LOCAL CURRENCY GOVERNMENT BOND MARKETS:

The Development Path

Based on a Client Presentation, March 2021

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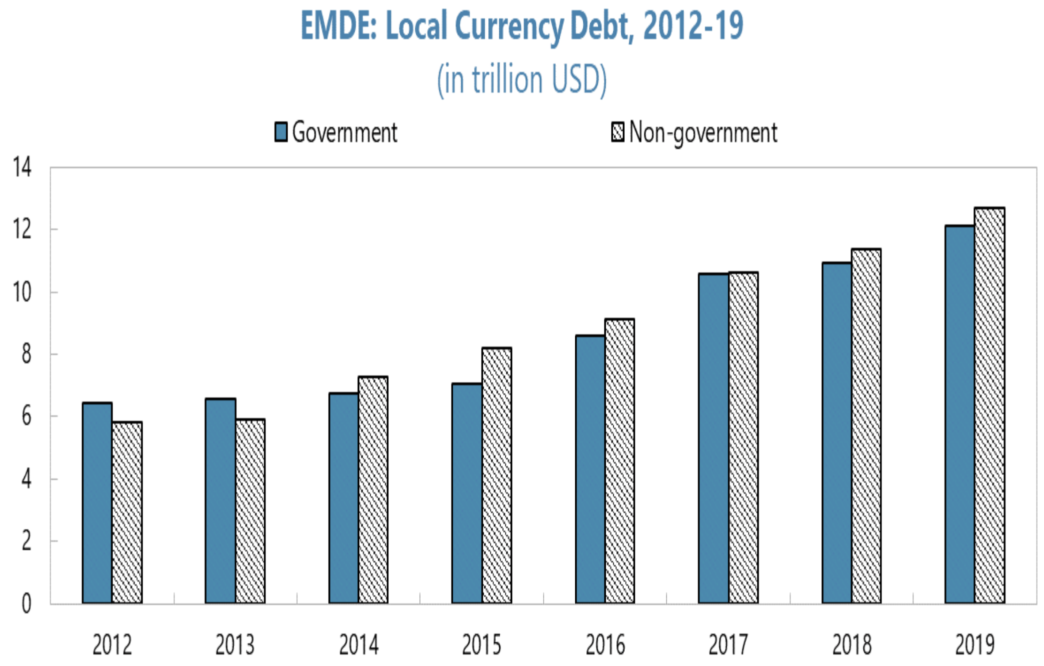
Outline

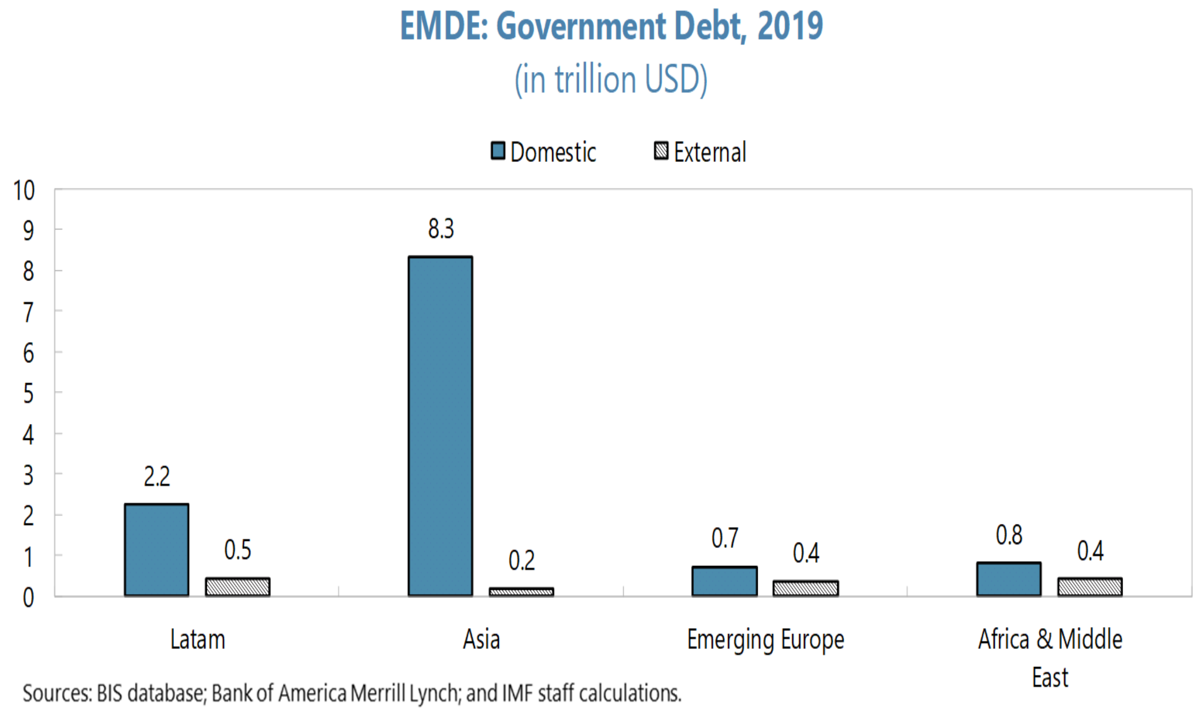
- The Context
- Building the LCBM
- The Special Case of the Money Market
- The Reform Plan

Local currency markets are growing....

...but are still very small (outside Asia)



Sources: BIS database; Bank of America Merrill Lynch; and IMF staff calculations.
Note: The following Advanced Economies are also included: Cyprus, Czech Republic, Hong Kong, Israel, Korea, Lithuania, Macao, Singapore,



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Note: The following Advanced Economies are also included: Cyprus, Czech Republic, Hong Kong, Israel, Korea, Lithuania, Macao, Singapore, Slovak Republic, Slovenia, and Taiwan.

Why Issue Domestically

Reducing portfolio risk

- Especially market risk (in domestic currency)
- Widening access to funds; reducing cost of funds
- Improved financing choices

Developing efficient local financial markets

- Liquid market and greater competition reduces risk for private sector borrowers
- Benchmark curve makes pricing more efficient and more transparent; allows development of hedges
- Risk-free asset facilitates portfolio construction

Wider benefits to the economy

- Improved resource allocation from channelling of savings
- Greater resilience at time of financial crisis

“Efficiency” is central to Money and Bond Market Development

Efficiency means:

- Low transactions costs
- Competitive market processes
- Liquidity* - ability to buy and sell close to market price
- High substitutability between financial instruments
- Completeness – allow maturity transformation and allocation of capital to productive uses

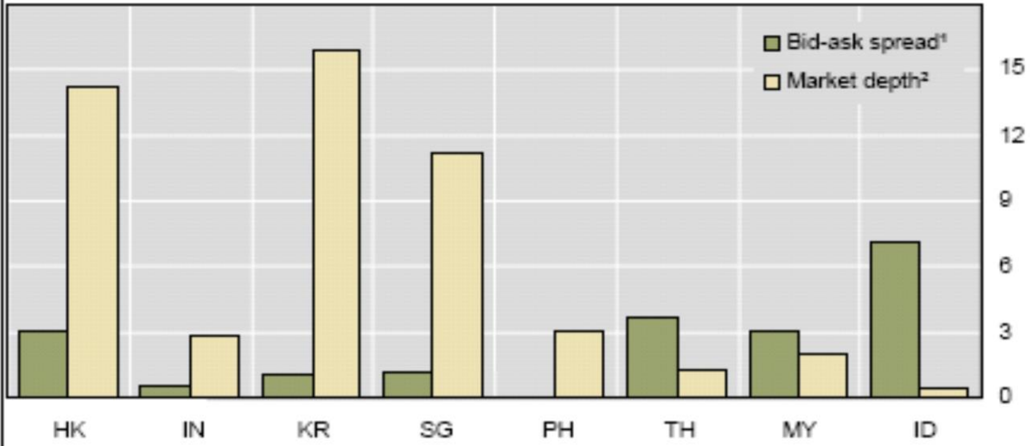
Implies

- Integrate efficiency objectives with domestic financing strategy

***Liquidity** has three components
- Market depth – the size of trade required to change prices by a given amount. Indicator: ratio of turnover during a period to the average outstanding stock
- “Tightness” – cost of turning around a position over short period. Indicator: width of bid/offer spreads on trades.
- Resilience – speed with which prices recover from a random, uninformative shock

Liquidity Indicators in E. Asia Bond Markets

Indicators of liquidity



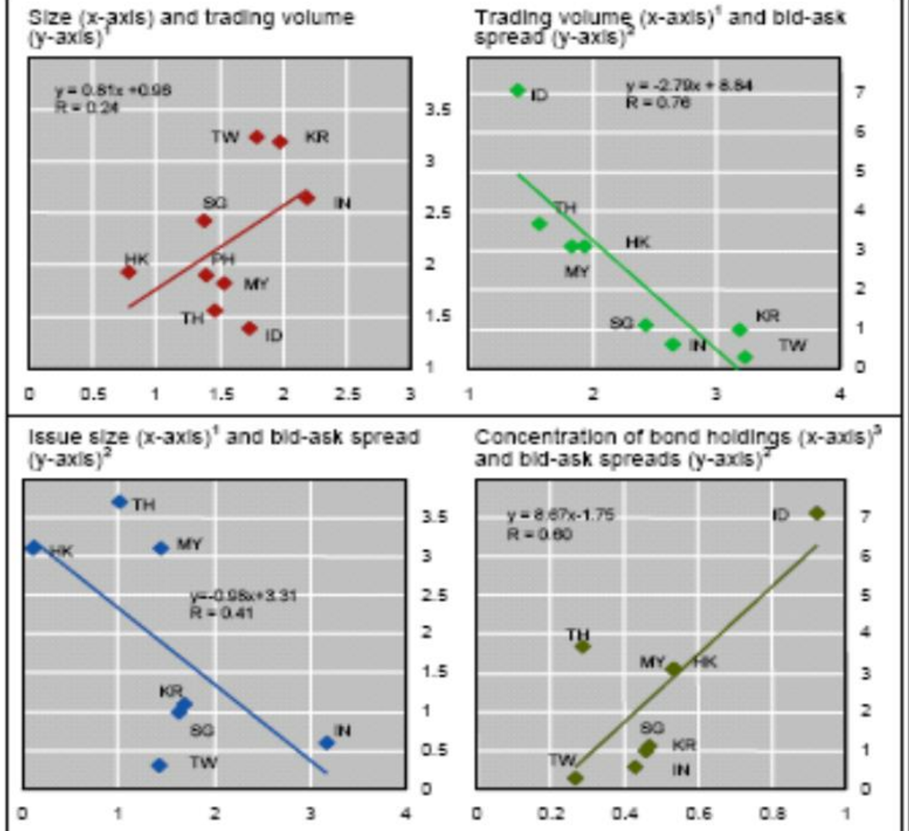
Note: HK = Hong Kong, IN = India, KR = Korea, SG = Singapore, PH = Philippines, TH = Thailand, MY = Malaysia, ID = Indonesia.

[1] Average spreads on government bonds as compiled by Barclays. [2] Annual turnover as a percentage of outstanding stock.

Sources : Barclays;Deutsche Bank; and HSBC.

Liquidity in East Asian bond markets

Size, trading, issue size and concentration



[1] In billions of US dollars; in logs. [2] In basis points. [3] Herfindahl-Hirschman index.

Sources: Barclays Capital; Bloomberg; Deutsche Bank; HSBC; BIS calculations. Graph

Source: Malcolm Knight, “Promoting Liquidity in Domestic Bond Markets”, BIS, May 2006

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LCBM: the Building Blocks

Macro fundamentals

- Constrained fiscal policy, established monetary policy implementation
- Sustainable debt, contained inflationary pressures, Sound financial sector
- Central for investor confidence and demand for government securities

Money market

- Essential for liquidity management
- Anchors prices for government bond yield curve

Primary market

- First source of price formation
- Provides pricing references supporting yield curve development
- Good practices contribute to competition, facilitate portfolio management

Secondary market

- Improves price discovery and transparency
- Stimulates liquidity (e.g. trading venues, market making)

Investor base

- Supports demand and liquidity in primary/secondary markets

Custody and settlement

- Foundation for safe and efficient settlement of transactions
- Reducing risks and costs that investors would otherwise be exposed to

Legal and regulatory framework

- Provides the foundations to enable issuance
- Supports market integrity and investors' confidence

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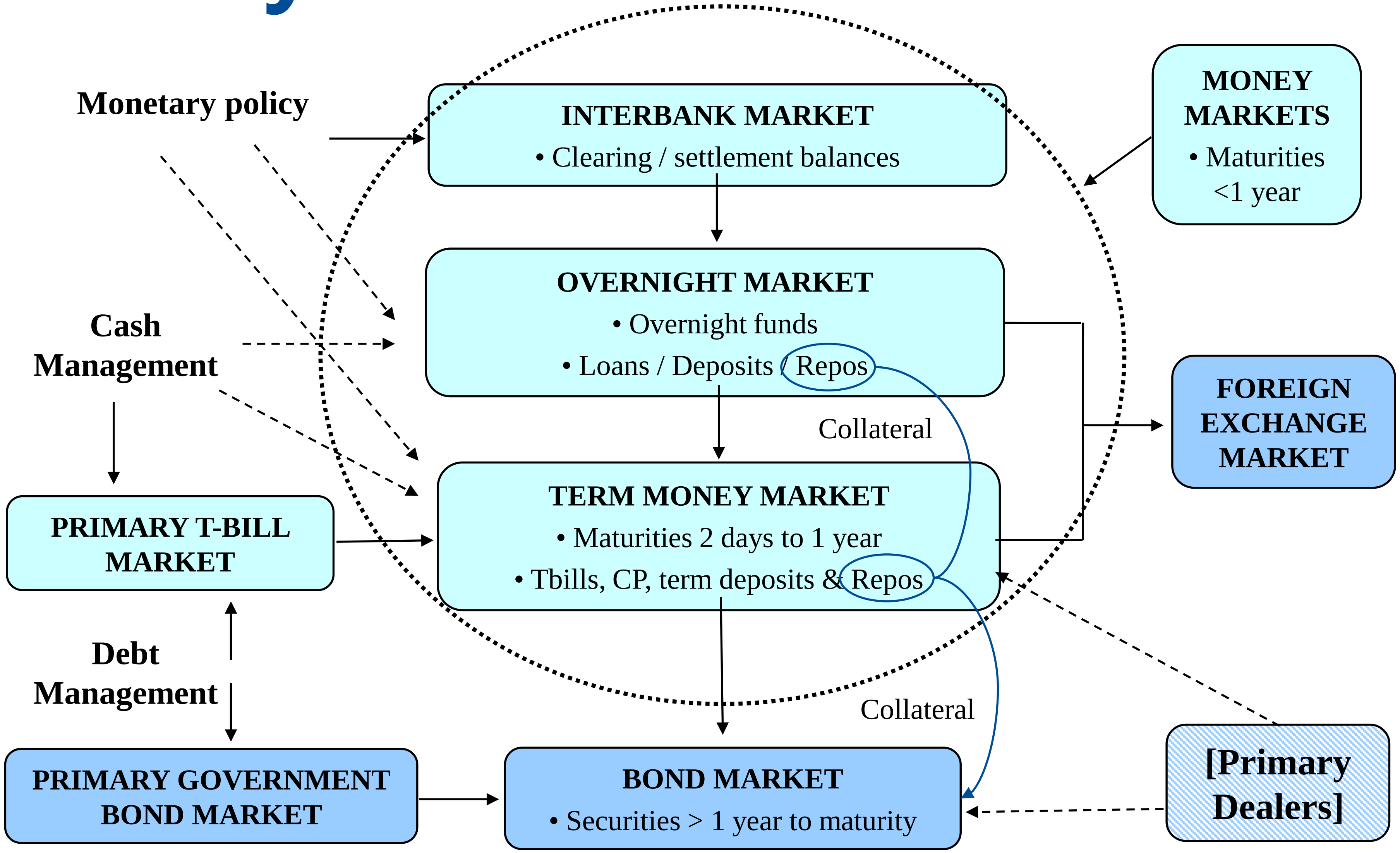
The Money Market and its Interactions



Developed money market important - as an objective in itself and through its links to other financial markets

The Role of the Money Market

Developed money market supports

- **Monetary policy** – greater reliance on market instruments, interest rate signals, improves transmission mechanism
- **Cash Management** – facilitates cash flow smoothing, lending & borrowing
- **Debt management**
  - Directly - facilitating issuance of Tbills, reducing risk of auction failure
  - Indirectly - helping intermediaries (primary dealers etc) fund positions
- **Wider market development**
  - Interbank market helps banks etc to manage their balance sheets flexibly
  - Market prices complete short end of yield curve; facilitates pricing, risk management

Emphasises importance of:

- Debt and cash managers working closely together.
- Interaction between cash management policies and monetary policy

Some Characteristics of an Efficient Money Market (from a LCBM perspective)

Market-based instruments for monetary policy

- Reduce reliance on standing facilities
- Enhance activity in inter-bank market

Inter-bank market

- Credit concerns
- Anonymity: brokers can help

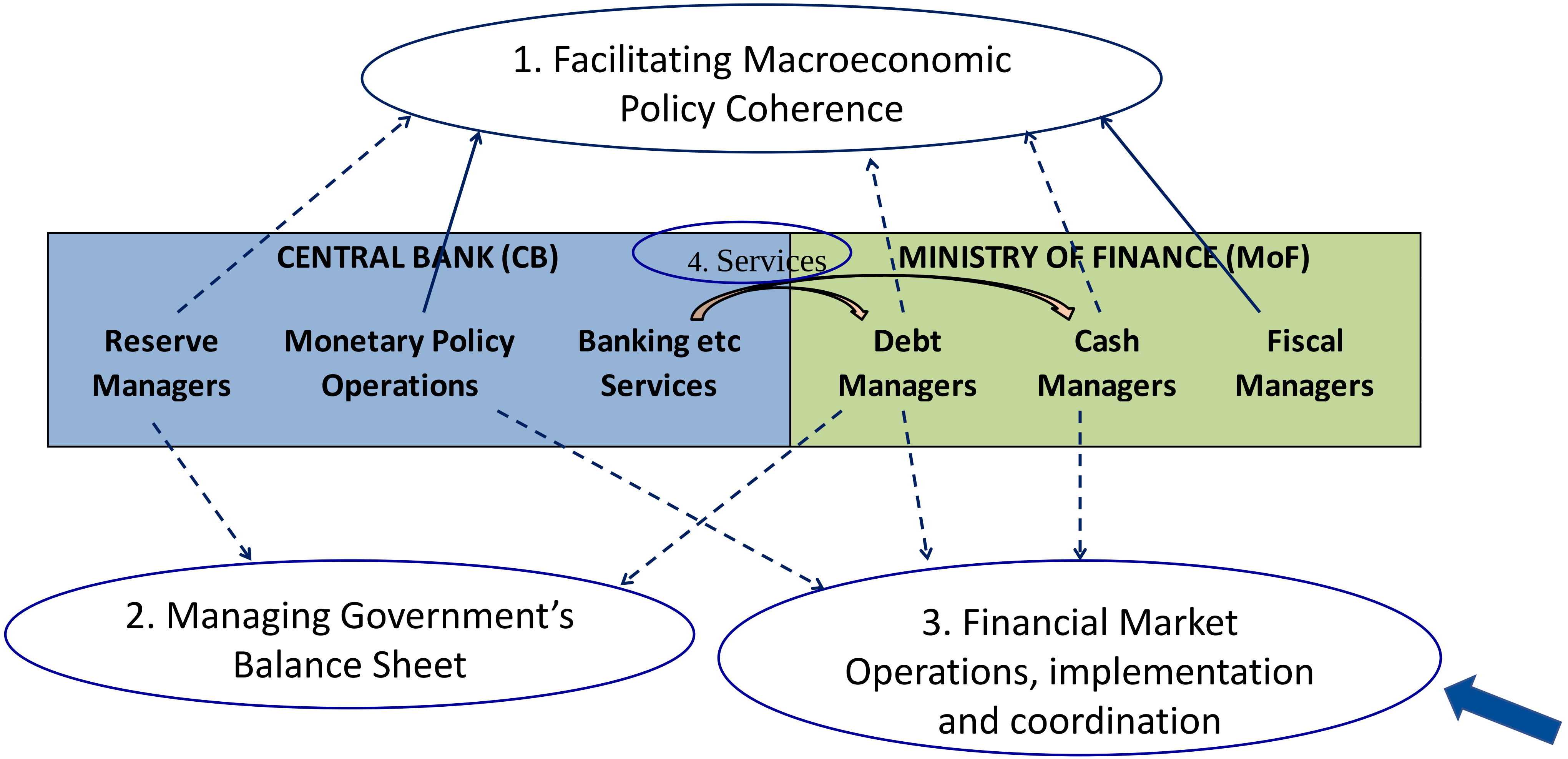
Repo market

- Removes credit concerns
- Facilitates liquidity of government bond market
- Ideal instrument for monetary policy operations

Sound government cash and debt management

- Good cash forecasting
- Discourage central bank borrowing
- Regular auctions of Treasury Bills

Coordination with Central Bank: the Wider Context



Coordination structures needed on different levels for different subjects – in this context 3. matters

Monetary policy should support LCBM development

Central Bank should keep required reserves close to that needed by banking system

- Helps develop interbank market; reduce interest rate volatility
- Create incentives for banks to trade with each other
  - Avoid generous deposit facilities at central bank
  - Exempt interbank transactions from reserve requirements

Using same instrument for Treasury's funding and Central Bank monetary policy operations can avoid market fragmentation

But issuance purpose must be transparent to the market – identifying Tbills for monetary or fiscal purposes, with the proceeds from monetary issuance being sterilised.

Timing & amounts of Gov't auctions should fit with Bank's monetary policy ops

Requires information sharing

Central Bank/DMO/MoF Coordination

Mechanisms

- Formalize objectives and understandings
  - Legislation, Decrees, Regulations where needed
  - Terms of reference of committees and working groups
  - Memorandums of Understanding or Protocols on operations
  - Service level agreements (SLAs)
- Treasury "ownership" functions logically separate
  - Financial performance of CB, rules applying to dividend, capitalization, etc
  - Best managed separately from operational interactions

Structures

- Must cover both policy and operations
- At different levels
  - Minister/Governor
    - Shadowed by regular meetings between senior ministry and central bank officials
    - Handle high level policy issues, firefighting
    - Identify areas for cooperation
  - Formal committee structures, e.g.
    - Public Debt or Debt Management Committee for high level policy coherence
    - Cash Coordination Committee for daily or weekly operations
  - Technical working groups
  - Day to day operational interaction

Some Issues for the MoU

The joint program for the development of the money market

Policies and operations for bill issuance, the respective roles of CBbills and Tbills and market announcements

How the CB reports its and the market's views about the debt and cash management program and operations (might be covered by the DMC)

Choice of primary dealers or auction counterparties

Shared or independent

The payment of interest on government balances at the central bank

- Has to be agreed at the policy level, but the basis of interest – maturity, relevant market analogues, etc – should also be identified (or in SLA)

Information exchanges – respective responsibilities

- Mechanism of communication and issues covered (e.g. the prospective auction schedule, cash flow forecasts, banking information)

Determinants of e.g. the timing of respective auctions

- Also associated market announcements (and linked information flows)

[Where the treasury is able to borrow from the CB], understandings of the limits (sums, maturities, ability to roll over etc.) of such borrowing]

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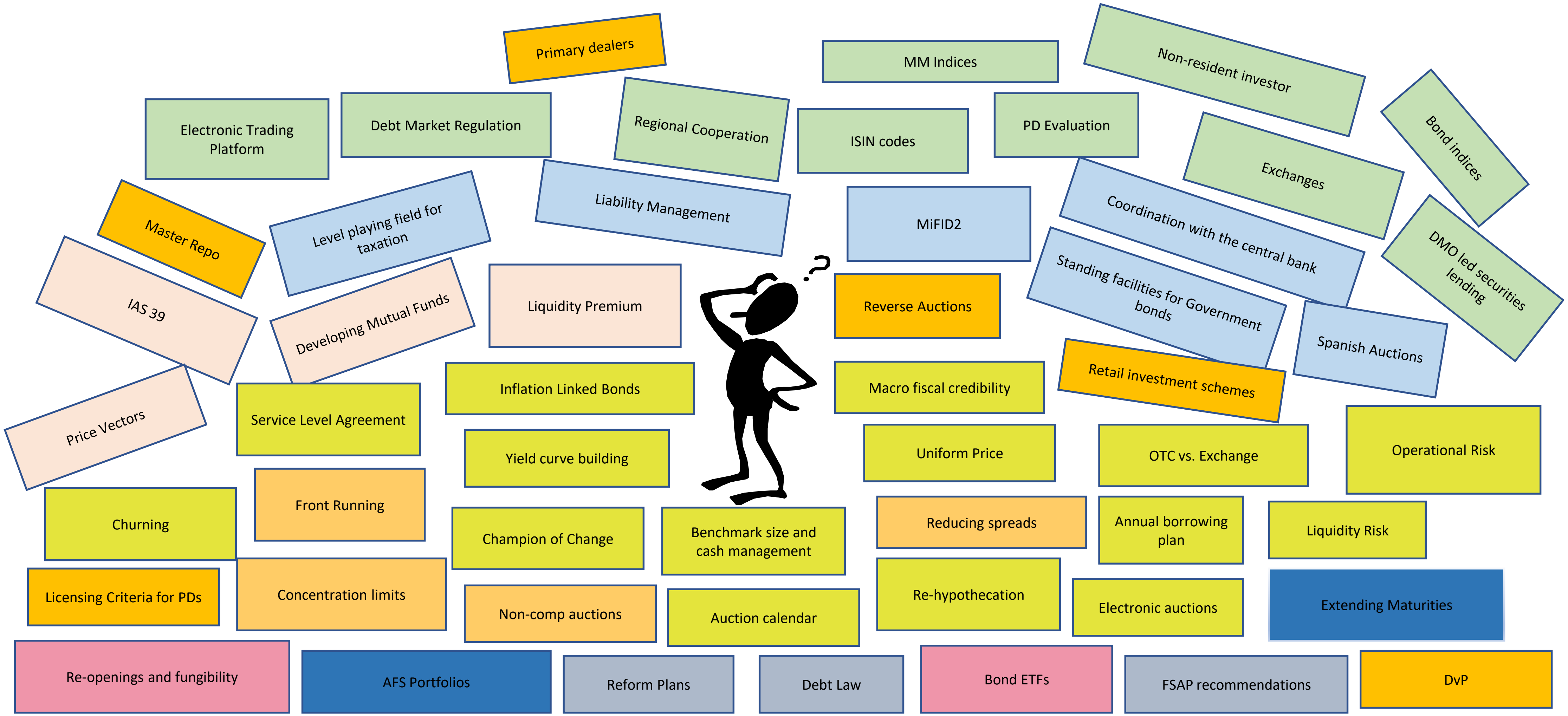
Debt and Money Market Development is a Complicated Task: it involves Many Decisions



Debt market development is a long process, involving many stakeholders

Actions on many fronts are required - proper coordination among different players is needed

From the government side, at least: MoF, debt office, treasury, central bank, regulators	From the investor side, ideal to have understanding of objectives and support of policies

Process will take time and face constraints

No single measure will suffice	Structural factors may be a hurdle

Debt managers, as one of the main beneficiaries, should be active players in this process

Who is Responsible for LCBM Development?

MoF

- Efficiency of bond and money market
- In some countries, formal objective: “to promote the liquidity and efficiency of the Government bond markets”

Central Bank

- Clear interest in efficiency of money market
- But multiple objectives related to efficiency and security of financial markets

Regul-ators

- Regulators also often have mixed objectives
- Competition, efficiency, growth, consumer protection, stability…..

Collective (sometimes competing) objectives

- Many countries fail to grapple with the challenges
- Consider setting up a steering committee with e.g. CB as chair – identify priorities, roles and responsibilities

Developing the GSM in Practice

An ongoing process based on continued macro & financial sector stability; and adequate institutional and regulatory reforms

Reforms proceed in parallel – it is project with – must identify priorities and sequencing

Supply Side Issues

- Instrument design
- Issuance techniques
- Issuance plan
- Building benchmarks, liability management operations
- Transparency

Demand Side Issues

- Diversification
- Types of main players – banks, mutual funds, long-term funds
- Investors' balance sheets
- Non-residents?

Infrastructure, Regulation

- Clarity and fairness of regulatory and legal framework, enforceable contracts
- Efficient and well-regulated marketplace
- Efficient settlement, custody & payment systems
- Non-distortionary tax regime

Sequencing the Development – Phase 1

Short end of Market

- Initial priority to strengthen short-end of market
- Treasury bills, repo, or secondary bill market; encourages participation of banks and builds money market liquidity (facilitating monetary policy operations)
- Requires active participation of central bank

Market-related

- Emphasis on market-related auction procedures, interest-rate flexibility (no direct controls), greater predictability and transparency

Intermediaries

- Development of intermediaries, market infrastructure and secondary market

Sequencing the Development – Phase 2

Deepening

- Move to longer-rate instruments
- Creep up the yield curve or issue linkers
- Fungibility, benchmark bonds

Investors

- Strengthening the investor base
- Growth of long-term savings institutions
- Mutual funds offer different investment horizons

Secondary Market

- Focus on secondary market
- repo market (source of financing and demand)

Phase 3

- Derivatives: swaps and futures markets

The Market Development Plan

Several countries have published a market development plan

- Involving a range of stakeholders and identifying priorities, roles and responsibilities
- Fewer have published a follow-up identifying what has been achieved and refreshing the plan

The particular challenges of small countries

- Internationalisation of market has helped small countries (Singapore, Taiwan);
- Foreign banks increase competition; non-resident offshore holdings of debt (requires stable macro-economy)
- Currency unions (formal or informal) allow issuance into a larger market – ECCU (Caribbean), SACU (S. Africa) CFA Franc (W.&C.Africa), Aus$ (Pacific), wider Euro and US$ areas - potentially GCC countries?

Leadership and Commitment to Reform

High-level commitment and ownership is essential to sustain reform

- Coordination across agencies and interaction with private sector participants are important tools
- Positioning LCBM development into broader programs, eg PFM reforms

Credibility can be lost if the authorities backtrack on policy commitments

- Avoid e.g. resorting to below-market-rate financing or failing to implement a market-based monetary policy regime.
- Focus on the fundamental issues before the technical issues

Clear communication to build and foster credibility among market participants

- Communication strategy that lays out the reform objectives and strategy to upgrade and deepen bond market
- As market develops, maintaining confidence also hinges on the clarity and predictability of policies and reform initiatives.
- Build and maintain investor relations and build the investor base

In practice....

It has been difficult because...

- Markets often too small
  - Set up => fixed costs
  - Straddles decades
- Inconsistent approaches of local regulators
- Limited range of financial institutions, investor demand insufficiently diverse
- More progress in primary market than secondary market.
  - Domination of banks
  - Too many small issues damages liquidity

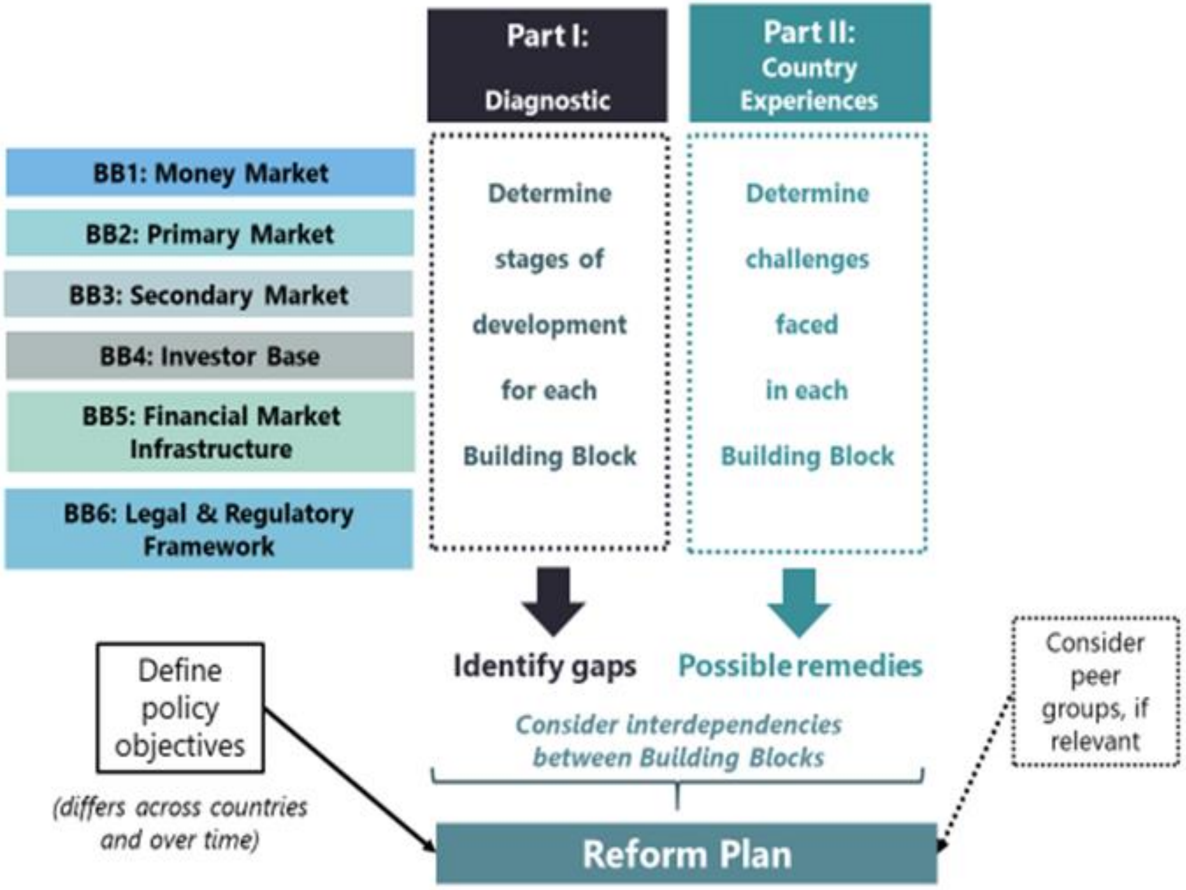
But some things have worked...

- Active money market and effective cash management facilitate more sophisticated primary market operations
  - Building benchmarks, effective primary dealers, liability management operations
- Competition improves activity =>improved liquidity
  - Facilitated by competition among dealers
  - Liquidity improves when activity consolidated in a small number of liquid instruments, transactions costs are minimized, market infrastructure is sound and robust, market participants have varying transactions needs and investment horizons
  - Buybacks stimulate activity; help build benchmark bonds

Possible Next Steps (depending on context)

MoF, Central Bank, Securities Regulator accept a collective responsibility

- Establish a steering committee charged with developing a reform plan. Chaired by central bank
- Potentially using WB/IMF Guidance Note* (includes diagnostic tool and suggested remedies)



*"A Guidance Note to the Development of Local Currency Bond Markets" (March 2021) (final slide for full reference)

Steps in Building a Reform Plan

1. Determine LCBM objectives and policy priorities.
2. Establish a coordination mechanism for LCBM reform.
3. Evaluate the enabling conditions and stage for market development in every building block.
4. Consider identifying peer groups to benchmark experiences.
5. Identify gaps in each building block.
6. Formulate a plan of action and measures needed to close the gaps, considering capacity and institutional constraints.
7. Propose targets and deadlines and assign clear responsibilities to the relevant agencies.

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