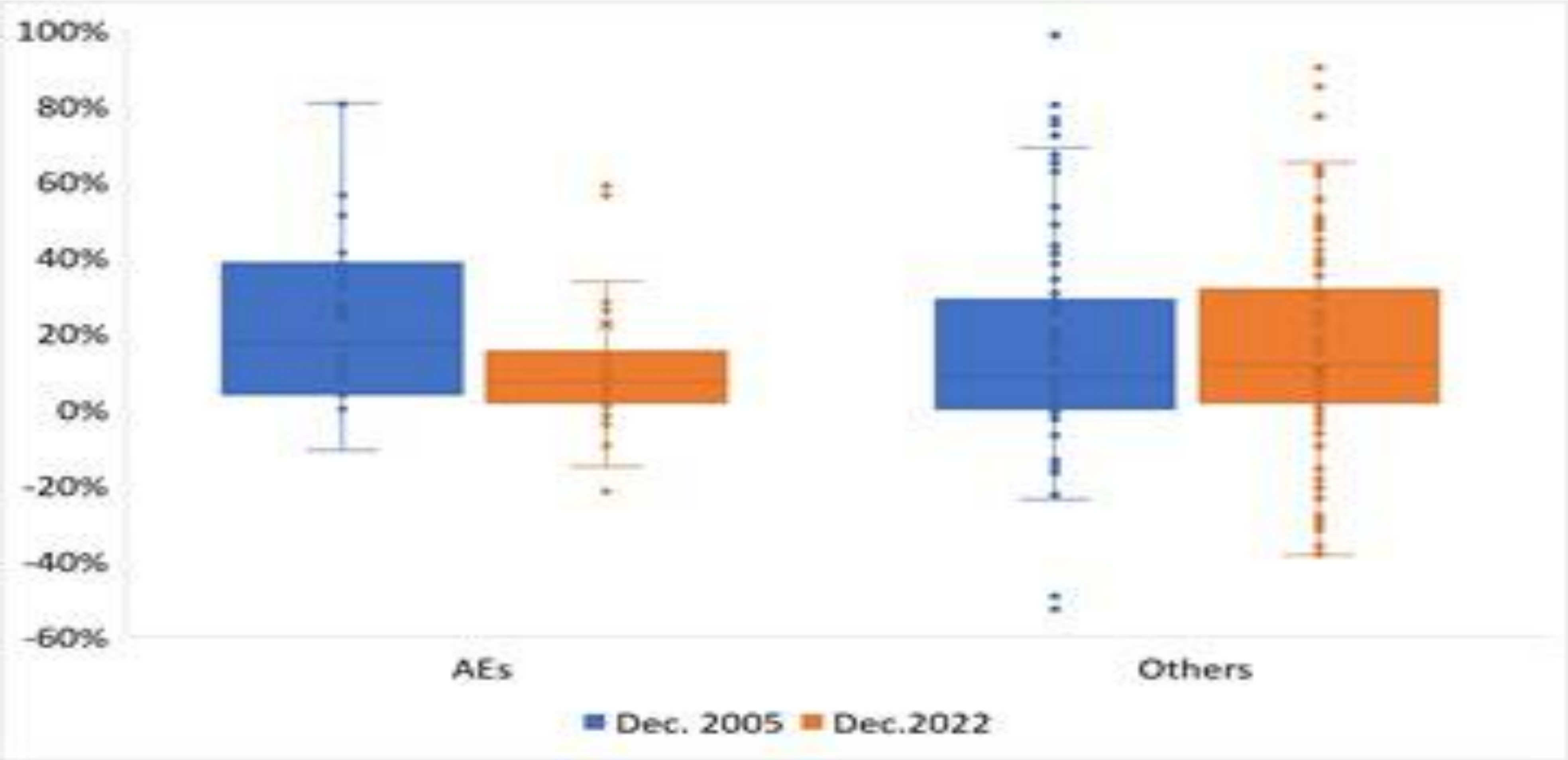
Government securities as a percentage of GDP



Source: IMF 2024d

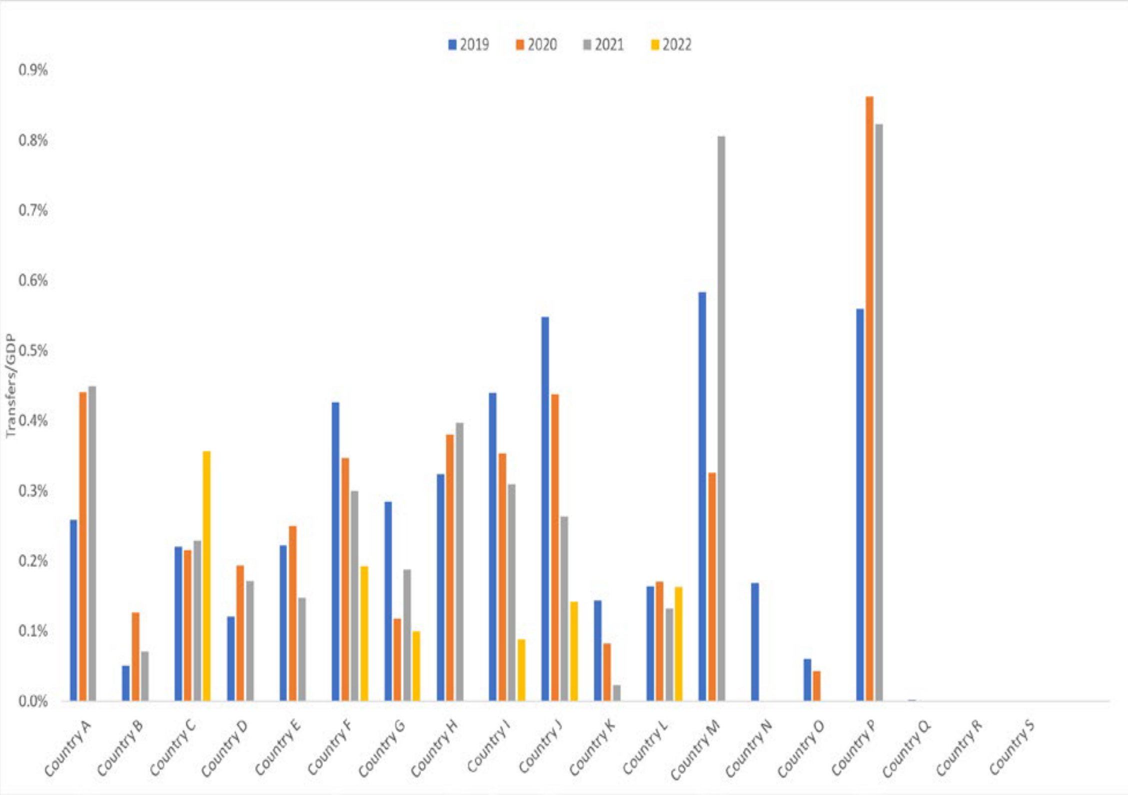
But CB capital cushions did not increase commensurate (at least in advanced economies)

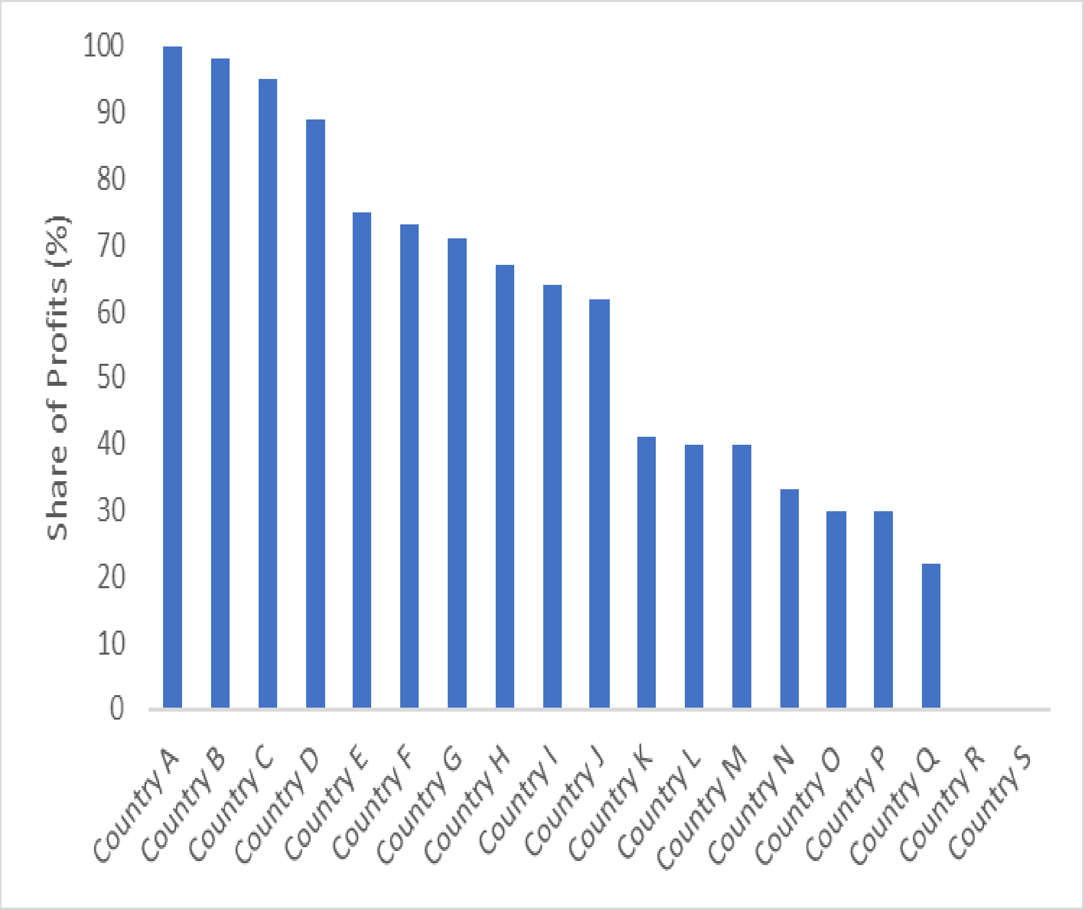
CB capital account (as percent of monetary base)



Source: IMF 2024d

CBs transferred much income to fiscal in recent past (left panel, % of GDP), with high payouts (right panel, %), more than historically





Source: IMF 2024d

Substantial recent losses, notably for advanced CBs, due to higher interest rates

Central Bank	Reported losses (in USD)
Bank of Canada (BOC)	USD 3.3 billion (nine-month period ended in September 2023)
Bank of England (BoE)	Losses projected to be USD 50 billion in 2023 and 2024
De Nederlandsche Bank (DNB)	USD 3.8 billion (2023)
European Central Bank (ECB)	USD 1.41 billion (2023)
Federal Reserve (Fed)	USD 114.3 billion (2023)
Monetary Authority of Singapore (MAS)	USD 22.8 billion (fiscal year ending in March 2023)
Reserve Bank of Australia (RBA)	USD 3.96 billion (fiscal year 2022/23)
Reserve Bank of New Zealand (RBNZ)	No surplus equity for distribution (fiscal year 2022/23)
Riksbank	USD 7.94 billion (2022)
Swiss National Bank (SNB)	USD 3.54 billion (2023)

Source: International Monetary Fund, 2024d.

What trends challenge CB financial strength?

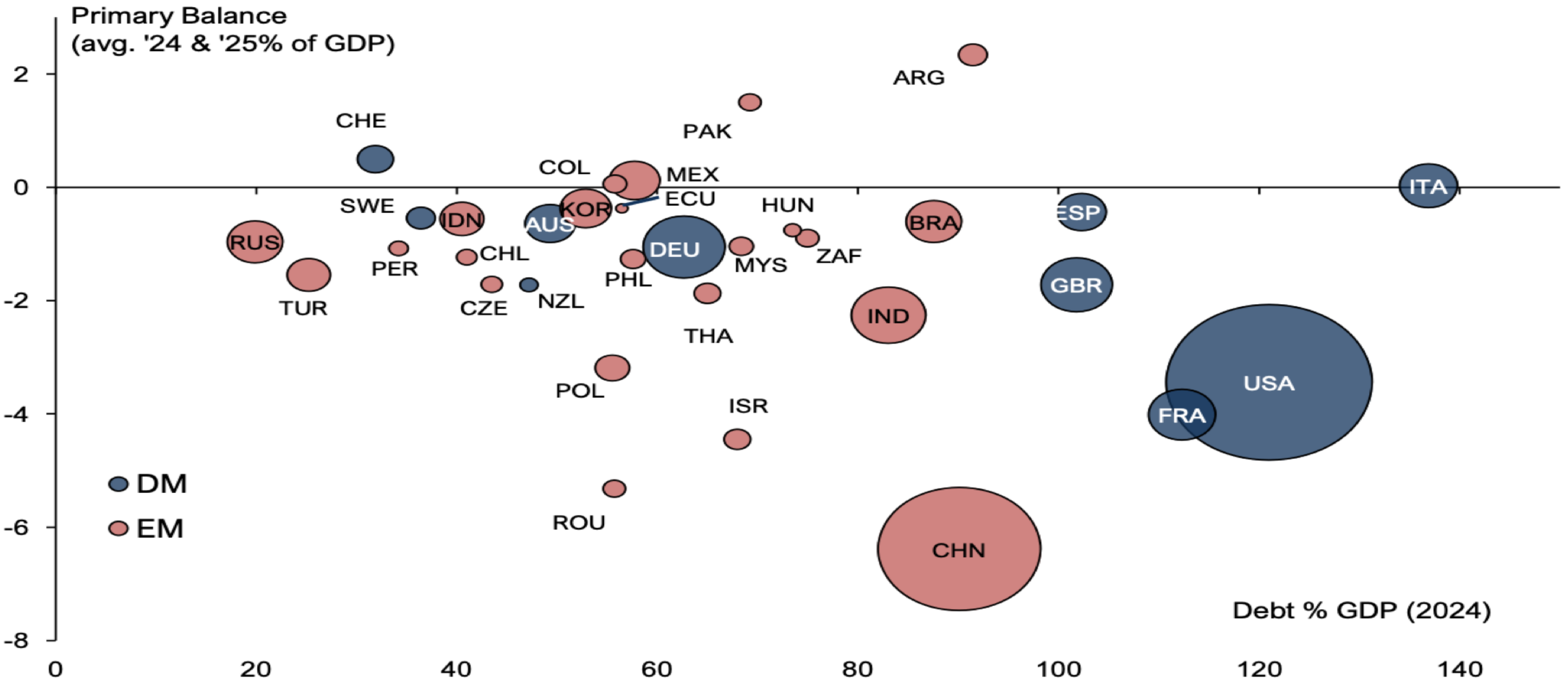
1. **Debt and Populism**
   - **High public debt and large fiscal deficits,** with low growth for many
   - **Rising populism,** increasing risk of lack of fiscal support
2. **Technology**
   - **Technological trends and innovation in payments** that can reduce **seigniorage,** a key source of income for many CBs
3. **Fragmentation**
   - Increased **geo-fragmentation in trade and capital flows** driven by political economy, mercantilism and national security concerns means:
     - ❖ More volatility in key variables, adversely impacting financial strength
     - ❖ Less scope for coordination to deal with global shocks

1a. Fiscal support is key for CB operations and independence

- Fiscal sustainability and fiscal support are both necessary

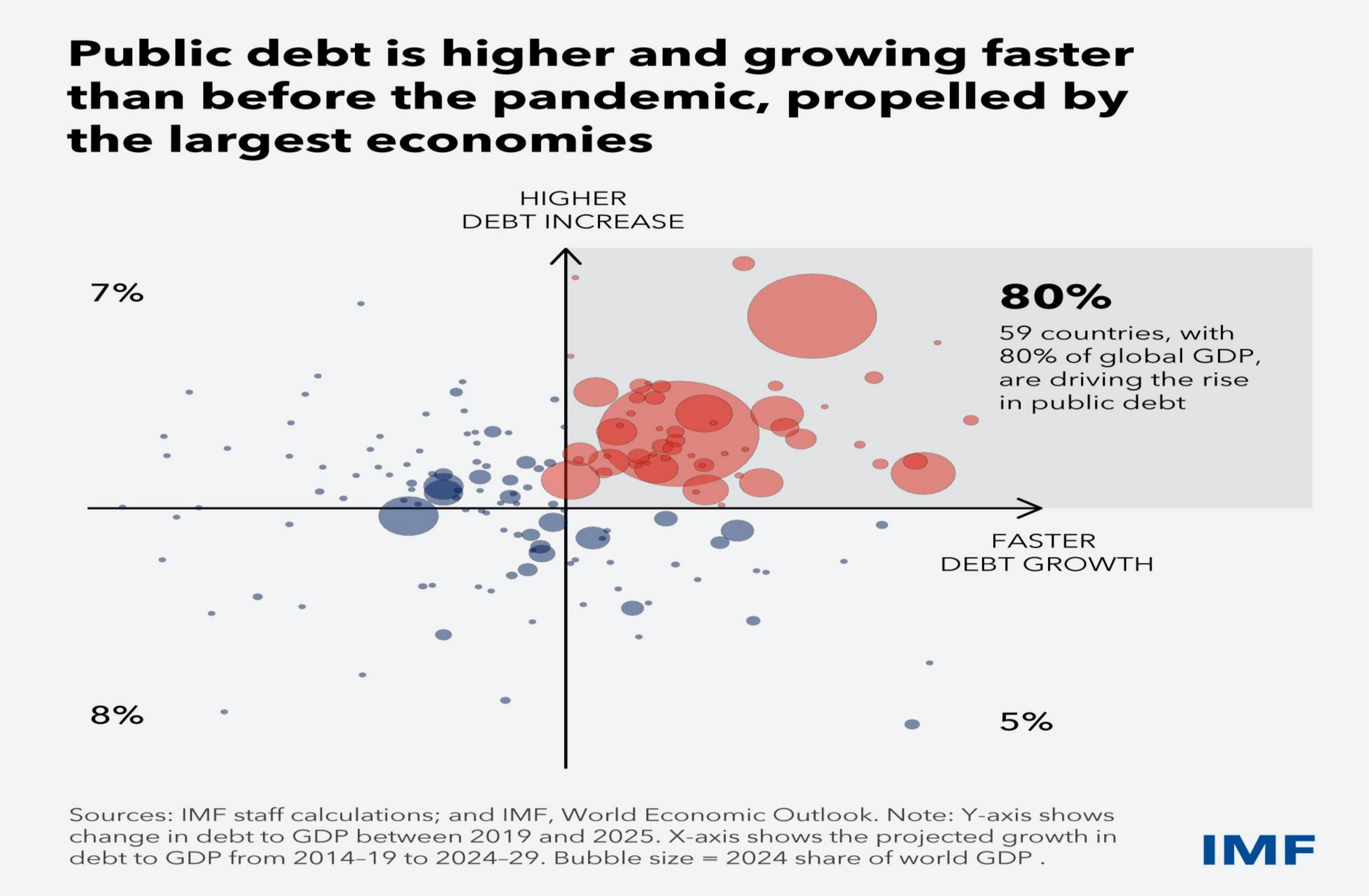
- Fiscal unsustainability threaten monetary policy (fiscal dominance)
- Fiscal support can be needed if large shocks occur (recur)
  - CBs are part of consolidated public financing, transfers can be large, but typically are not symmetric (one way)
  - Large CB losses or low capital call for fiscal support, but more in question with high debt and rising populism

1b. Increasing public debt levels and primary deficits



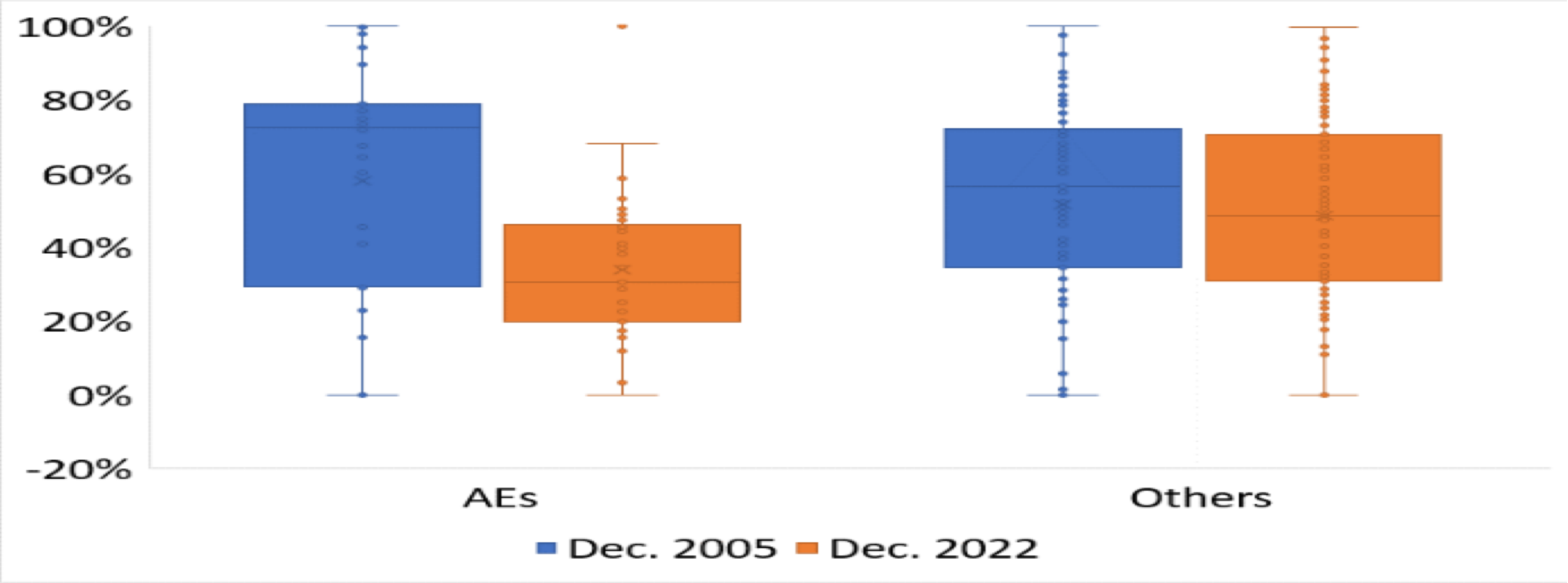
Goldman Sachs Global Investment Research 2024

1b. Going forward, debt increasing in majority of global economy. Along with populism, lowers ability and incentives for fiscal support



2. Currency in circulation has fallen, more so in advanced economies, and seigniorage may fall sharply

Currency in Circulation (as a share of the Monetary Base)



Source: IMF 2024d

3. More deglobalization and fragmentation

- Deglobalization and fragmentation of trade and capital flows have adverse financial and economic impacts
    1. Lower real growth and higher inflation, worsen trade-offs
    2. Higher volatility, challenging monetary and financial stability
    3. Less diversification opportunities, lower return on assets
    4. Reduced willingness to cooperate in stress/crisis situations

➢ CB income lower, valuations of assets worse

➢ Risks greater, requiring higher CB capital buffers

Framing of channels and effects

Direct effects (main

Challenges tasks' execution

Potentially perverse feedbacks

Central bank financial strength

1. Current net worth plus
2. Present value of future income minus expenditures plus
3. Various ad hoc transfers to and from the Tr/MoF

Current losses
Three trends:

1. High debt, deficits, populism
2. Technology changes
3. Deglobalization

Core mandates and related tasks:
Monetary policy
Financial stability
Payments

The three trends affect CBs' financial strength directly and indirectly, with impacts varying by country

Trends and Their Adverse Impacts on Central Banks' Financial Strength.

(Direct effects and indirect effects, by challenging the execution of policy tasks)

	Trends→ *Channels↓*	*High debt and deficit levels, populism*	*Technology changes*	*Deglobalization*
Direct effects on net worth, income	*Fiscal backing*	*XXX*	.	*X*
	Own Income	*X*	*XXX*	*X*
*Indirect effects by challenging execution of tasks**	*Monetary*	*XX*	*X*	*XX*
	Financial stability	*XX*	*X*	*X*

Notes: XXX indicates more important, XX moderately important, X less important, . largely absent.

*By challenging tasks, the trends increase risks and can reduce central bank financial strength. But there are also opportunities to achieve the core policy goals while incurring less risks to central bank financial strength.

How to future proof CB financial strength in ways that *reinforce* independence and key CB objectives?

➢ CB need sufficient **<u>comprehensive net worth</u>** to execute core functions, ensure independence and insulate it against political pressures

1. Income is robust and external support is ensured
   - Function of accounting (notably MtM valuation) rules, income recognition and distribution policies, and recapitalization rules
   - Also function of indemnification and MOF/TRE risk sharing, and ad-hoc support
2. Develop greater, new revenue sources as seigniorage declines
   - Increase existing fees or add new income sources
3. Adapt core tasks and their execution and tools to reduce risks
   - Monetary policy (criteria for and forms of unconventional monetary policy, operational frameworks, use of forward guidance)
   - Financial stability functions (thresholds, crisis management, facilities, ..)

1a. Mechanisms affecting reported income, allocation, recapitalization rules and indemnification vary widely

Mechanism	Approach	Description and comments
	Fair value changes go directly to P&L	Changes in market values have immediate impact on P&L, thus introducing volatility to income and distributions.
A: Accounting	Fair value changes go to equity account	Changes in market values are recognised but retained in equity by reserving, thus reducing volatility from asset valuations.
	Historic cost accounting	Changes in market values are not recognised unless and until the asset is sold. Reduces volatility from asset valuations.
	Full transfers	Any income in excess of expenses is automatically transferred (and building buffers may be explicitly prohibited).
	Fixed or contingent distributions	Distributions are of fixed magnitude; or are contingent on targeted equity level or requirements to hold similar buffers for loss coverage. Allows central banks time to rebuild reserves.
B: Income recognition and distribution rules	Discretionary risk buffers	General or specific risk buffers (built in some cases before P&L is calculated). Can cover a range of risks but excess buffers could lead to socially inefficient overcapitalisation. Can be at central bank discretion or subject to joint decision with government (which may introduce risk of disputes).
	Distribution smoothing	Decouples volatility from distributions, making transfers to fiscal authority more predictable.
	Automatic loss coverage or recapitalisation by government	Makes it clear that fiscal backing is ultimately required and can avoid negotiation over terms of a recapitalisation.
C: Risk transfer	Government indemnities	Government may provide indemnity, eg by creating a special purpose vehicle (SPV) for non-standard central bank activities or providing one for specific operations. Can be used to segregate specific operations where desired.

Reproduced from Bell et al. 2023.

1b. Strengthen reporting of income, distribution and recapitalization/ indemnification and disclosures

- Accounting rules need to assure adequate capital buffers
  - Asymmetric accounting rules, income recognition and dividend distribution policies to smooth volatility in income and build capital buffers
- Rule-based recapitalization arrangements can be especially helpful
- Regular stress tests can help guide TR/MOF and CB policies relating to income and capitalization support
- Indemnification arrangements
  - Essential for non-core tasks, such as performed under agency agreements
  - Should generally be avoided for core tasks, especially monetary policy operations (e.g., asset purchase programs)
  - Still, in some cases (e.g., economy-wide stress, debt management in small economies with limited local debt markets), indemnification may be useful
- Disclosure policies - relating to balance sheet, income projections, stress tests, indemnification arrangements - to be carefully calibrated

2. As seigniorage declines, considering tradeoffs, cover operational expenses with other revenues

- Under currently planned designs, retail CBDC (on net) will likely <u>not</u> preserve seigniorage income
  - Use cases are not obvious and designs limit amounts held
    - But if needed, CBDC-designs can allow for more seigniorage
- Develop and increase alternative income streams
  - Increase non-remunerated reserves, use tiering
  - Increase interest income from CB lending operations
  - Enhance foreign reserve management related income
  - Charge and/or increase fees relating to supervision, payments services and use of the CB distribution network
    - Programmability, tokenization could provide new revenues
  - Charge an overall fee to recover costs for core operations

3a. Alter monetary policy framework and operations to assure CB financial strength consistent with core objectives

- Assure tasks align with core mandates, else realign
- Adjust policies and implementation modalities to mitigate risks to financial strength <u>and</u> enhance policy effectiveness
  - Move operationally to a scarce reserves regime, with a corridor system
  - Consider impacts on CB financial strength of unconventional monetary policy choices (part of lengthening policy horizon)
  - Deploy unconventional measures only exceptionally (e.g., like for GFC)
  - Limit lending facilities to banks, ensure self liquidating/exit, raise their costs over time (as economic conditions normalize)
- Use less unconditional ("Odyssean") forward guidance as too risky
- EMEs: evaluate size of international reserve holdings => SWFs

3b. Revisit financial stability policies, ex-ante and ex-post, to assure greater CB financial strength

- Improve oversight and raise threshold for interventions
  - Improve oversight, notably of non-banks and core FMIs
  - Allow somewhat greater volatility while ensuring core remains resilient, respond only to systemic events
  - Lowers financial stability risks over longer horizon, enhances CB strength

- Aim at greater risk sharing with the private sector
  - Use well governed mutualization and other arrangements (e.g., @CCPs) to support more ex-ante risk sharing by the private sector
  - Prioritize targeted, temporary and transparent interventions
    - Enhance data reporting and collecting accordingly
  - Allocate resolution and recovery costs for failed banks on other FIs

Many synergies, some tradeoffs and considerable differences by country .. But acting early is valuable for all CBs

- Many recommendations are synergetic
  - Better policies → greater financial strength
  - Greater financial strength → more credibility
- But there are tradeoffs, e.g.
  - Transparency: depending on governance can overdo
  - Rules for every contingency: can overdo and be risky
- Countries differ
  - Large advanced economies: more choices and time
  - Emerging markets, small open economies: more challenges, can have stark non-linearities
- Acting early is valuable
  - Waiting for the “right time” is risky
  - Irreversible damage can arise