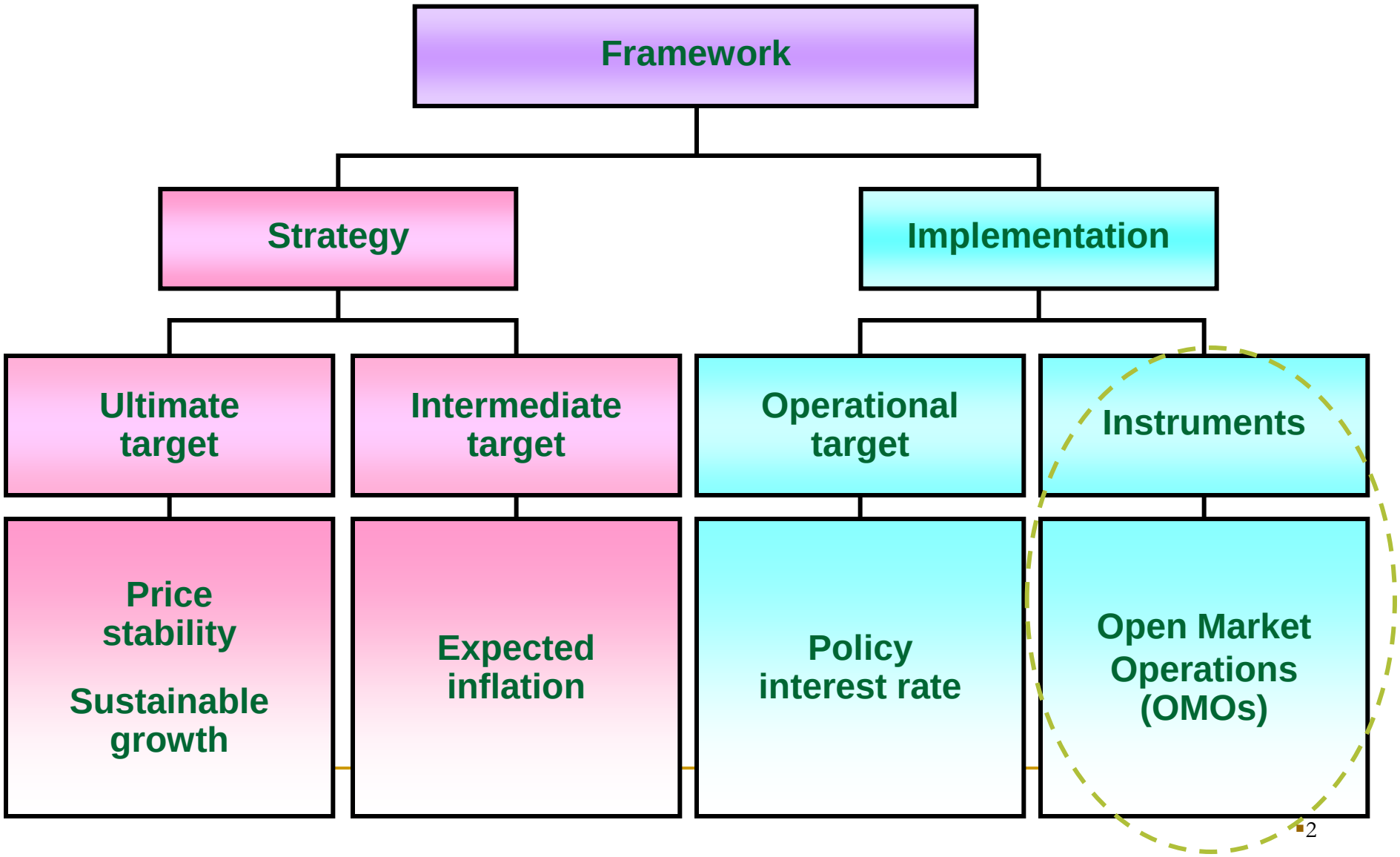
Lecture 12: Monetary Operations in Thailand

Dr. Runchana Pongsaparn

30 March 2013

Monetary policy implementation



Monetary Policy Implementation under Inflation Targeting

Relevant data

MPC meeting, every 6 or 8 weeks

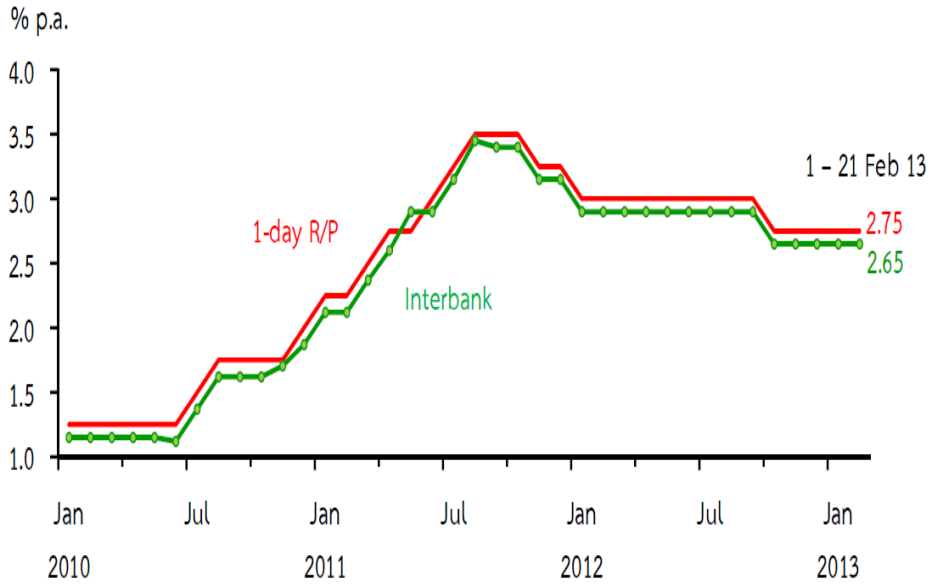
MPC decision:
Hike / maintain / cut 1D RP rate

Decision announcement

OMOs to maintain money market liquidity at a level consistent with the policy rate

Transmission mechanism

Money Market Rates



Liquidity management is done through 3 main channels:

- **Reserve Requirement**

  A bank regulation that sets the minimum reserves each bank must hold to customer deposits, normally in the form of vault cash or deposit with a central bank

- **Open Market Operations**

  The means of implementing monetary policy by which a central bank controls its national money supply by buying and selling government securities or other financial instruments

- **Standing Facility**

  An instrument of monetary policy that allows eligible institutions to borrow money from a central bank, usually on a short-term basis, to meet temporary shortages of liquidity caused by internal or external disruptions

1. Reserve requirements

Objective

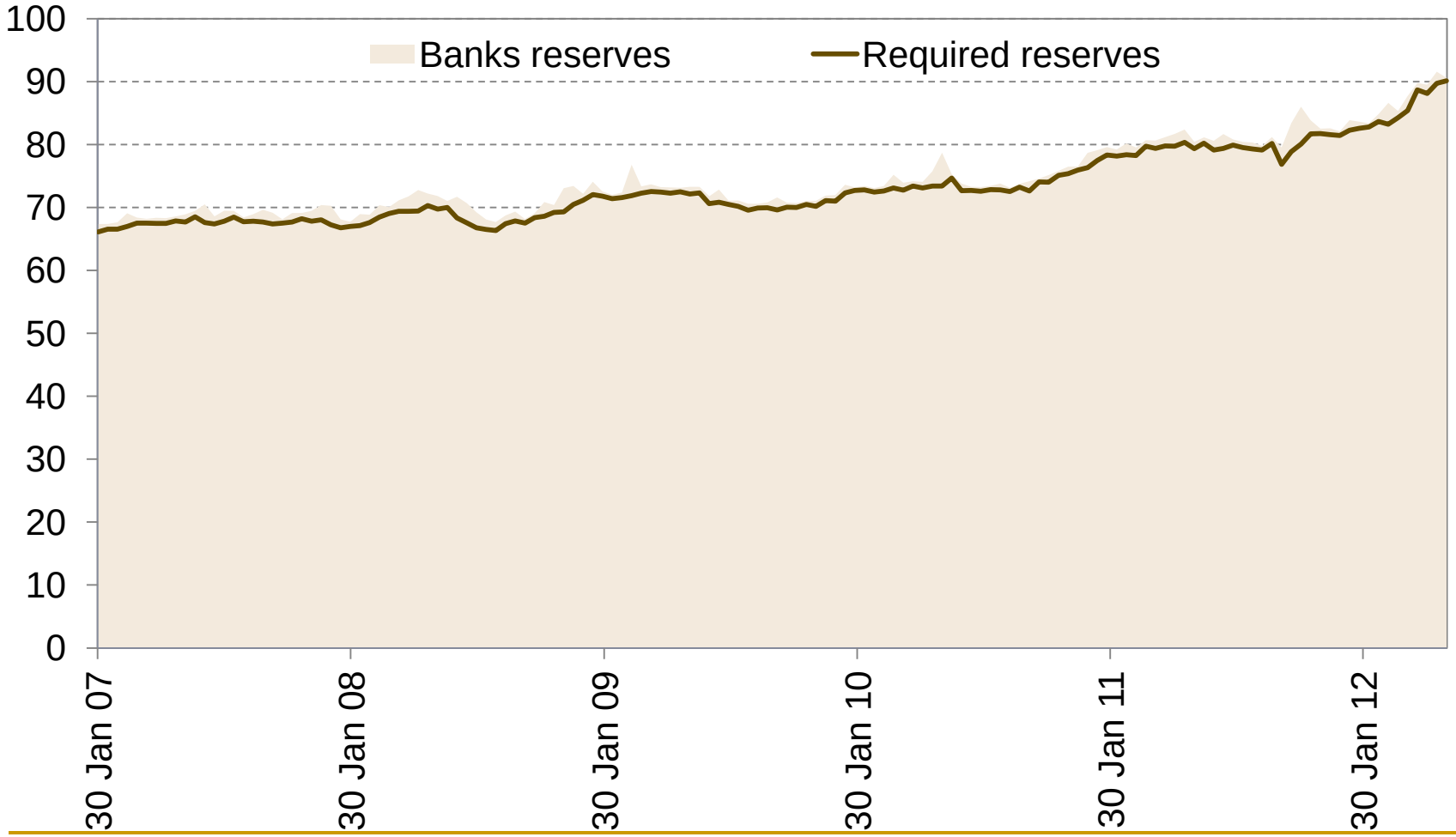
- Short-run monetary management
  - To influence the demand for reserves
  - To limit the volatility of O/N interest rate via reserve averaging scheme
- Longer-term monetary management
  - To control money supply (for example, China and India)
  - But implicitly imposes tax on banks

Framework

- Commercial banks are required to maintain reserves, on average, as a proportion of the deposit base
- Rate: 6% of deposits
  - Minimum of 1% as deposits in the current account at the BOT
  - Maximum of 2.5% in vault cash
  - Remaining as eligible securities, including government bonds and state-enterprise bonds

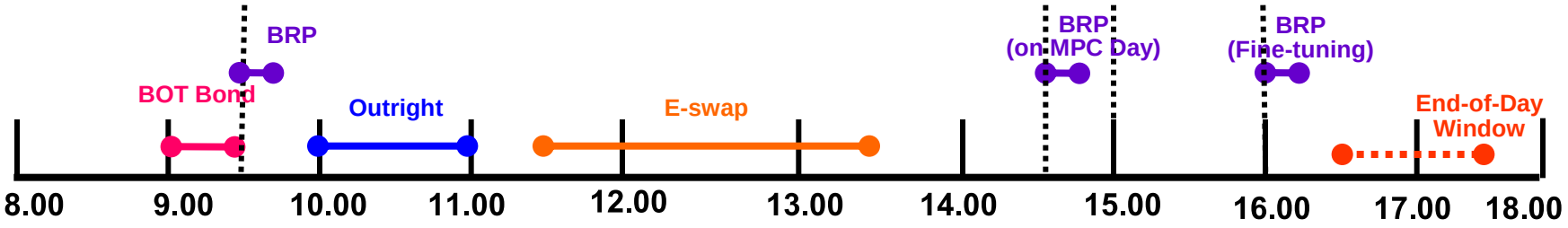
Deposits held by private sector at BOT (CAB)

- Bil. Baht



2. Open market operations

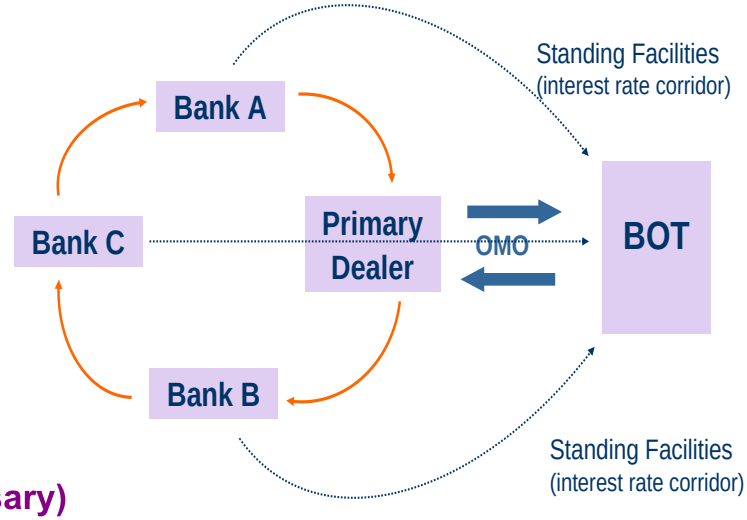
To affect aggregate bank reserves and steer interest rates in line with the monetary policy stance



Type of transaction	Counterparty	Frequency of operation	Operating Time	Tenor	Auction method	Collateral
1. Bilateral Repo						
Morning session	12 BRP PDs	Daily	9.30 – 9.45	1, 7, 14 days 1 month	Variable-rate tendor except for O/N transactions which is conducted at the policy rate	eP/N (only for O/N & 7 days), Govt. bonds, BOT bonds, SE bonds, FIDF bonds
Afternoon session		MPC date	14.30 – 14.45			
Fine-tuning		As necessary	16.00 – 16.15			
2. Outright purchase and sale of bonds	8 bond outright PDs	Approximately twice a month	10.00 – 11.00	-	Multiple-price auction	Same as bilateral repo
3. BOT Bond Auction	60 eligible bidders	Bonds: 1-4 issues/week Bills: 2-3 issues/week	within 9.30	1-15 days 1, 2, 3, 6 months 1, 2, 3 years FRN	Multiple-price auction (also NCB for longer than 1Y bonds)	N/A
4. FX swap						
E-swap	28 BOT counterparties	Daily	11.30 – 13.30	1, 7, 14 days 1, 3, 6, 9, 12 months	Multiple-price auction	USD
OTC	30 BOT counterparties		Office hours	As needed	Broker system	

Bilateral Repurchase Operation

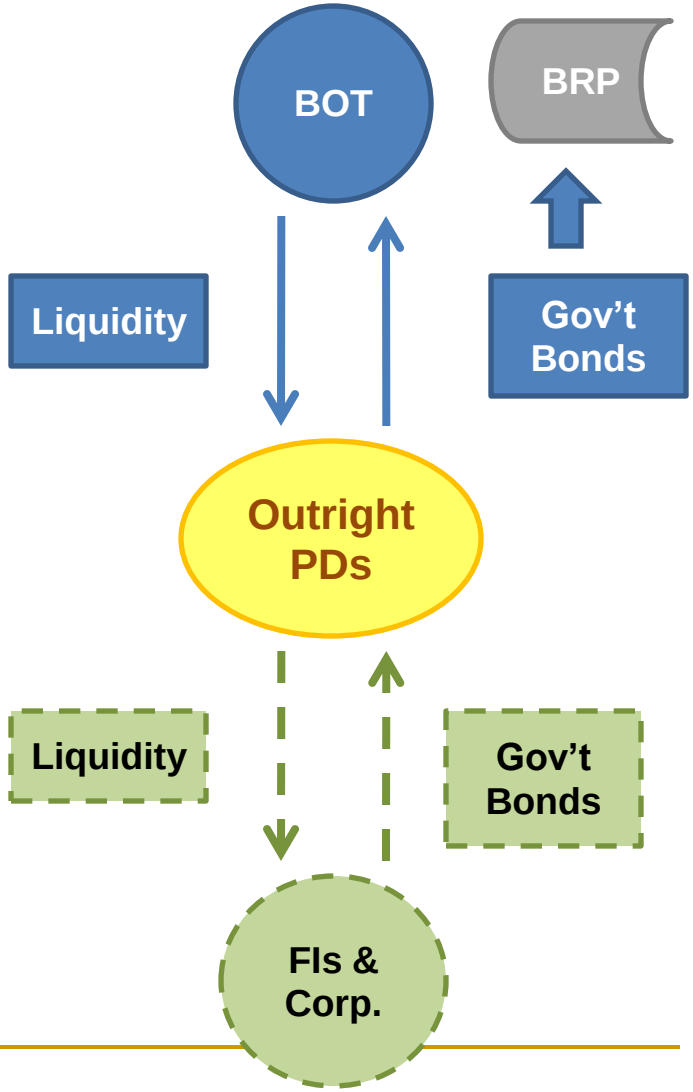
- BOT began conducting the BRP operation in Dec 2002
- Aims to help stimulate the private repurchase market, thus improving the efficiency and transparency of the RP operations
- Conducted daily through appointed <u>Bilateral PDs</u>
  - Normal round: 9.30am
  - On MPC days: 2.30pm
  - Fine-tuning operation: 4pm (only when necessary)



- Either fixed-rate (for 1-day tenor) or variable-rate tenders (for 7,14-day, 1M tenors) are conducted
- Same-day settlement

Outright purchases/sales of government securities

- Permanently adds or drain reserves available to the banking system
- BOT buys or sells public debt securities outright with outright PDs.
  - eligible securities include all types of secured public debt securities but BOT has primarily used government bonds in the outright operations as the market for government bonds is quite liquid
- Use multiple-price auctions
- Settlement takes place two days later (t+2)



BOT Bond Issuance

Objectives

1. To expand the range of instruments for monetary policy implementation, in order to enhance flexibility and efficiency in managing money market liquidity
2. To stimulate bond market development by
    - providing regular and predictable supply of bonds
    - reducing auction frequency and consolidating issues to facilitate secondary market trading
    - introducing new products such as floating-rate notes

BOT Bond Auction Frequency

Type	Frequency
CMBs	**Every Friday**
1, 3, 6 M	**Every Tuesday**
1Y	**Once a month**
3Y (FRN)	**Once every even month**
3Y, 2Y	**Once a month (odd/even)**
Saving	**As necessary**

Instrument Maturity

Instrument	Maturity
BOT Bonds	
•CMB	≤ 15D
•BOT Bonds	1M-3Y
•BOT Savings Bonds	3Y-7Y
Bilateral Repo	1D-1M
FX Swap	1D-1Y

Foreign Exchange Swap

- FX swap is similar to a repurchase agreement in domestic securities, the difference being that THB is exchanged for foreign currency, namely the US dollar, rather than domestic securities
- BOT can transact FX Swap for liquidity management via
  - E-Swap: an electronic bidding platform where banks wishing to obtain baht liquidity may do so by submitting their bids, via Web Portal, to the Bank between 11.30am to 1.30pm, indicating swap points, amount and maturity and the BOT will notify results within 2.30 pm
  - OTC: The BOT either calls banks directly asking for quotes or access the market via brokers
- Counterparties include onshore and offshore commercial banks
- Standard tenors are overnight up to 6 months, but more actively concentrated on the short end. (up to 3-month)
- Settlement usually takes place T+2

3. Standing facilities

Objective

- To set a corridor for short term market rates

Framework

Type	Operating time	Interest rate	Collateral	Counterparties
Deposit facility	16.30 – 17.00	Policy rate – 0.5%	N/A	Financial institutions with C/A accounts at the BOT and have applied for membership
Lending facility	17.00 – 17.30	Policy rate + 0.5%	Bonds issued or guaranteed by government	
O/N ILF (liquidity provision)	End of day	Policy rate + 0.5%	Subject to collaterals posted with ILF	BAHTNET members

From the policy rate to short-term market rates: How can the BOT control market rates?

- BOT manages liquidity in the banking system by controlling the **aggregate supply of bank reserves** to accommodate or offset changes in the aggregate demand for bank reserves
- Financial institutions with excess or shortage of liquidity are able to borrow from or invest in BOT's liquidity-adjustment windows. Through these channels, BOT can transmit changes in the policy rate market interest rates
  - BOT transacts **O/N BRP** at the policy rate
  - **For BRP at tenors other than O/N**, deviations from the policy target are accepted to accommodate market expectations of future policy rate changes
  - **For other facilities**, BOT ensures that spreads from the policy rate are not too wide (some spreads allowed to reflect different features of the instruments)
  - Interest rate volatility is limited by the standing facility corridor at **+/- 50 bps**

A day at the market operation desk

- Liquidity forecast for the day
- Conversation with the market
- OMOs planning in accordance with the liquidity forecast
- Discussions in the morning meeting
  - Money market conditions wrap-up
  - Proposal of daily operations: size, instrument, tenor, etc.
- OMOs
- Market monitoring throughout the day
- Revision of liquidity forecast if necessary

Central bank's balance sheet

Assets	Liabilities & Equity
Foreign assets (net)	Currency in circulation
Domestic assets	Current Account
Government bonds	Bank's deposit
Lending to banks	Other deposit
Credit facilities	Government deposit
Lending facility	Liquidity absorption operations
Other items (net)	Bilateral Repo
	BOT Bond
	Deposit facility
	Capital and Reserves

Monetary base

Monetary base = Currency in circulation + C/A balances

= Net foreign assets + Net domestic assets + Others

= (FA – FL) + (Govt. bonds – Govt. deposit) + (Lending to banks

– Liquidity absorption operations) + (Other items – Capital and Reserve)

Re-arranging the above equations, we get the liquidity forecasting formula:

C/A balances + Currency in circulation = NFA + Net govt. flows + Net lending to banks

+ Others

Liquidity forecasting

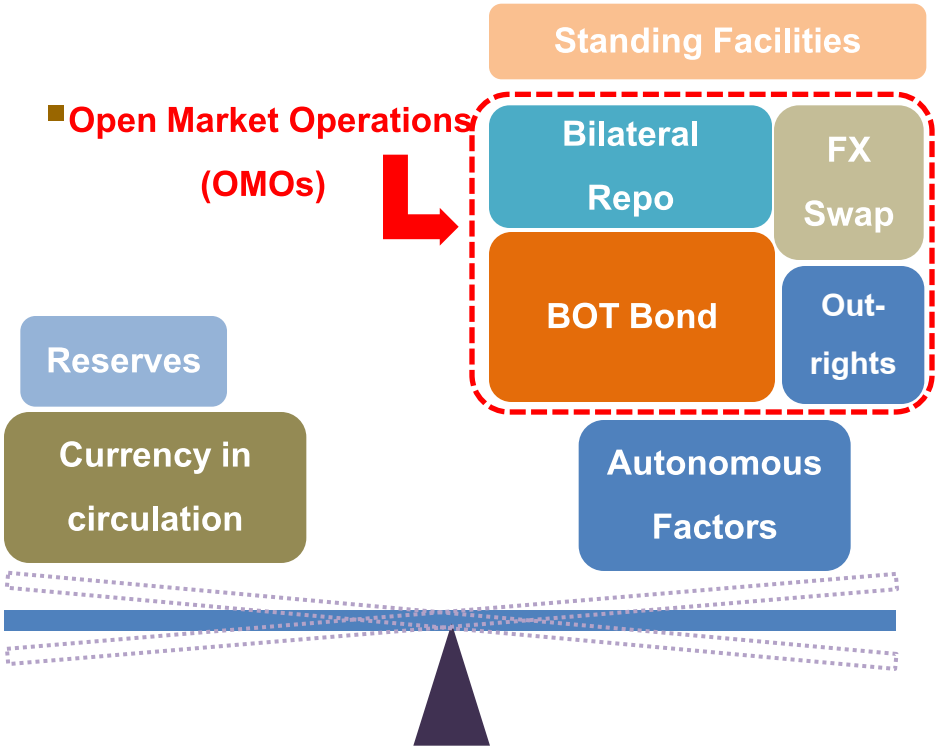
Demand for Monetary Base

- *Currency in circulation*
- *Reserves*

Supply of Monetary Base

- *Autonomous Factors* (e.g. FX intervention, government spending)

- *Open Market Operations: (OMOs) and Standing Facilities*



Liquidity forecasting

Change in Demand and Supply for Monetary Base

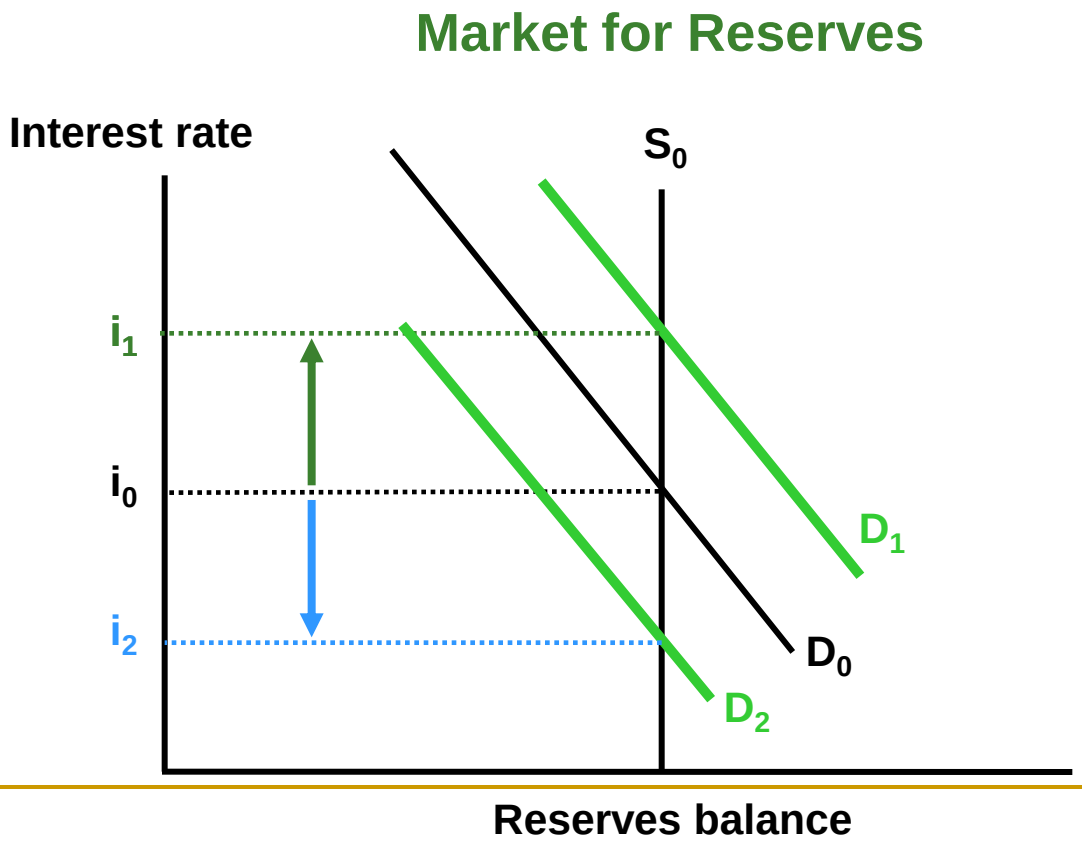
Demand for Monetary Base	**+15**
Deposit of commercial banks at BOT	+10
Currency in circulation	+5
Supply of Monetary Base	**+20**
Treasury Balance	***+4***
- Cash balance (+deficit/-surplus)	+7
- Debt financing (+ = maturing > new issue)	-3
Policy implementation by BOT	***+16***
- Maturing OMOs	+13
- Exchange rate policy (+ = USD purchase)	+2
- Credit facility (soft loans)	+1
Excess Demand (-) or Supply (+)	**+5**
Amount of liquidity BOT needs to absorb or inject to bring about equilibrium interest rate	**-5**

Changing the policy rate does not involve adjusting today's reserves supply

- Demand for reserves depends on reserves requirement and settlement needs which are determined by exogenous factors, not on stance of policy
- Thus, there is no need to change OMOs to adjust reserves supply
- Meanwhile, money market interest rates jump because pricing depends on market expectations of the terms over which the central bank is willing to inject/absorb supply of reserves
- Central bank's control over interest rates relies on market perception about how central bank will react to deviations of the reference market rate from its policy rate
- So long as the public knows the targeted price and expects the central bank to take action accordingly when price moves sufficiently away from it, market trades will typically be anchored at or close to this price

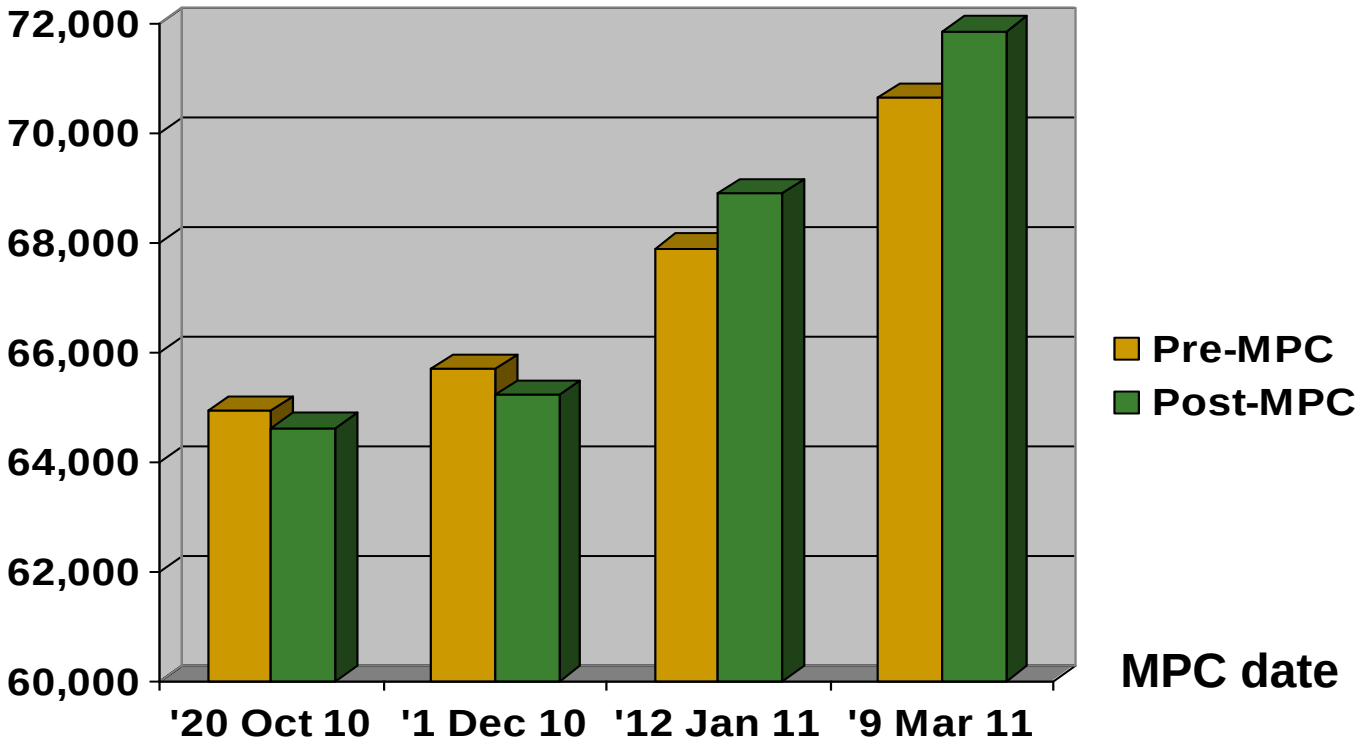
Market rate will adjust instantaneously to the new target rate if market participants <u>believe</u> that the central bank will manage liquidity in a way that will achieve this rate over the maintenance period

Demand curve shifts in response to <u>perceived</u> ceiling and floor of interest rate which the central bank will tolerate



Empirical evidence

Fortnightly Average of Commercial Banks' Reserves Holding at the BoT (in million bahts)



Source: Bank of Thailand