



ธนาคารแห่งประเทศไทย
BANK OF THAILAND

Thailand Bond Market Development

Vanaporn Laksanasut

Financial Markets Department

21 July 2015

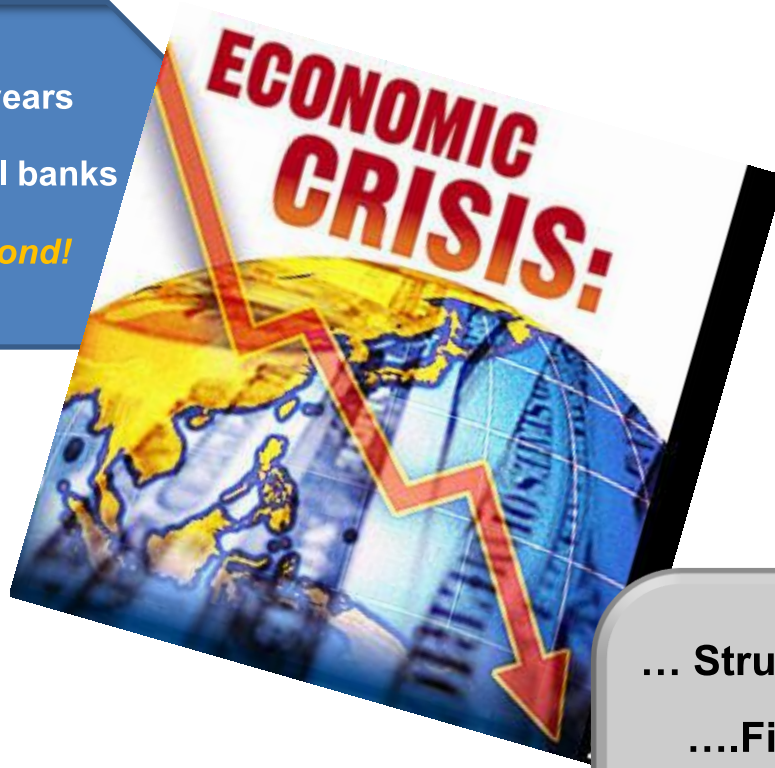


Outline:

- 1. The Thai bond market: History, Growth and Present Profile**
2. Thai bond market development plans and BOT's involvement
3. The current capital market development plan



Fiscal Surplus for years
Base on commercial banks
!No need for Gov Bond!



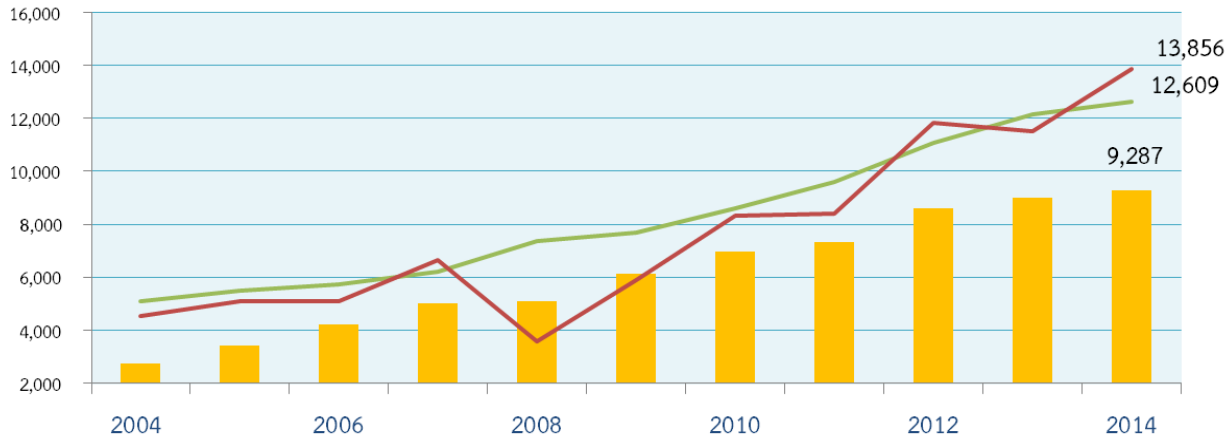
... Structural imbalance
....Financial sector restructuring
**Start of
bond market development
as a source of funding!!**



Growth and Present Profile

Market Size (billion baht)

Domestic Bond (at par) Bank Loans Equities (SET mkt. cap)

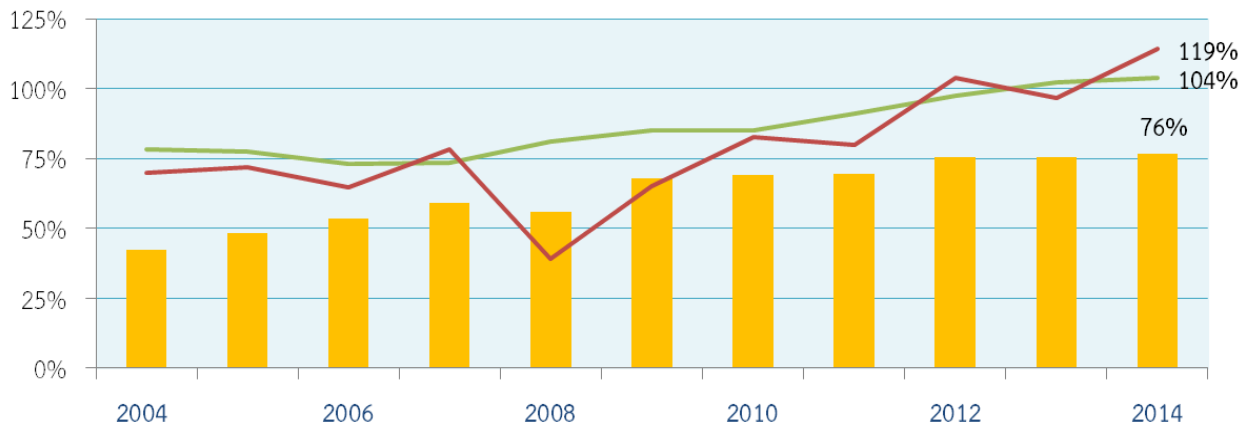


Bond market size and its share to GDP have been continuously rising over time.

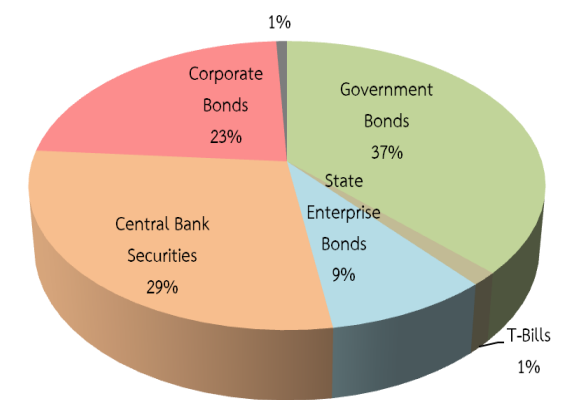
Public sector bonds comprise around 75% of bond market.

Percent to GDP

Domestic Bond (at par) Bank Loans Equities (SET mkt. cap)



Composition of bond market by bond type - Q1/2015 (%)



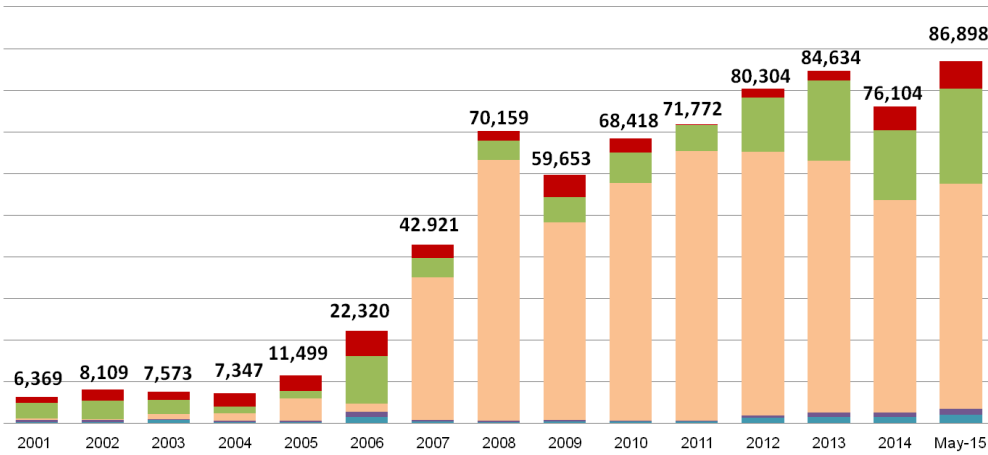


Growth and Present Profile

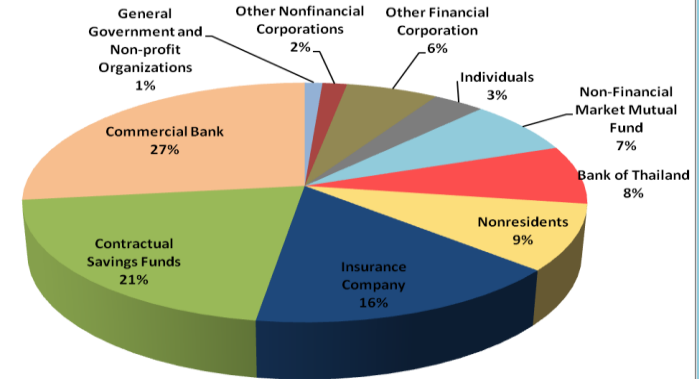
Bond trading volume has grown significantly, particularly short-term central bank bills. The development is partly due to a diverse investor base.

Outright daily average trading value (min baht)

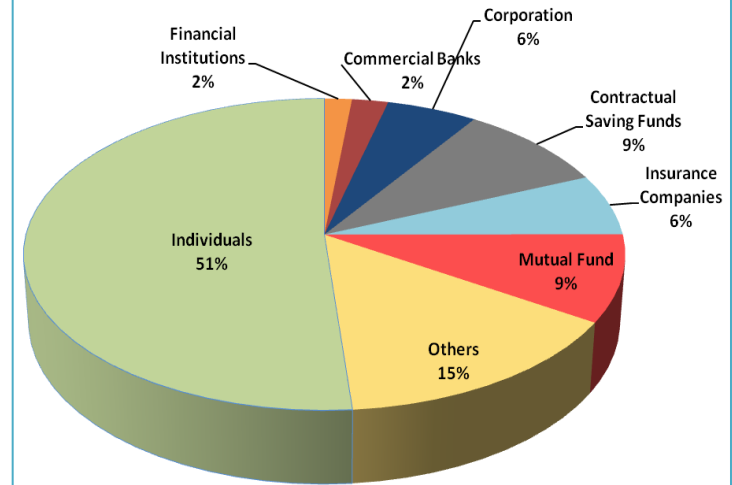
- Treasury Bills
- Government Bonds
- Central Bank Securities
- State Enterprise Bonds
- Long-term Corporate Bonds
- Baht Bonds



Investor base of government debt securities - Q1/2015

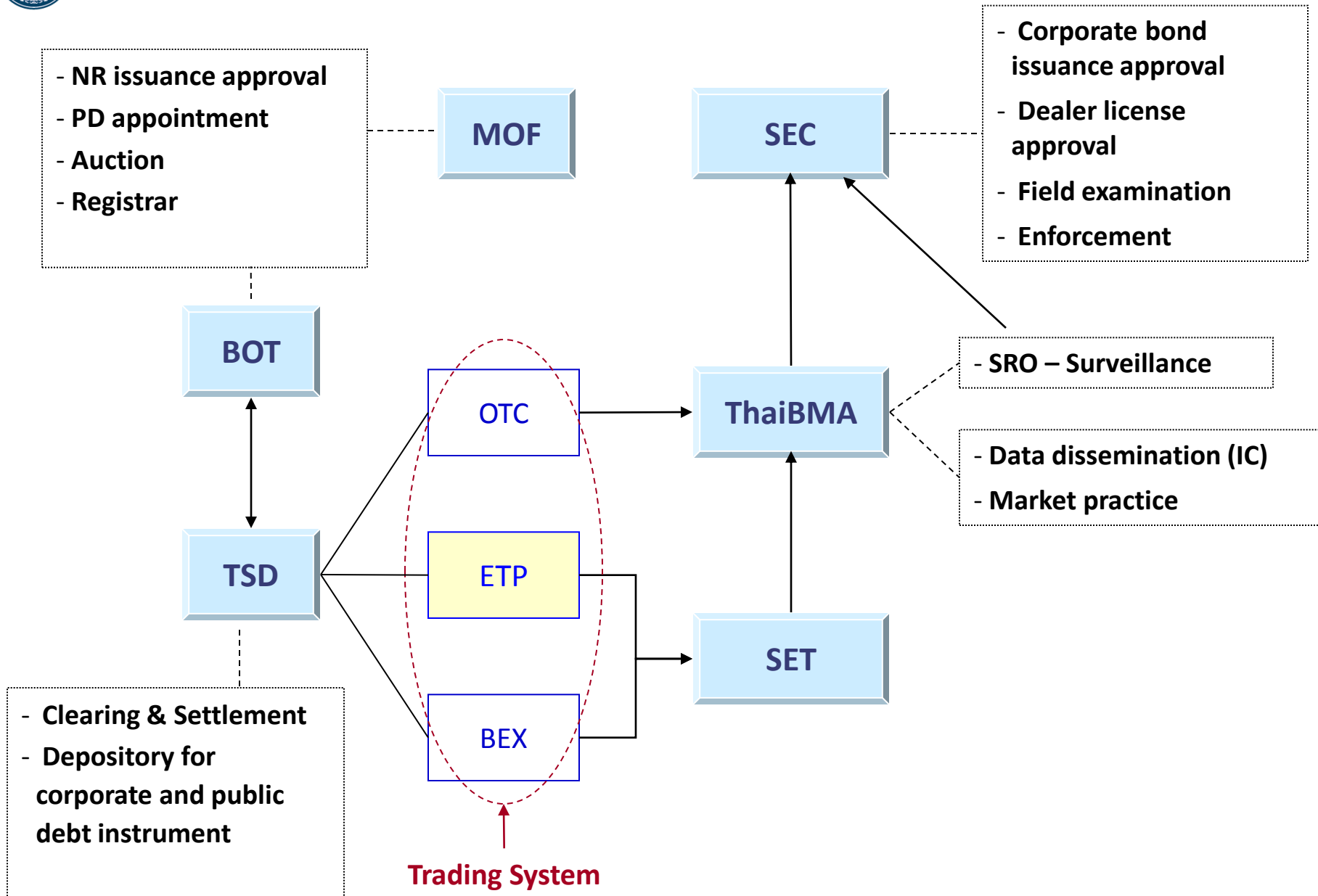


Investor base of corporate bonds - Q2/2014





Thai Bond Market Infrastructure & Authorities





Outline:

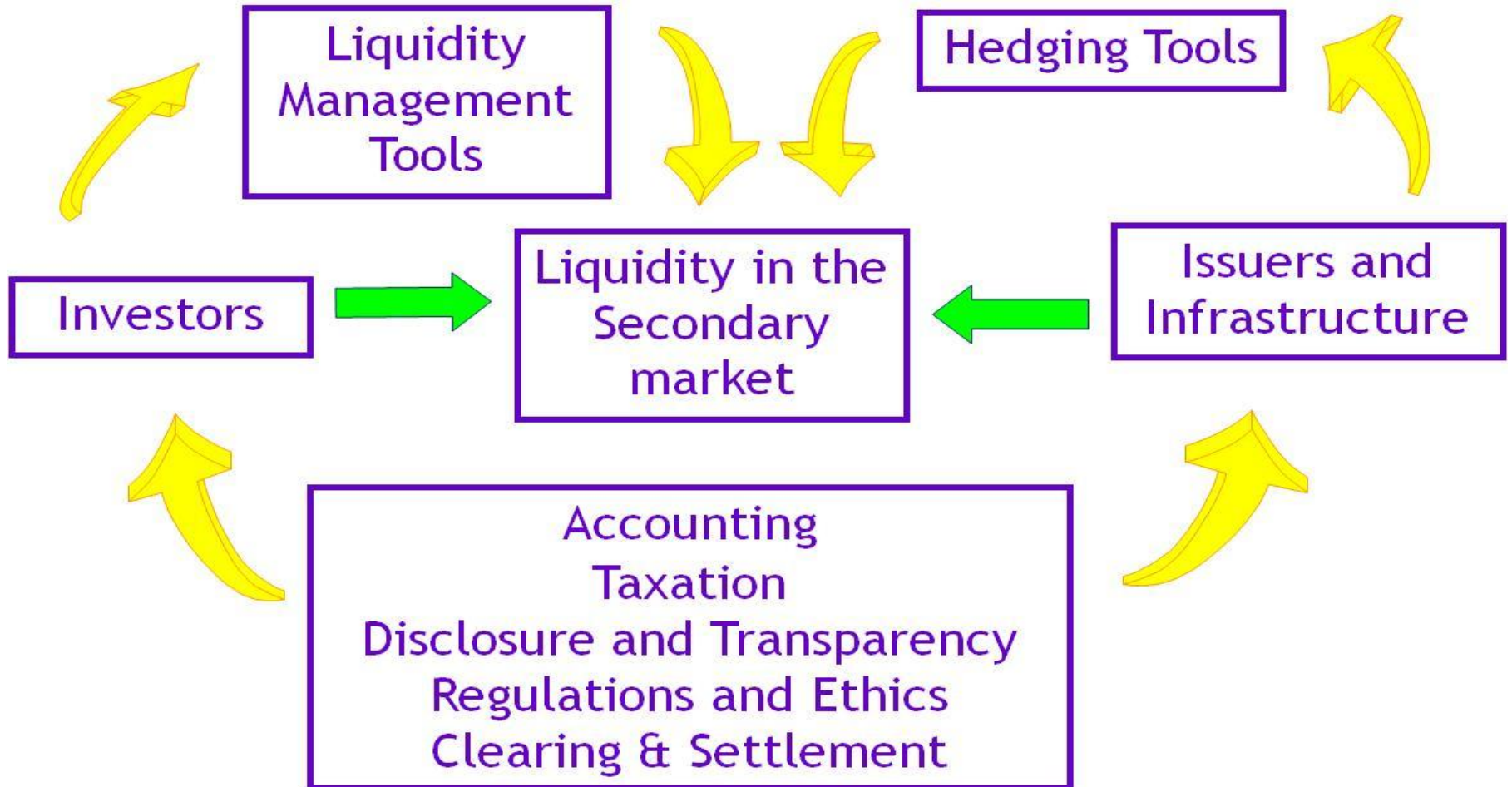
1. The Thai bond market: History, Growth and Present Profile
2. Thai bond market development plans and BOT's involvement
3. The current capital market development plan



- **To become an additional source of investment and funds that helps improve the capital and financial market → reduce both “currency and maturity” mismatch**
 - **Reduce reliance on bank intermediation and diversify the risk of intermediation across a large number of institutions and market players**
- **To reduce the cost of government debt financing**
- **To transmit monetary operations of the central bank through bond market efficiently**

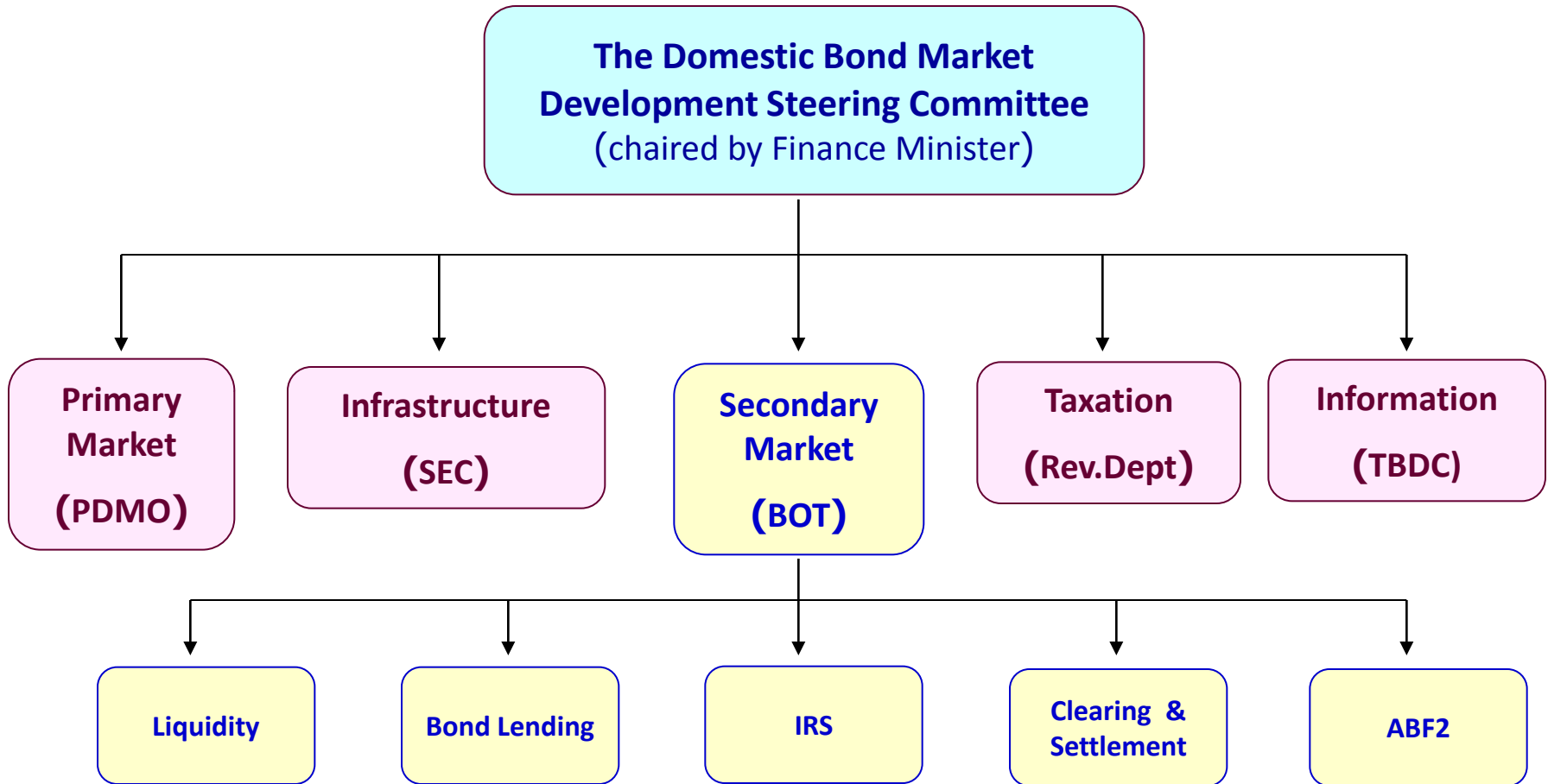


Three development plans had been accomplished since 1998,
with measures to develop the bond market in different areas and at different stages.





Related Taskforces working on Bond Market Development





Roles of the Bank of Thailand

- **Actively participates in the National Bond Market Development Committee or the Capital Market Development Committee.**
- **BOT's involvement in the bond market**
 - **Primary market: Fiscal agent of the government**
 - **Secondary market: Through implementation of the monetary policy.**
Therefore, effectiveness of the bond market is important for policy transmission.
- **Also the operator of the bond depository and settlement system until 2005, before centralized at TSD.**



Primary Market

- **Set up PDMO and drafting PDMO Act**
 - Amended PDMO Act to allow regular bond issuance, regardless of budget status
- **Issued advanced calendar**
 - Reviewed issuance practices to stimulate secondary market trading , i.e. less auction frequency, larger issue size and commitment to build up benchmark issues
- **Developed auction system and methods**
- **Developed pricing formulas and conventions**
- **Diversified products e.g. saving bonds, FRNs, Inflation-linked bonds**



Secondary Market

- **Introduced Primary Dealer system**
 - Reviewed the PD's privileges and obligation to strengthen the market making activities
- **Enlarged issue size of bonds and bills and adopted the benchmark bond system**
- **Developed private repo market**
- **Introduced bond position adjustment facility to support PDs' market making role**
- **Reformed the BOT's monetary operations to stimulate secondary market development**
- **Enhanced price transparency**
- **Seminars and education program for market participants**



Infrastructure

- Introduced book-entry depository system
- Introduced DVP RTGS clearing and settlement system through **BOT BAHTNET Phase II**
- Established the **Thai Bond Market Association (ThaiBMA)** to be a centralized information platform and SRO
- Securities clearing and settlement system centralization at **Thailand Securities Depository (TSD)**
- **Bond Electronic Exchange (BEX)** established (2003)
- **Fixed Income and Related Securities Trading System (FIRSTS)** as an ETP was established (2005)
- **Derivatives Act B.E. 2546** (effective 2004) and **Thailand Futures Exchange (TFEX)** established (2004)
- Introduced Interest Rate Futures and Bond Futures

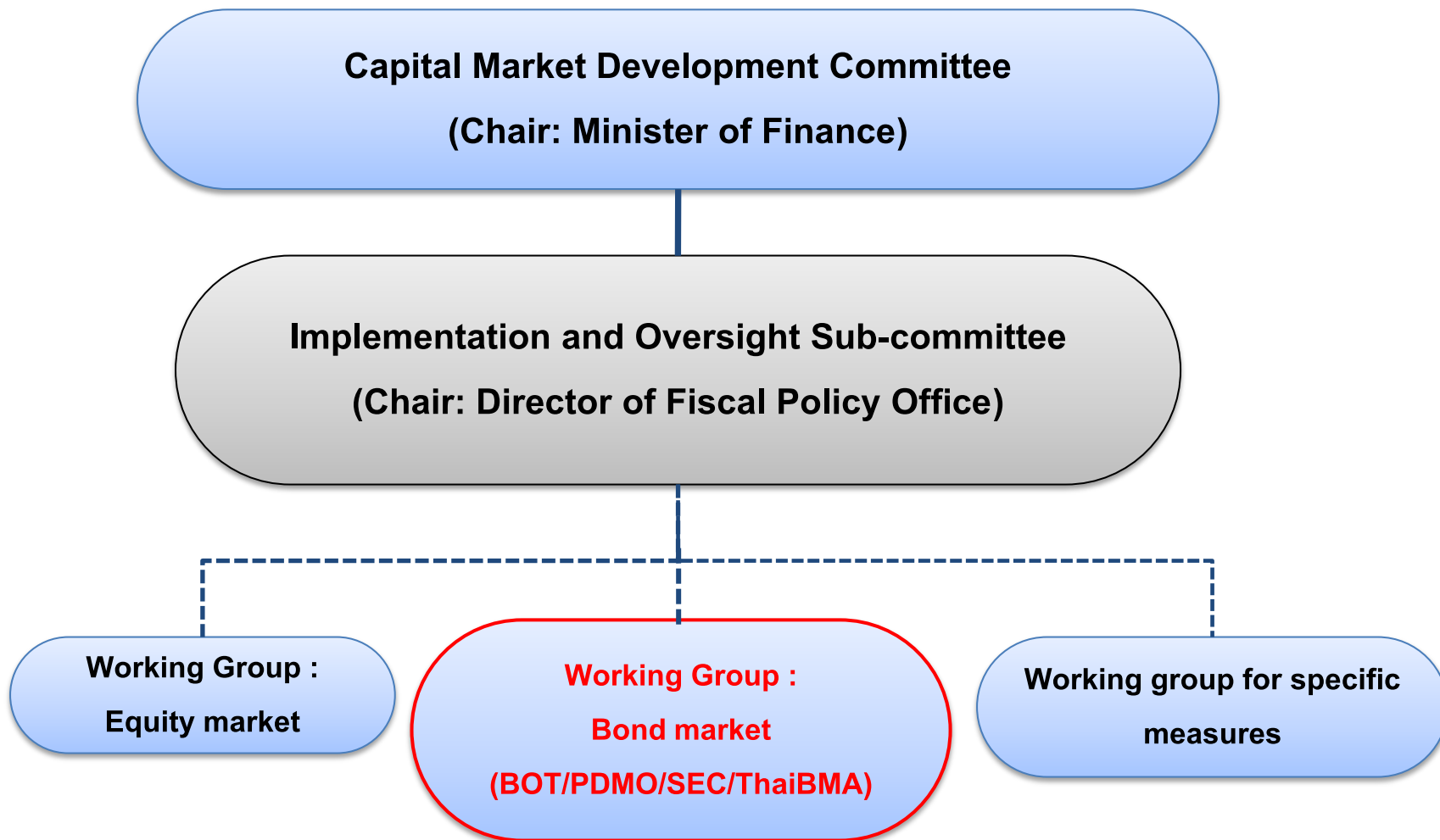


Outline:

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Bond market development is a key task under the Capital Market Development Committee





Capital Market Development: Vision for the Thai Capital Market

To better serve funding needs of the country and be ready for more regional integration in the near future, the Capital Market Development Committee has envisioned Thai Capital Market during 2012-2016 to be...

*“The engine for growth and wealth distribution
and a preferred destination and linkage for global investment”*

Missions: What the capital market should achieve

1. Engine for sustainable economic growth
2. Distribution of wealth and preparation for an aging society
3. Enhance competitiveness of and connecting businesses to the capital market



The following areas are being emphasized to enable the Thai bond market as a key driver to accomplish such vision.

1. Deepen the government bond market
2. Utilize corporate bonds as another main funding channel
3. Bring attractiveness to bond investment
4. Develop and enhance efficiency of bond market infrastructures
5. Prepare for regional integration



1. Deepen the government bond market

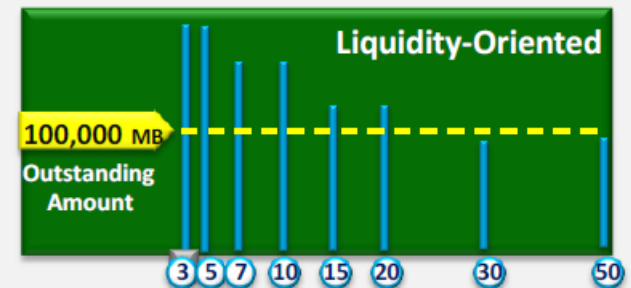
- Make a transition from market deepening oriented during 2010-2012 to funding infrastructure investment and connecting ASEAN through several mechanisms such as
 - Develop the bond switching and/or bond consolidation programs to improve liquidity in the secondary market from increased outstanding size and less bond series
 - Maintain variety of products e.g. retail bond, amortized bond and inflation-linked bond

Market Deepening Oriented (2010-2012)

Building Yield Curve /
Enhancing Liquidity



Funding Infrastructure Investment Connecting ASEAN (2013-2020)



Source: PDMO's Kingdom of Thailand Bond Market Development Q4/FY2013



2. Utilize corporate bonds as another main funding channel

- Increase diversity of products to serve demand of market players
 - Such As FX bond issuance – remove hindrance for new bond issuance in primary market and develop infrastructure necessary for secondary market
 - Considering possibility of covered bond issuance and credit guarantee mechanism to support SME financing in capital market .
- Promote the development of High Yield bond market, which would be an alternative channel for SME financing.
 - Accredited Investor (AI) scheme identifying eligible investors for High Yield products
 - Initiating the SMEs Bond Project to promote another fundraising channel for SMEs with several privileges with a collaborative effort of several agencies
- Enhance liquidity in secondary market by publishing a list of corporate bonds with prime credit ratings on website to facilitate investment decision.



Supporters of SMEs Bond Project





3. Bring attractiveness to bond investment

- Broaden domestic investor base - esp. retail investors through several mechanisms
 - Seminars and educational programs for retail investors
 - Develop one-stop information center including www.thaibond.com/bondmart, www.start-to-invest.com, mobile application, TV program, facebook fan page



- Propose changes to bond related taxes to make investment more attractive.



4. Enhance efficiency of bond market infrastructures

- How to encourage the usage of electronic trading platform (ETP)
 - MoF outright PDs were required to provide two-way firm quote for benchmark government bonds
 - BOT's bilateral primary dealers were asked to provide indicative quote of corporate bonds with criteria as specified

- How to promote the bond and interest rate futures





5. Prepare for regional integration

- Participate in regional development efforts

ASEAN+3: Asian Bond Market Initiatives (ABMI)

- Support Thai corporate sector to raise fund through CGIF
- Promote the issuance of local currency-denominated bonds by non-residents



ASEAN: ASEAN Capital Market Forum (ACMF)

- Thailand is among the first 3 countries to implement several initiatives to harmonize rules and regulations such as
 - ASEAN Disclosure Standard Scheme
 - ASEAN Trading Link





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The Role of BOT in Regional Bond Market Development, “Asian Bond Fund (ABF)”

Vanaporn Laksanasut

Financial Markets Department

21 July 2015



Outline:

- 1. Background**
- 2. ABF2 and Regional Bond Market Development**
- 3. Way Forward for Asian Bond Fund**



EMEAP
Executives' Meeting of East Asia-Pacific Central Banks

a forum of central banks in the East Asia and Pacific region that aims to strengthen cooperation among its 11 members.



Asian Bond Fund (ABF)

□ First initiative launched by EMEAP group that allows its members to invest in bonds issued by Asian sovereign issuers in EMEAP economies.

□ The Objectives of ABF

1. To promote bond market development in the region.
2. To facilitate channeling the sizable official reserves held by Asian economies back into the region.
3. To provide an innovative, low-cost and efficient investment product in the form of passively managed index bond funds to broaden investor participation.
4. To identify impediments to bond market development in EMEAP economies and acting as a catalyst for regulatory reforms and improvements to market infrastructure.



Two stages of ABF : ABF1 and ABF2

ABF1

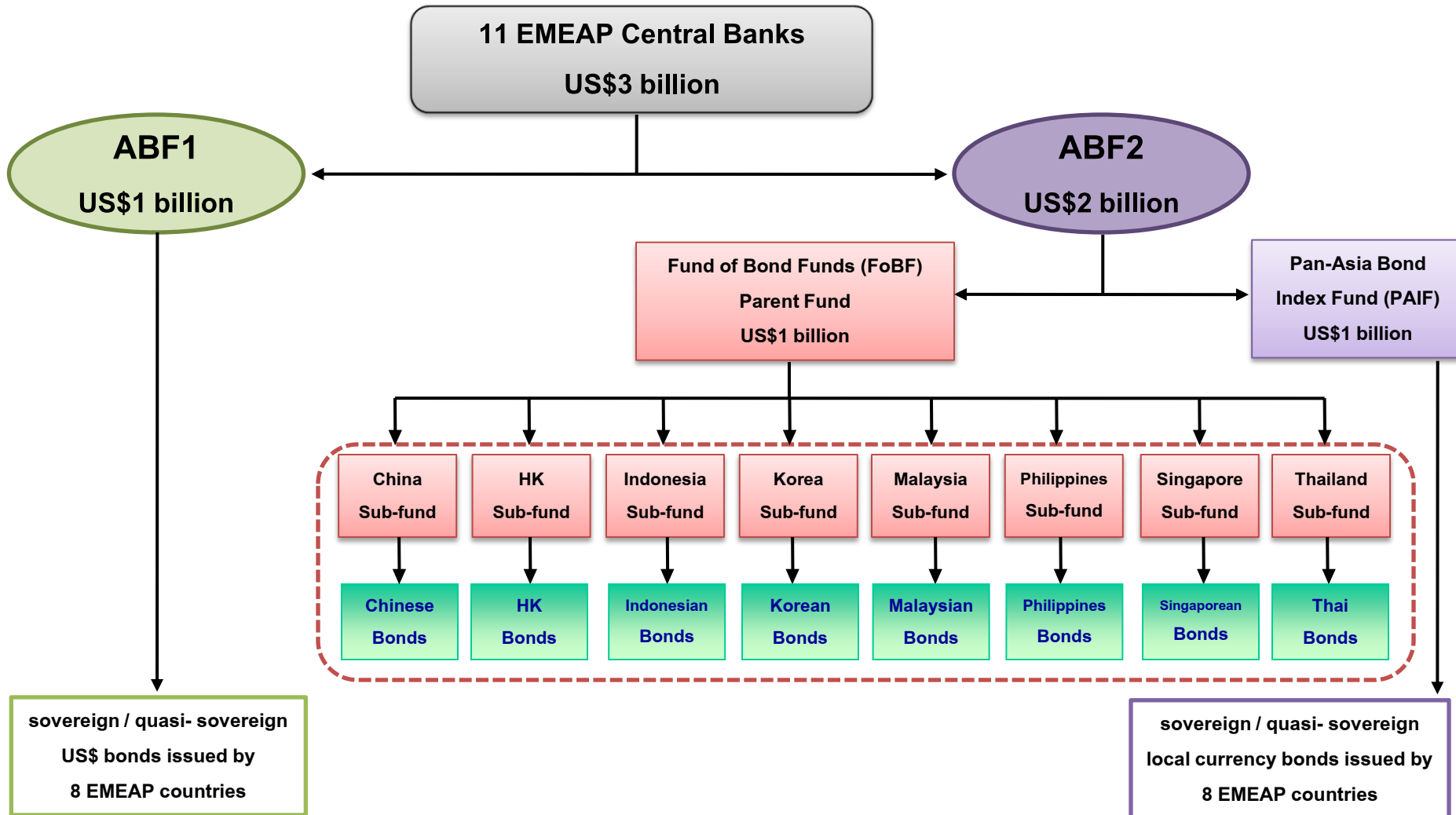
- launched in June 2003.
- US\$1 billion pooled from the 11 EMEAP central banks only.
- investing in dollar bonds issued by 8 EMEAP sovereign and quasi-sovereign borrowers.

ABF2

- launched in December 2004.
- initial seed money of US\$2 billion by the 11 EMEAP central banks.
- investing in local-currency bonds issued by 8 EMEAP sovereign and quasi-sovereign borrowers.



The Structure of Asian Bond Fund





ABF2: Design and Rationale

- Low Costs
- Wide Distribution
- Tracking NAV
- High liquidity



Passively managed index bond funds

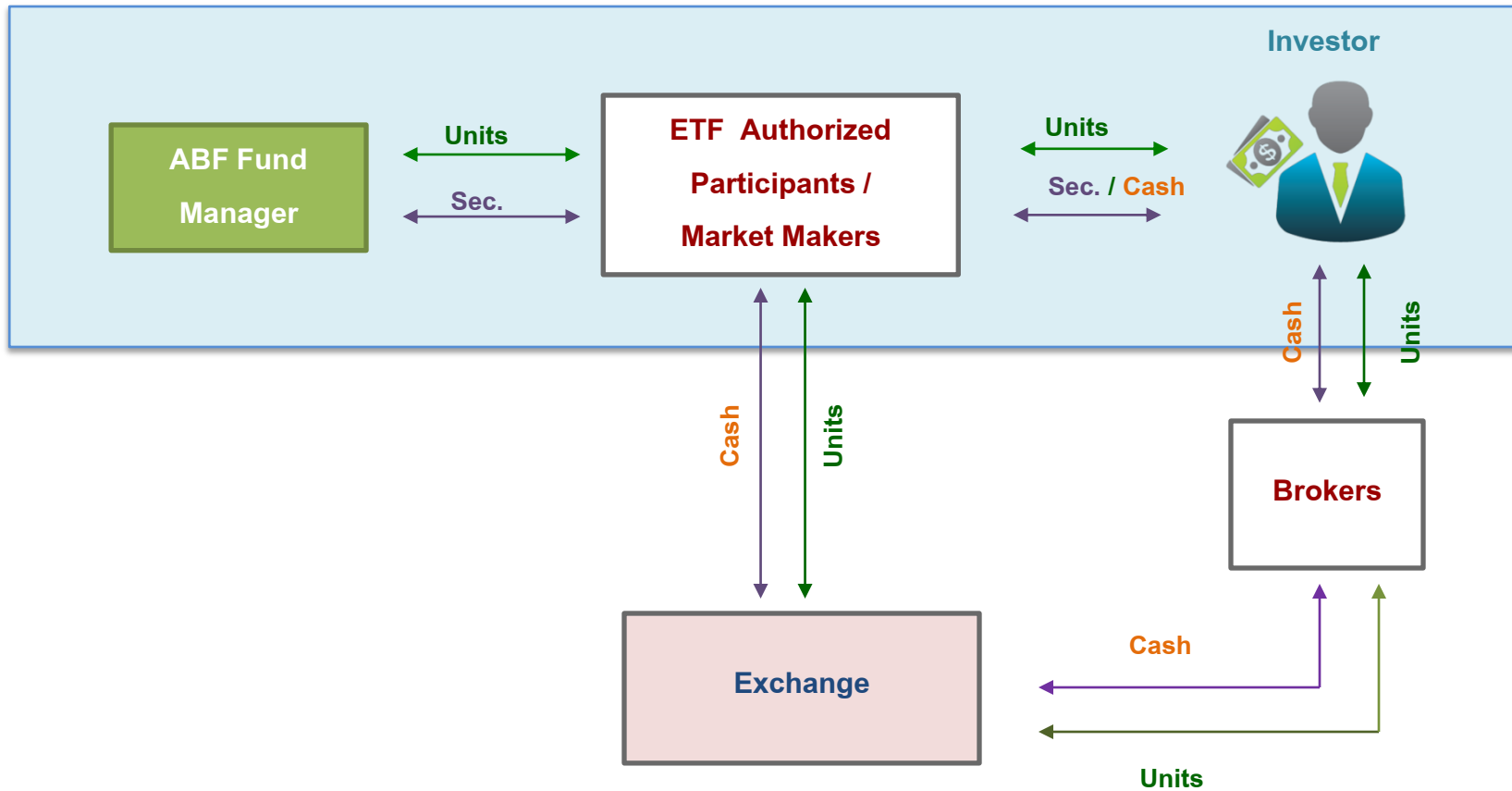
- Lower management fees
- Listed on the stock exchanges for lower transaction costs and ease of access
- ETF where possible



- Tracking Markit IBoxx Index



In-kind mechanism for ETF creation/redemption





Outline:

1. Background
- 2. ABF2 and Regional Bond Market Development**
3. Way Forward for Asian Bond Fund



Regional Bond Market Development

How successful is ABF2 in achieving its objectives?

I. Providing an alternative investment product.

- The ABF establishment considered as an innovative, low-cost and efficient product in the form of passively managed index bond funds.

- The bond ETFs were the first such product in many markets including Thailand and has also been contributing in stimulating the growth of other ETFs in the ABF economies.

- As investment vehicles, the ABF2 represents a successful introduction of a new asset class in Asia, laying the foundation for broader investor participation in bond markets.





Asian Bond Fund and Regional Bond Market Development

How successful is ABF2 in achieving its objectives?

II. Promoting bond market development and fostering regional cooperation.



- Directly supports the development of regional bond markets by stimulating investment activities.
- Identifies the impediments to bond market development in EMEAP economies.
- Acts as a catalyst for regulatory reforms and improvements in market practices and infrastructure in the region.



Outline:

1. Background
2. ABF2 and Regional Bond Market Development
3. **Way Forward for Asian Bond Fund**



Way Forward for Asian Bond Fund

Asian Bond Fund (ABF2)

For the local-currency bonds;

- **A room to foster the development of new debt products which could help to incentivise the market.**
- **Challenge of attracting private sector investment to the single market funds.**



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BANK OF THAILAND

Monetary Operations Framework at the Bank of Thailand

Chotima Sitthichaiviset

Financial Markets Department

21 July 2015



- Current monetary operations framework
 - Reserve requirement
 - Open market operations (OMOs)
 - Standing facilities
- Sterilization and financial market development



- Current monetary operations framework
 - Reserve requirement
 - Open market operations (OMOs)
 - Standing facilities
- Sterilization and financial market development



Flexible Inflation Targeting in Thailand

Framework

Strategy

Ultimate target

Price stability
Sustainable growth

Intermediate target

Expected inflation
(Headline inflation of 2.5% +/- 1.5% annually average)

Implementation

Operational target

Policy interest rate
(1-day RP rate)

Instruments

- Reserve requirement
- Open Market Operations
- Standing facilities



Data/Market Intelligence/Analysis

MPC comprises of 3 BOT officials and 4 external experts

MPC meeting every 6 – 8 weeks

Assessment of economic conditions and outlook

MPC decision:
Raise/Maintain/Cut policy rate

Press release: announce decision

Monetary instruments

Maintain money market rates at a level consistent with the policy rate



Various monetary instruments are used to steer short-term interest rates as well as serve the objective of promoting developments of financial markets.

BOT's monetary instruments

1. Reserve requirement

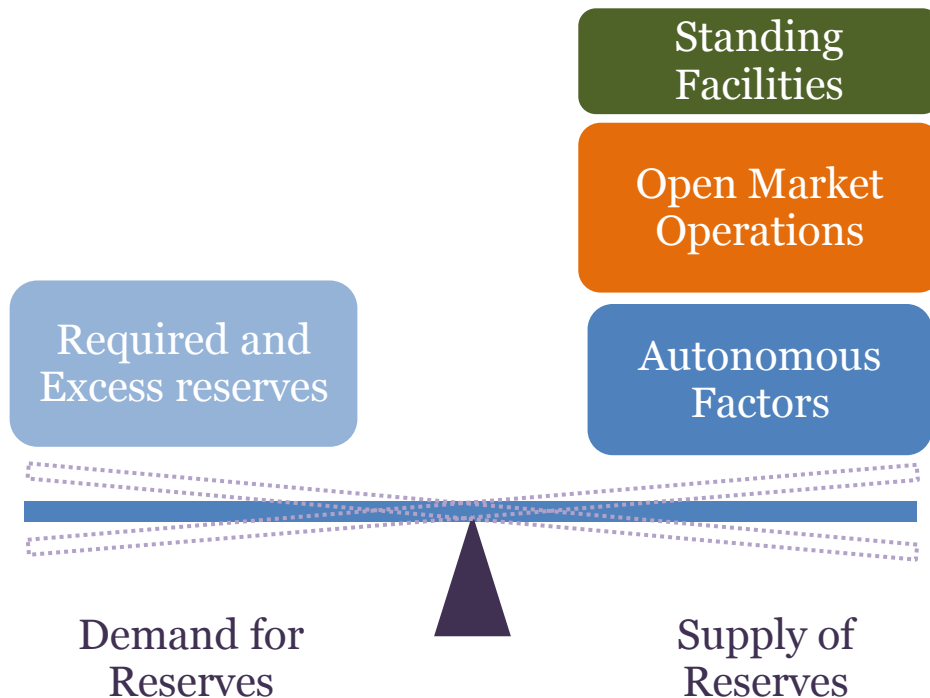
Statutory requirements for some types of FIs to hold a specified part of their portfolio in reserve money

2. Open Market Operations

The purchase or sale of financial instruments by either in primary or secondary market.

3. Standing Facilities

The lending or borrowing of liquidity of high-quality financial assets at penalty rates.





1. Reserve Requirements in Thailand

	<u>Criteria</u>	<u>Types of Liquid Asset</u>
6%	Remaining (including (a) (b) and (c)) no less than 6%	Unencumbered eligible public securities and term deposits at BOT such as government bonds, BOT bonds, MOF-guaranteed state-enterprise bonds
	(c) No more than 2.5%	Vault cash
1%	(b) No more than 0.2%	Cash at the central cash centers of commercial banks
No less than 1%	(a) No less than 0.8%	Current Account Deposits at BOT (C/A)

- Reserve requirement (RR) is currently used for liquidity management , rather than for monetary policy signaling purpose
- Commercial banks are required to maintain a reserve ratio of 6% of deposits base
- However, after the adoption of LCR in 2016, only the 1% of RR, current account deposits, will remain as part of BOT’s monetary instruments, while the rest 5% of RR will be terminated.

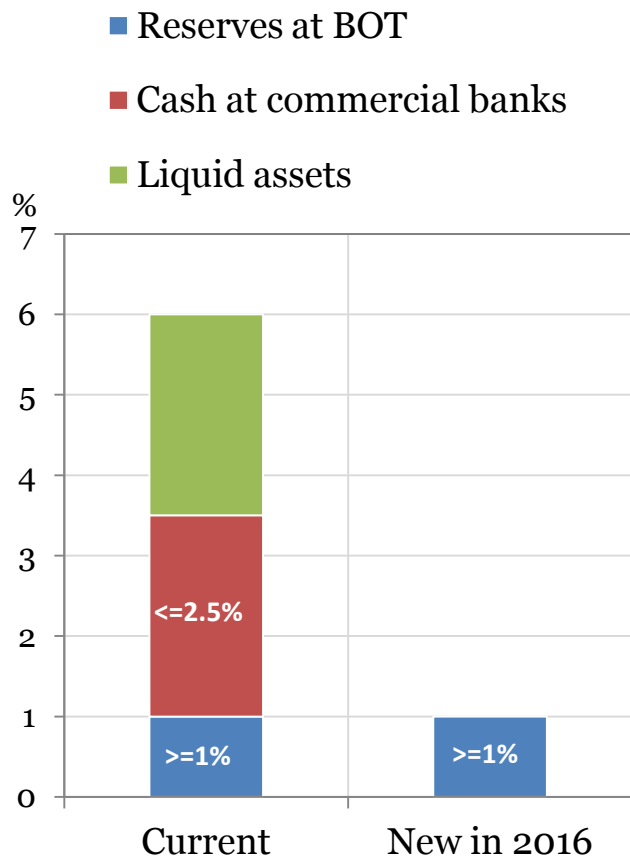
Important features of RR

- Liability base: **All deposit base, net foreign borrowing with maturity less than 1 year, bill of exchange and promissory notes (lag 1 period)**
- Maintenance period: **fortnightly, starting from Wed to Tue in the next two weeks**
- Renumeration : **No**
- Averaging over the maintenance period: **Yes**
- Carry backward/forward: **Yes**



In 2016, Reserve Requirement will be replaced by the LCR. However, all commercial banks are still required to maintain the non-remunerated current account deposits at the BOT.

Liquid asset + Reserve Requirement Framework



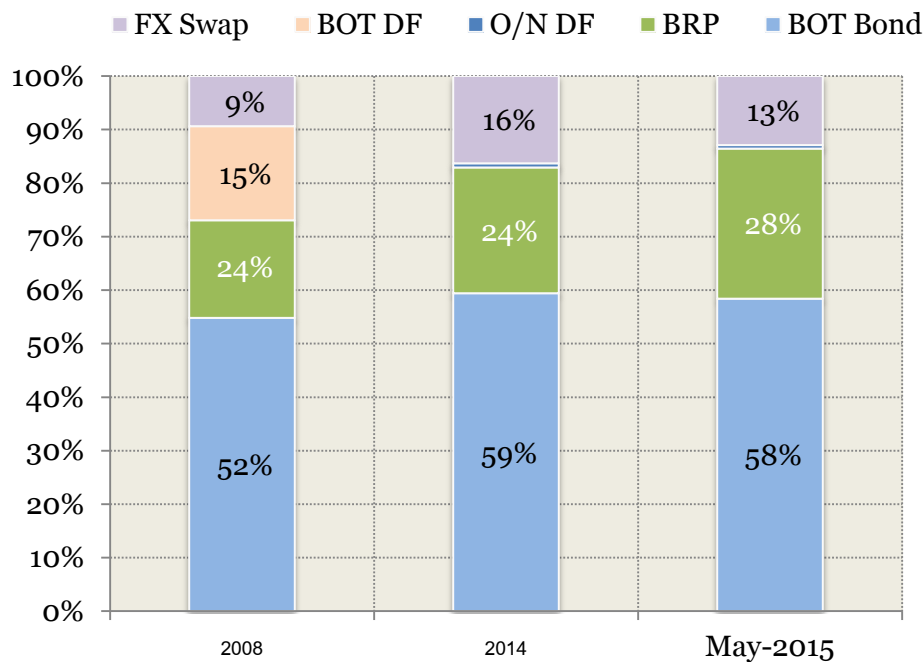
- Keeping the RR unchanged will facilitate commercial banks to gradually adapt to several ongoing regulatory reforms, which could help limit potential adverse effects on the real economy.
- Maintaining the same level of the cash reserve ratio also reduces the possibility of public's misinterpretation of the monetary policy stance.
- The cash reserve requirement can be counted as HQLA for the LCR.



2. Open Market Operations

1. Bilateral repurchase (BRP)
2. Outright purchase/sale of government securities
3. Issuance of BOT bonds/bills
4. Foreign exchange swap

Outstanding of BOT's Monetary instruments



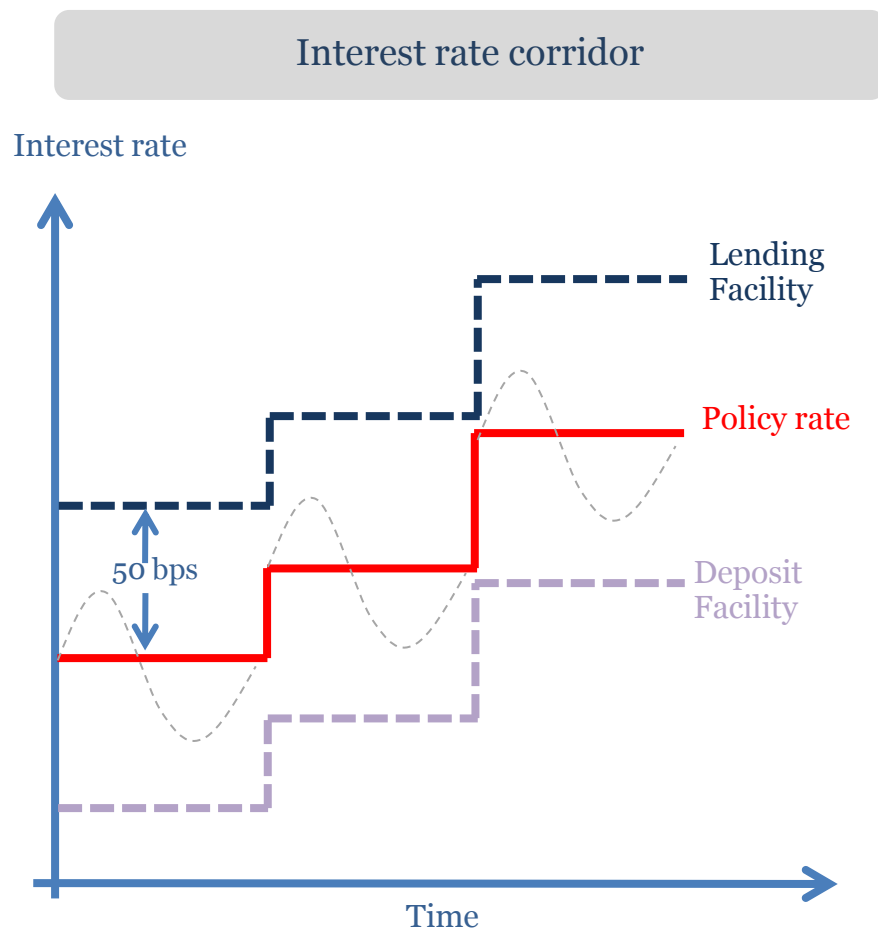
- The BOT relies mainly on OMOs as they can facilitate financial markets development
- The BOT has increasingly used BOT bonds, relatively have the longest-maturity, as the main monetary instrument



3. Standing Facilities

The interest rate corridor effectively set boundaries for short-term market rates and thus help contain short-term interest rates volatility.

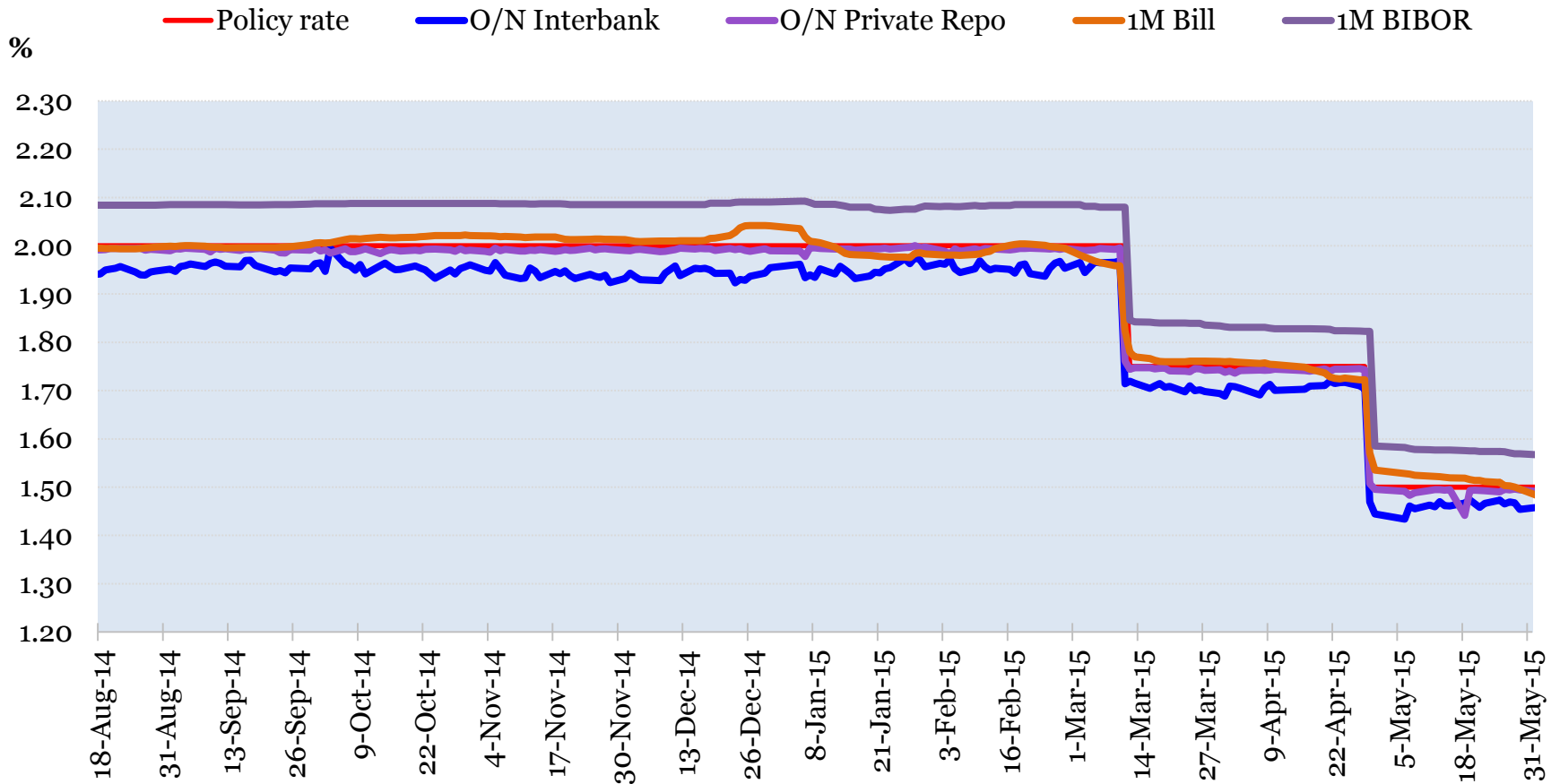
Feature	Deposit facility	Lending Facility
Operating Time	16.30 – 17.00	17.00 – 17.30
Interest rate	Policy rate – 0.5%	Policy rate+ 0.5%
Collateral	N/A	Bonds issued or guaranteed by government
Tenor	Overnight	Overnight
Counterparties	Financial institutions with current accounts at the BOT and have applied for membership	





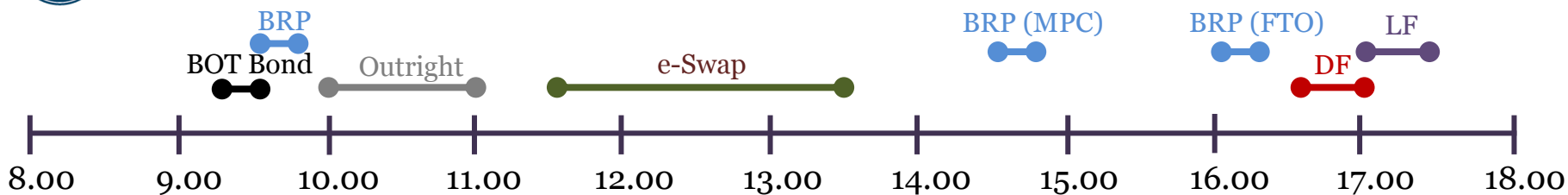
**So far, the current framework has served its functions well.
Short-term money market rates have been stable
and moved in line with the policy rate.**

Money market rates





Summary: Open Market Operations & Standing Facilities



Instruments	Counterparty	Frequency	Operational time	Tenors	Methods
Open Market Operations					
- BOT Bond	Eligible bidder	2-3times per week	9.15 – 9.30	14D/3M/6M/ 1Y/2Y/3Y	Multiple-price Auction
-BRP	BRP PDs	Daily	Regular: 9.30 – 9.45 MPC: 14.30 – 14.45 FTO: 16.00 – 16.15	1D/7D/ 14D/1M	1D: Fixed-rate Tender -(at Policy rate) >1D: Variable-rate Tender (indexed against policy rate)
- Bond Outright	e-Outright CPTs	As required	10.00 – 11.00	-	Multiple-price Auction
- e-Swap (Buy/Sell Swap)	Eligible commercial banks	Daily	11.30 – 13.30	<1Y	Multiple-price Auction
- Sell/Buy Swap		As required	Business hours	<1Y	OTC
Standing Facilities					
- Deposit Facility	FIs with C/A At BOT	Daily	16.30 – 17.00	O/N	Policy rate-50 bps
- Lending Facility		Daily	17.00 – 17.30	O/N	Policy rate+50 bps
- O/N ILF Facility	BAHTNET members	Daily	End of day	O/N	Policy rate+50 bps

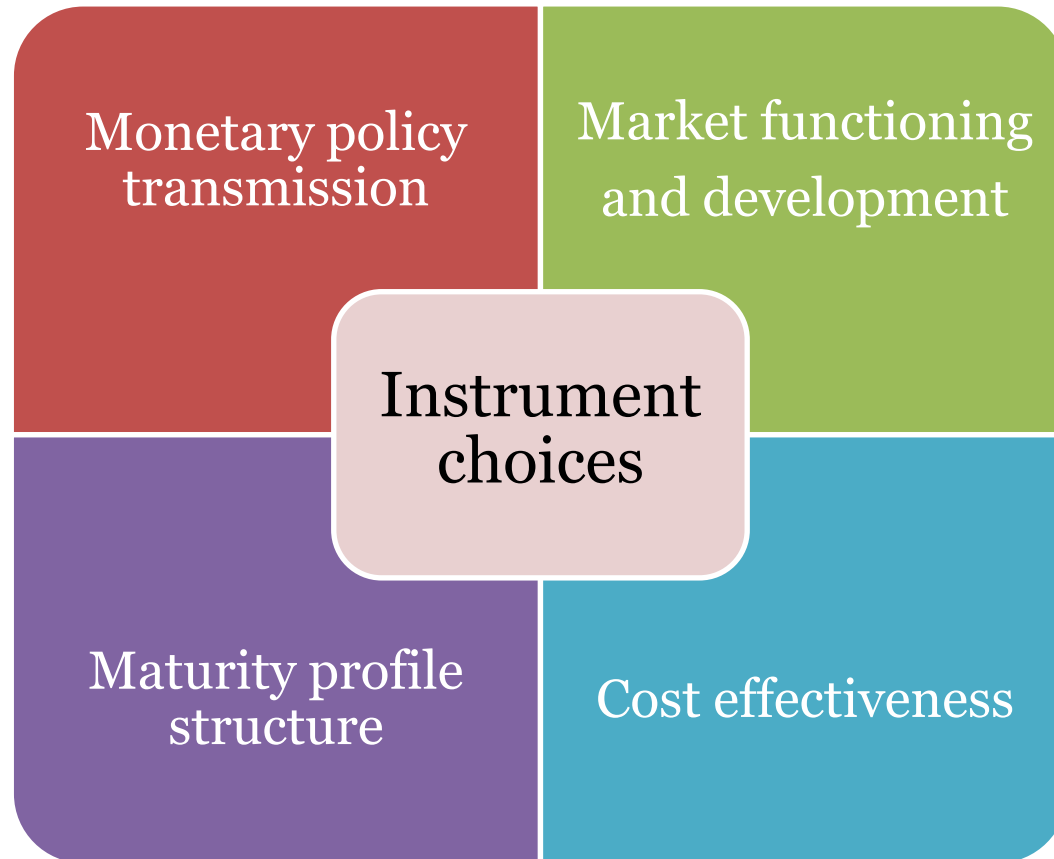


How different instruments are combined in an overall framework for monetary operations?

- Most central banks in developed countries use a combination of indirect instruments
- The appropriate balance between them depends on:
 - Stages of financial market development
 - Structure of local financial markets
 - Country-specific circumstances (e.g., history, technical expertise, infrastructure)
 - The extent to which the central bank wishes to manage the market
- Countries are moving towards market-based instruments since the most efficient instruments of monetary policy are those which best complement the workings of a market system
- An ideal structure of monetary operations varies from country to country.



The Instrument Allocation





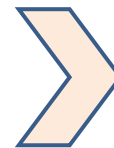
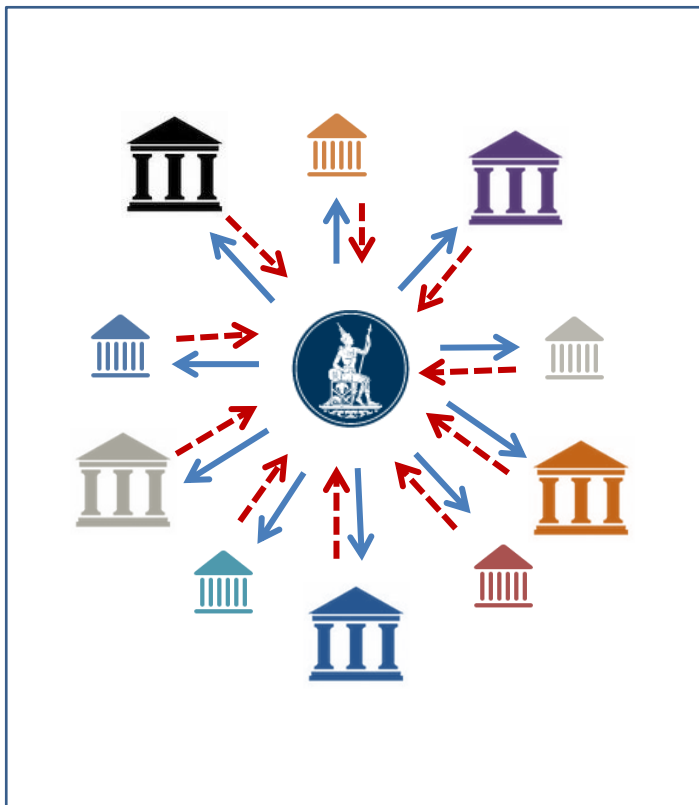
- Current monetary operations framework
 - Reserve requirement
 - Open market operations (OMOs)
 - Standing facilities
- Sterilization and financial market development



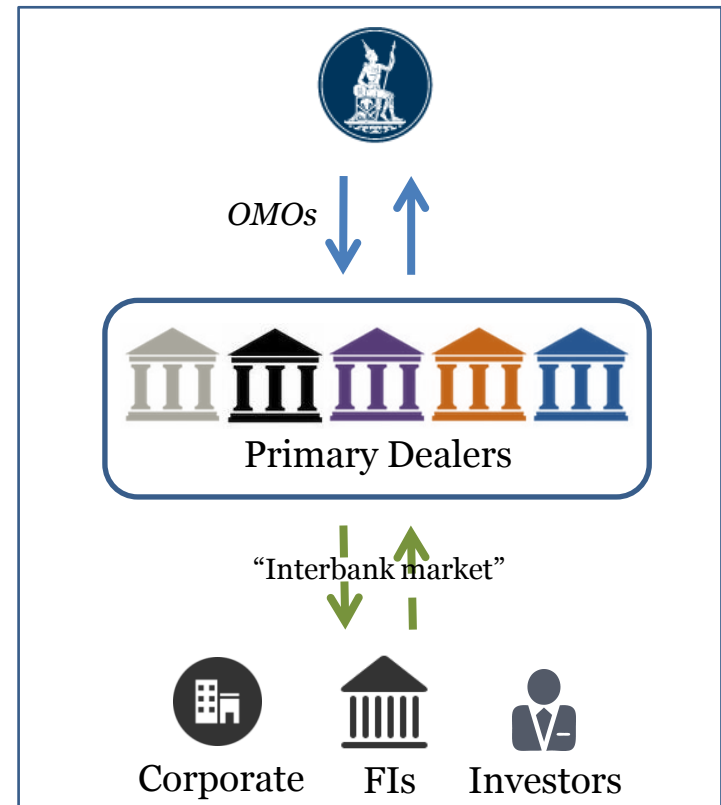
The closure of the BOT-RP market in early 2008 was aimed at promoting money market development.

- The BOT reduced its role as an intermediary by closing the BOT-operated market in Feb-08.
- PDs (for OMO) will act as intermediaries instead, which would enhance market functioning and liquidity and risk management of financial institutions.

BOT-RP Market



Current Framework





- BOT started re-issuing BOT bonds/bills in early 2003
 - Aiming to expand the range of monetary instruments to enhance the flexibility and efficiency in managing money market liquidity.
- BOT determines the total issue size and maturity distribution in accordance with the prevailing money market conditions, taking into account the issuance schedule of public sector debts.
- The monthly auction calendar is announced in advance on the BOT website.
- Used for relatively longer-term liquidity absorption
- Eligible bidders are same as those eligible for the bidding of Government debt securities



As the 2nd largest bond issuer, close coordination with public debt management office (PDMO) is essential.

The BOT coordinates closely with the PDMO in order to meet both fiscal and monetary goals as well as enhance market development.

Timing of issuance

Auctions are arranged on different days of the week, by type of issuers

Sector of the curve

MOF: 1-month T-bills and longer-term bonds (5 years up)

BOT: 1-, 3-, 6-month and 1-year bills, 2-, 3- fixed coupon bonds and 3-year floating rate bonds.

BOT also issues very short-term bills (up to 15 days) (Cash Management Bills: CMBs).

Domestic Bond Auction Day

Day	Issuers/Instruments
Mon	<ul style="list-style-type: none"> • Treasury bills
Tue	<ul style="list-style-type: none"> • BOT bills (up to 1 Year)
Wed	<ul style="list-style-type: none"> • Government bonds
Thu	<ul style="list-style-type: none"> • State enterprise bonds • 2- and 3-year BOT bonds
Fri	<ul style="list-style-type: none"> • Cash management bills ($\leq 15D$) • BOT floating-rate bonds



Views and comments from market participants are taken into account for the annual BOT bond issuance programme.

BOT Bond Issuance Programme in 2015

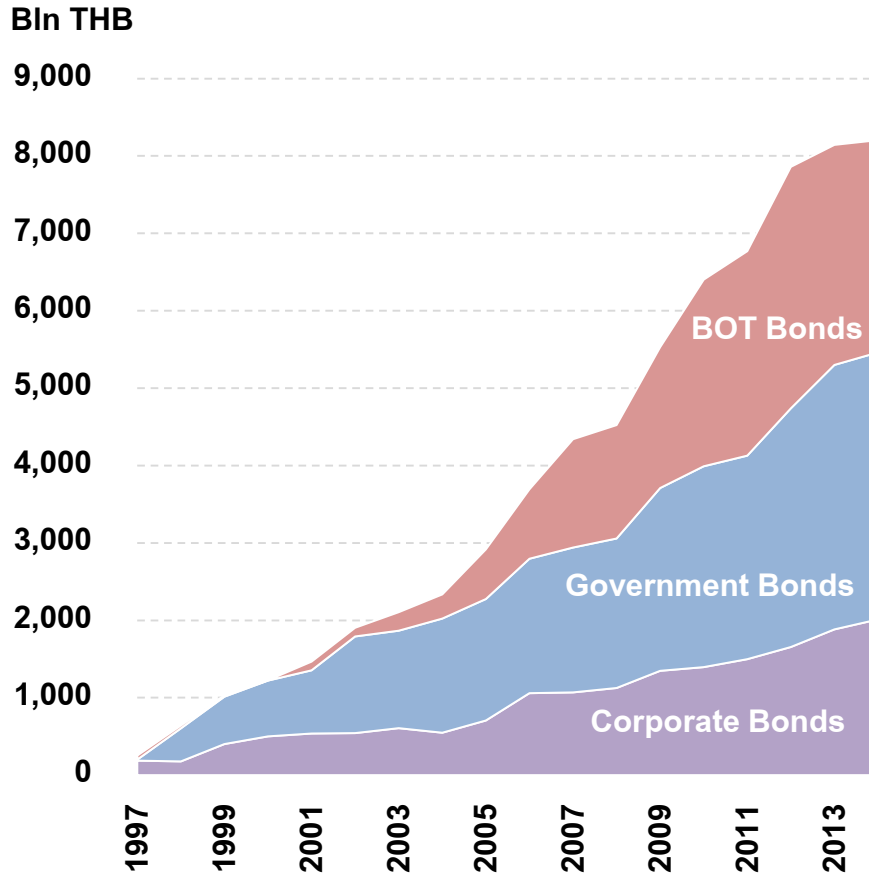
	Issue size per auction (Billion Baht)	Outstanding per issue (Billion Baht)	Auction Date	Auction Frequency
1. Bill				
Cash management bill	10 – 50	10 – 50	Friday	As appropriate
3- and 6-month	25 – 40	25 – 40	Tuesday	Every week
1-year	25 – 45	75 – 135	Tuesday	Every month
2. Fixed-coupon Bond				
2-year	20 – 40	60 – 120	Thursday	Every even month
3-year	20 – 40	60 – 120	Thursday	Every odd month
3. Floating-rate bond				
3-year	8 – 15	48 – 90	Friday	Every even month

Source: <https://www.bot.or.th/Thai/PressAndSpeeches/Press/News2557/n5757e.pdf>



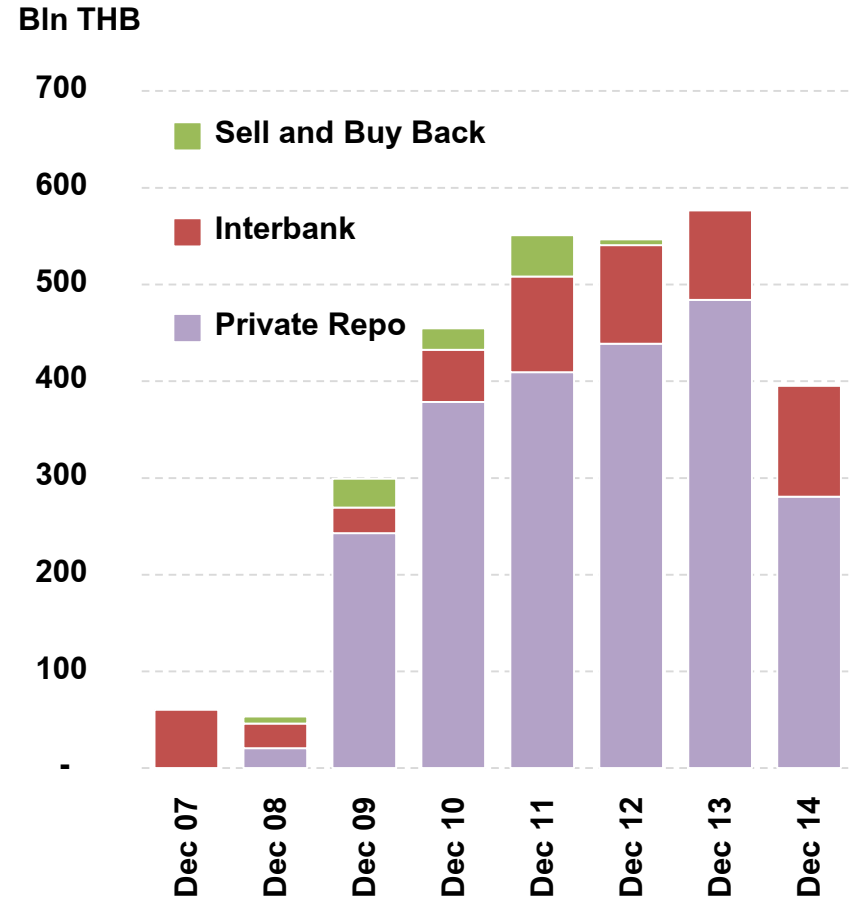
The BOT has turned the massive burden on absorbing liquidity into the opportunity for bond and repo market development.

Size of Thai Bond Markets



Source: ThaiBMA

Outstandings of Money Market Transactions





Q & A