



ธนาคารแห่งประเทศไทย  
BANK OF THAILAND

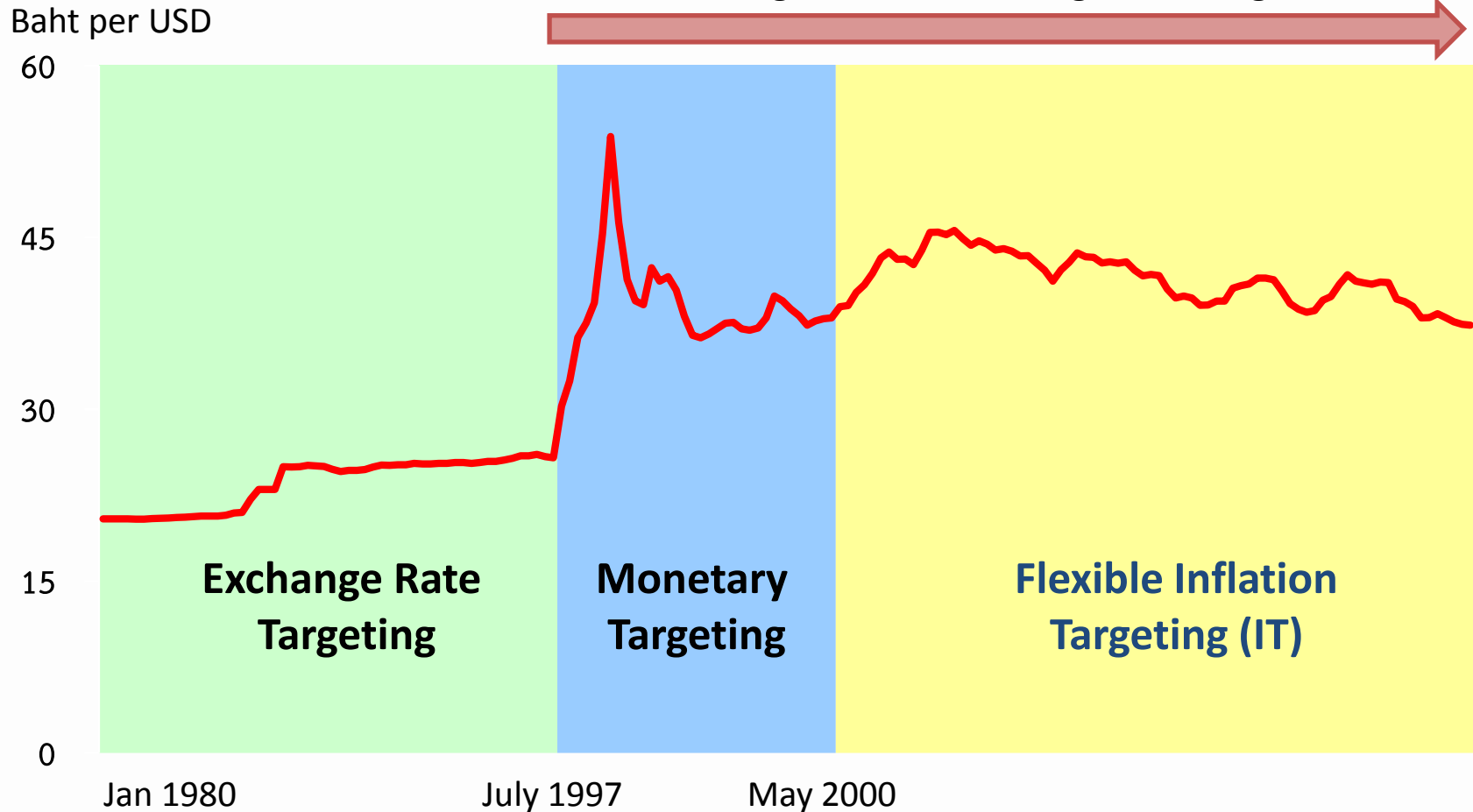
# Lecture 15

## Thailand's Experience on Conducting Exchange Rate Policy



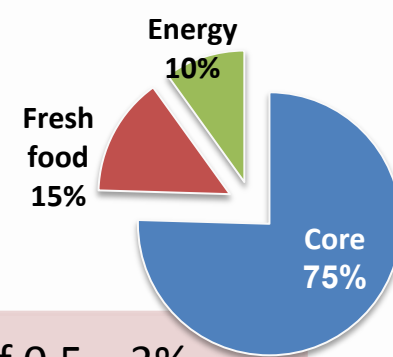
# Evolution of BoT's monetary policy framework

'Managed Float' Exchange Rate Regime





## Flexible Inflation Targeting



### Inflation Target

- Quarterly average core inflation target of 0.5 – 3%
- Target, set in conjunction with the Minister of Finance, is approved by the Cabinet

### Instrument

- 1-day bilateral repurchase (BRP) rate

### Responsibility

- MPC's authority and responsibility clearly stipulated by the BOT Act
- MPC comprised of 3 internal and 4 external members

### Communication and Transparency

- Regular press conference after each MPC meeting
- Quarterly *Inflation Report*
- Edited minutes and announcement of voting results



## BoT currently adopts “Flexible Inflation Targeting” as monetary policy framework

### Announcement of numerical target

- To anchor inflation expectation, which will have an impact on actual inflation outturn
- Inflation as primary but not the only goal

### Forward-looking

- Due to long and variable lag of monetary policy transmission
- Development of a suite of econometric models

### Transparency and accountability

- To anchor inflation expectation and facilitate smooth market adjustments
- Regular communication with the public



## Exchange rate policy at the Bank of Thailand

- **Since July 1997, Thailand has adopted the managed-float exchange rate regime, which is also consistent with the inflation targeting regime that has been in place since 2000.**
- **Under the inflation targeting framework and the managed-float, the value of the baht is allowed to be determined by market forces, reflecting demand and supply for the baht in the foreign exchange market.**
- **Under the managed float, the Bank of Thailand**
  - (1) does not target a fixed level for the exchange rate,**
  - (2) stands ready to intervene in the case of excess volatility, particularly resulting from speculative capital flows.**

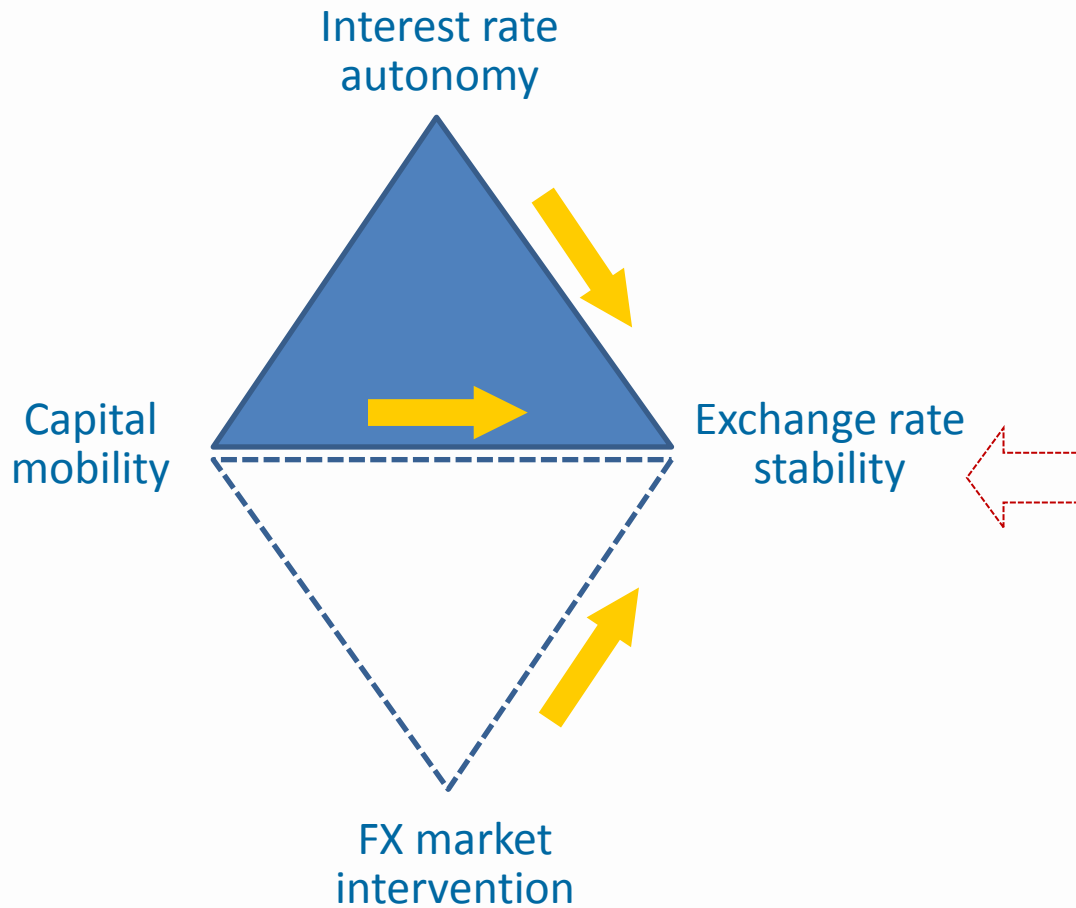


# Exchange rate policy at the Bank of Thailand

- **In some instances, supply and demand may be at a disequilibrium, leading to excessive volatility in the value of the baht.**
- **The Bank of Thailand aims to ensure that the value of the baht is allowed to fluctuate under the following conditions;**
  - (1) the Bank of Thailand stands ready to intervene in the foreign exchange market such that volatility of the exchange rate is at a level that the economy can tolerate,**
  - (2) maintaining national competitiveness, as measured through the Nominal Effective Exchange Rate (NEER), which comprises currencies of important trading partners - and not just the US Dollar, and**
  - (3) any intervention does not go against economic fundamentals which would otherwise lead to further imbalances.**



## Coping with the Impossible Trinity: In the short run some central banks try to overcome the Impossible Trinity by intervening in the FX market



### Challenges of Developing Countries

Heavy reliance on exports

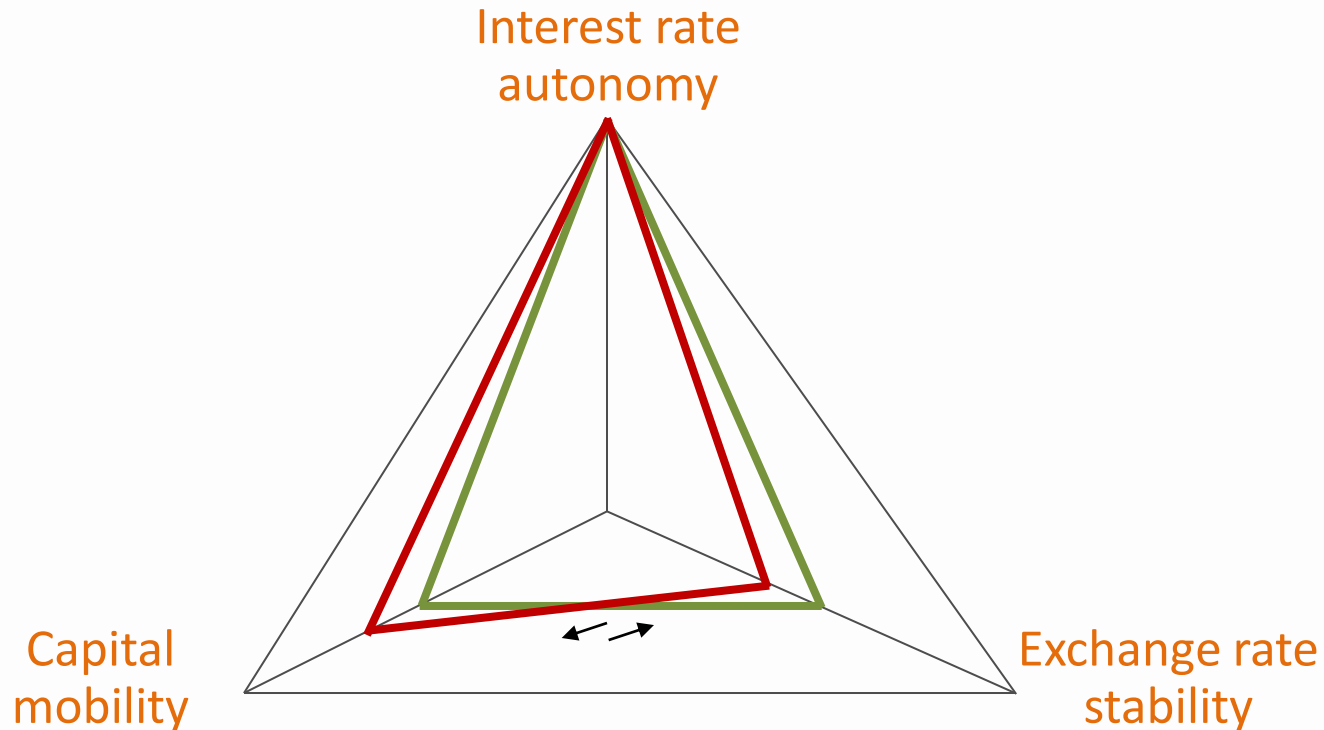
High level of foreign debt

Underdeveloped financial markets

Significant pass-through  
via import prices



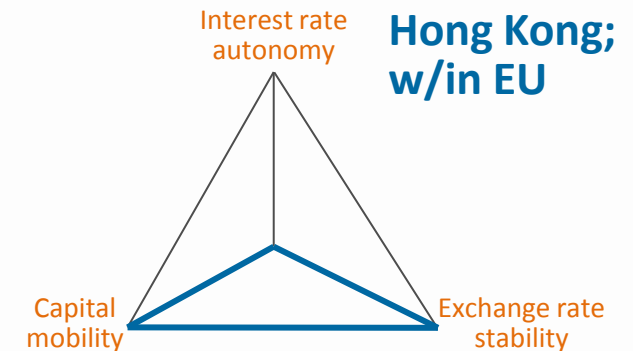
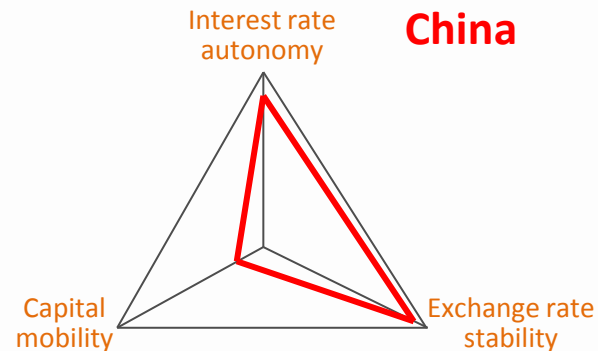
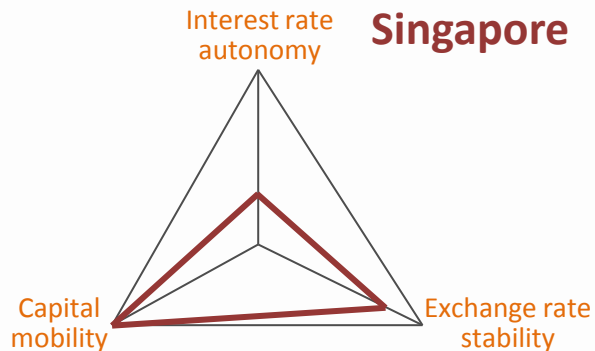
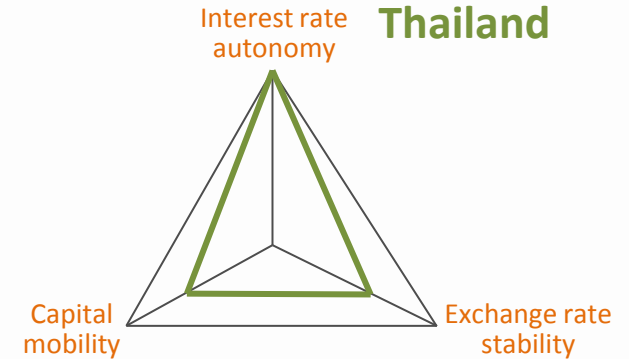
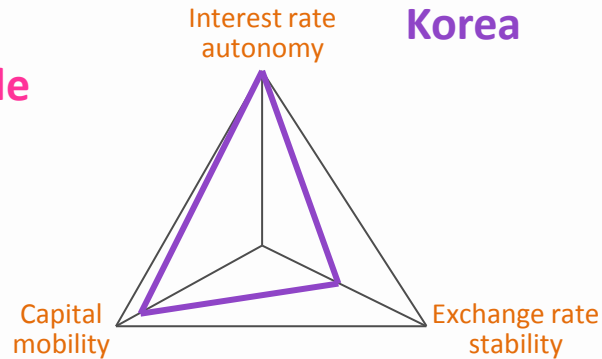
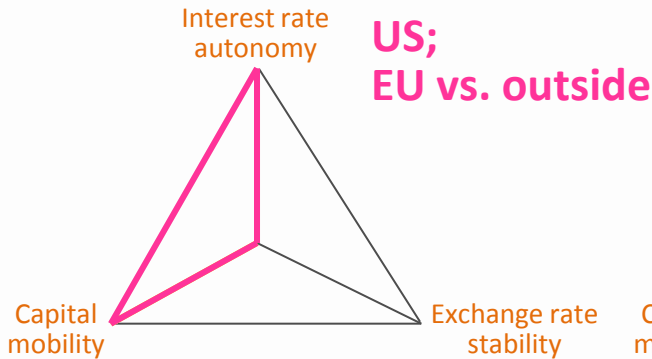
## The “Impossible Trinity”



These three goals **cannot** be pursued at the same time.  
The central bank has to find a balancing position, based on various economic considerations, and choose the appropriate combination of monetary policy tools.



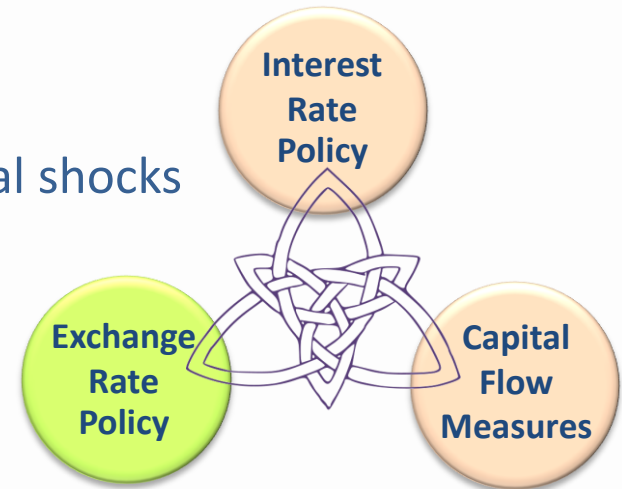
# Policy choices under the Impossible Trinity





## Exchange rate management under IT

- **FX is generally allowed to move freely in line with economic fundamentals**
  - Acting as automatic stabilizer against external shocks
  - Encouraging market participants to cope with volatility
  - Facilitating economy-wide structural change



- **But the need for FX management may arise from time to time**
  - Market dysfunction
  - Prolonged and significant adverse impact on the economy

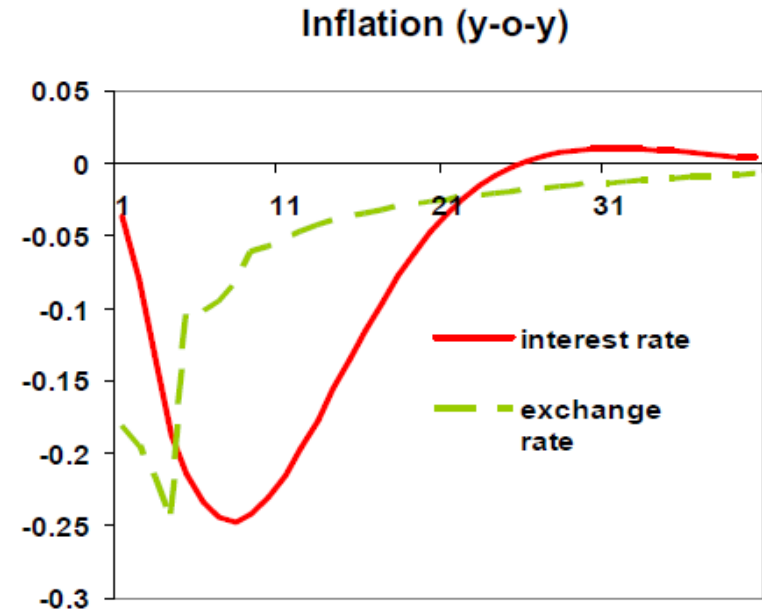
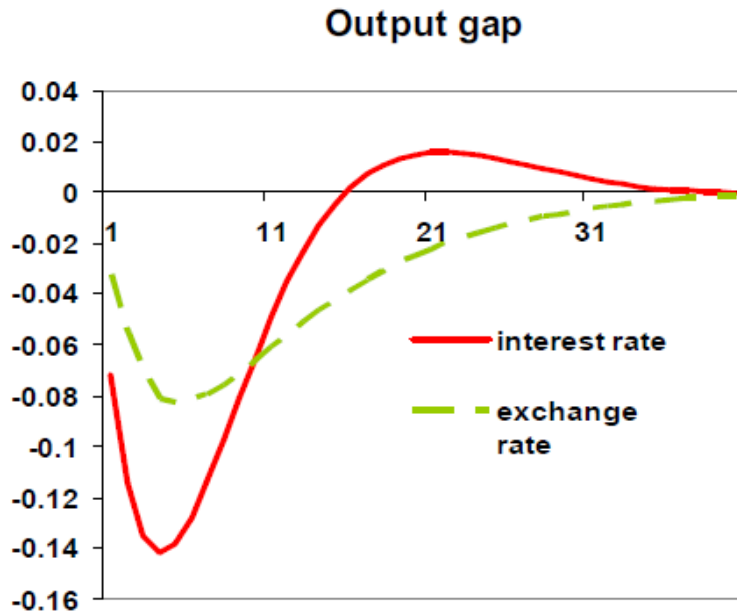


# Exchange rate has effects on output and inflation

ER has prolonged impact on output

... but temporarily affects inflation

Responsiveness of Output Gap and Inflation to the Policy Rate and the Exchange Rate



Source: Chai-Anant et al. (2008)



# Exchange rate management tools and its considerations

## FX Intervention



- Direct buy/sell foreign currency (artificial demand-supply of foreign currency)
- To fix at particular rate needs unlimited amounts
- Sterilization tools and costs
- Balance sheet extension with mismatch risk

## Verbal



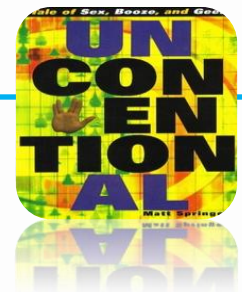
- Short-lived
- Strong credibility required for effectiveness
- Time inconsistency problem

## Monitoring System



- Gauge the pressure on exchange rate
- Timely, full-span and predictive are crucial properties
- Burdensome to market players

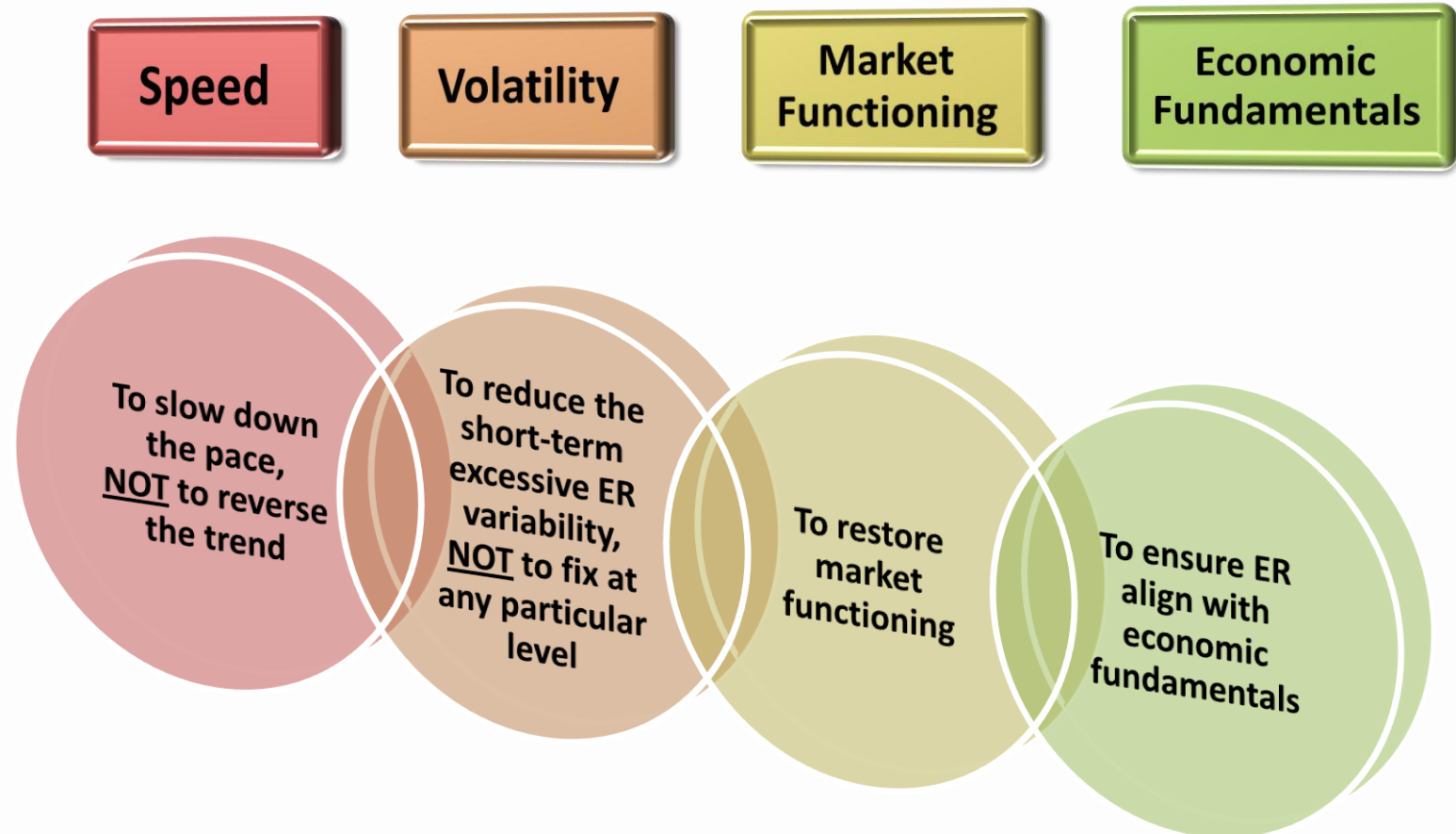
## Capital Flows Measures



- Limit no underlying transactions or delink R-NR to prevent speculation
- Market unfriendly
- Negative impact on mkt development
- Effectiveness is temporary (loophole always be found)



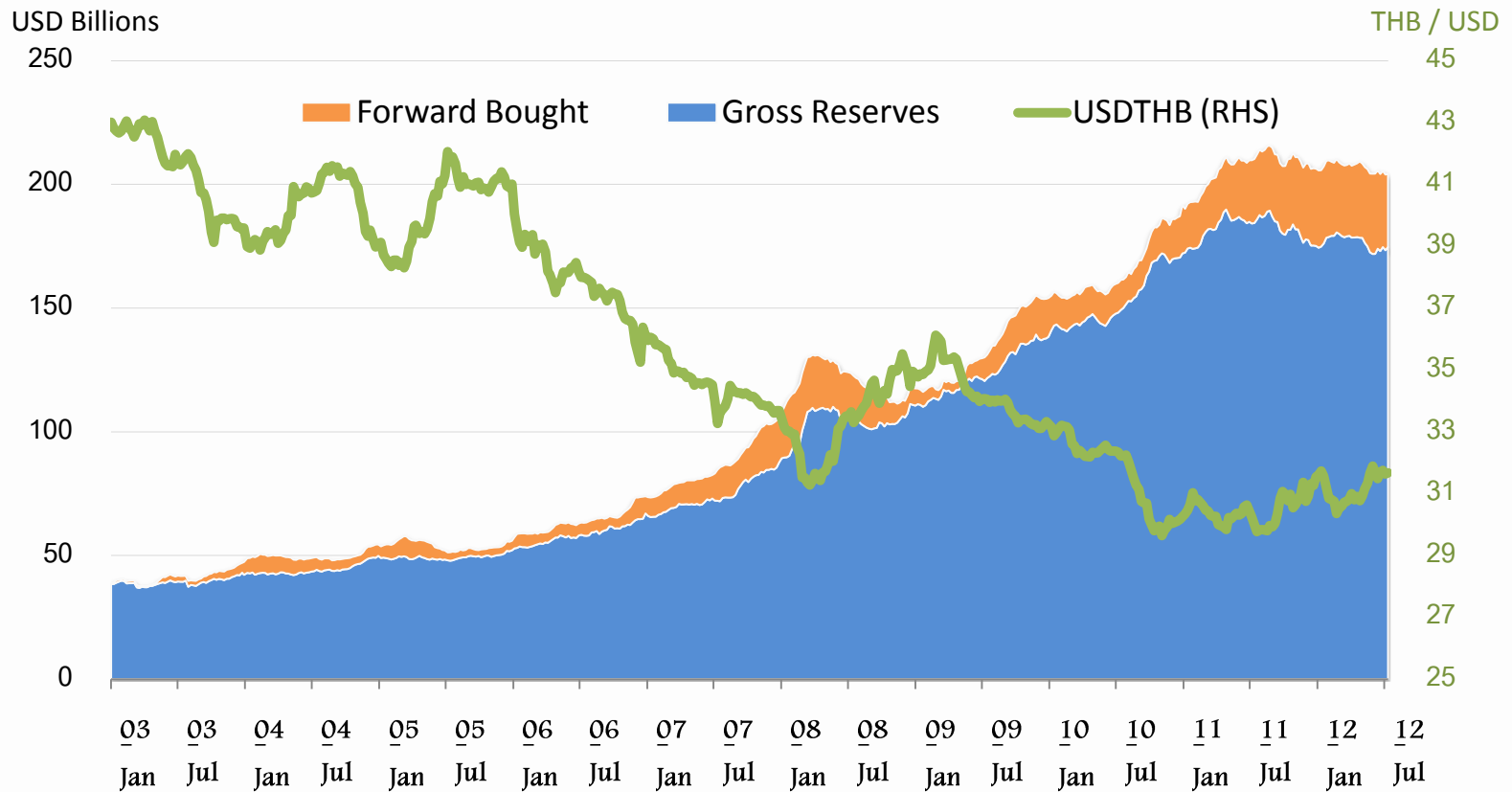
# What can the intervention probably do and cannot do?





# The consequence of FX intervention: Reserve build-up

## FX Reserves Accumulation since 2003

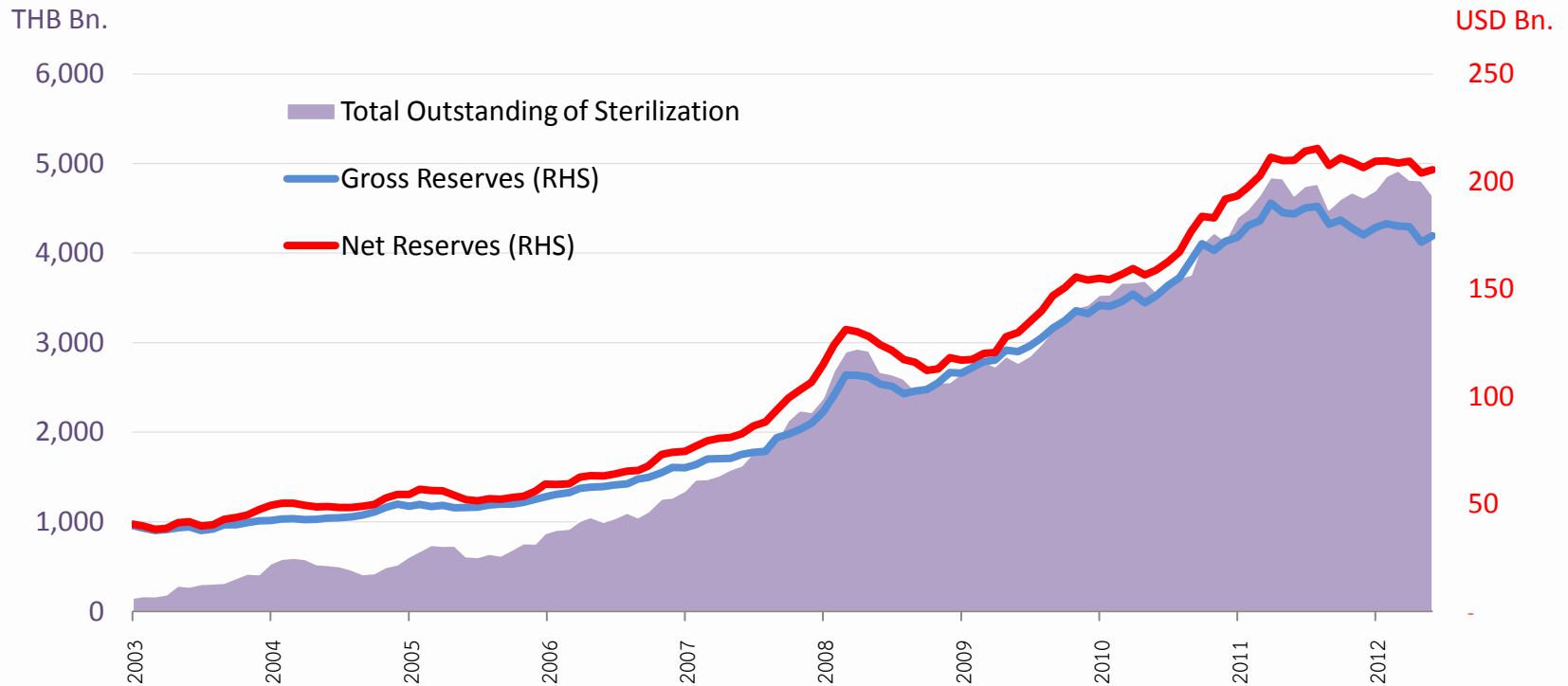


Source: BOT



# Accumulation of FX reserves led to increasing large amount of excess liquidity needed to be withdrawn from the system to maintain short-term interest rates consistent with the policy rate

## International Reserves and Sterilization

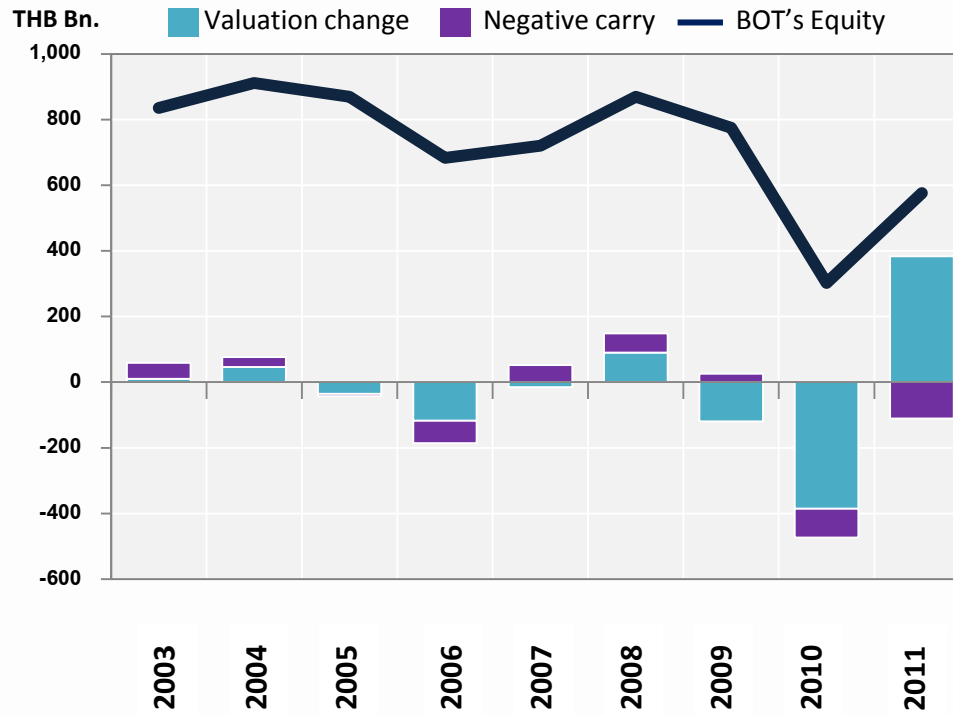


Source: BOT



# Capital erosion from balance sheet mismatch

## BOT's capital and losses from intervention

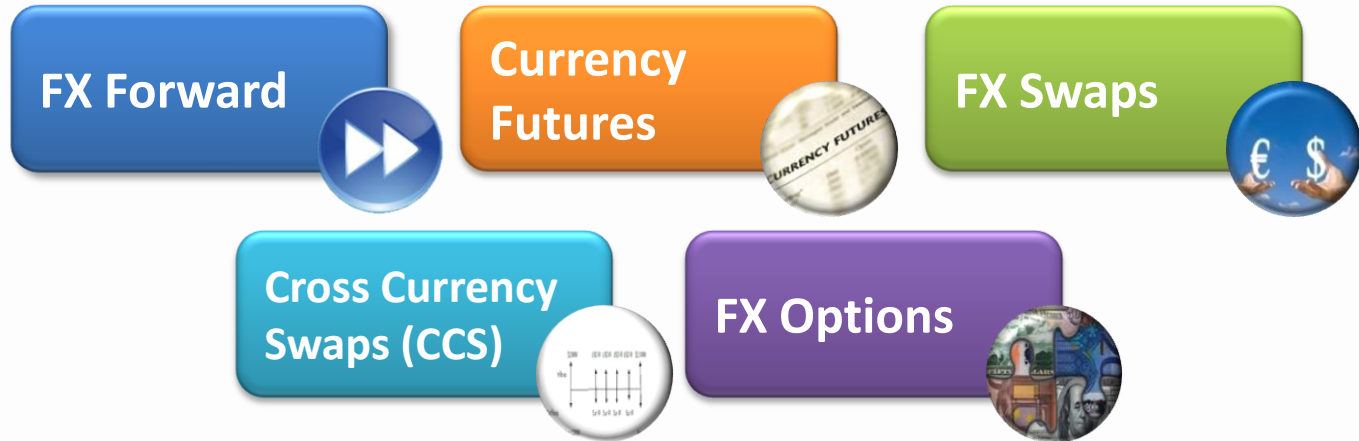


Source: BOT



## Foreign exchange derivatives

### Products:



### Uses:

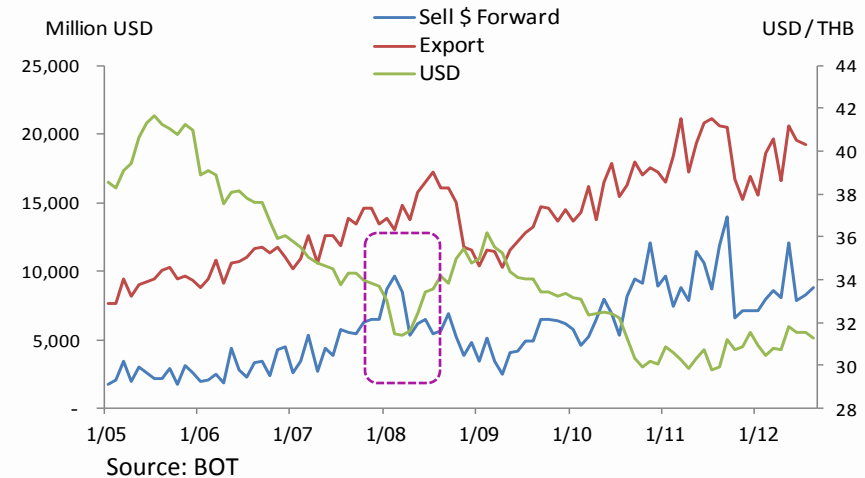
- Hedge or mitigate FX risks
- Provide liquidity and foreign currency funding
- Speculate and arbitrage



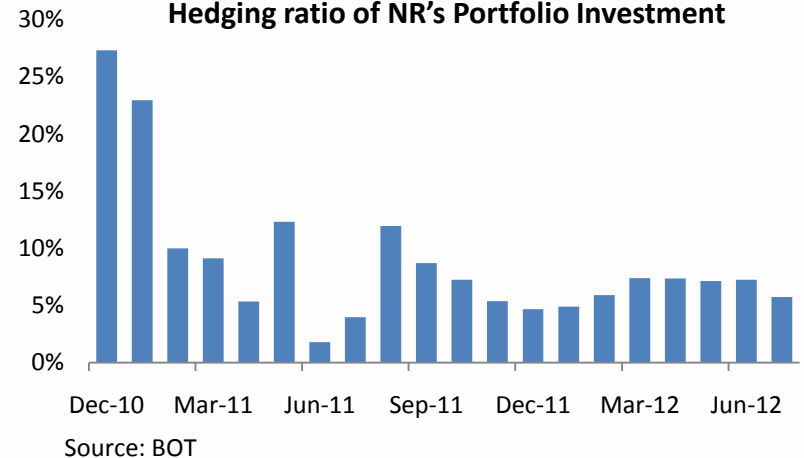
# FX Forward

- **Forward** is a tailored contract between two parties, where payment takes place at a specific time in the future at today's pre-determined price
- A major tool for managing FX risks for trade-related (exports and imports) and investment transactions
- Demand for Forward is determined primarily by exchange rate volatility
- Supply of Forward is much related to 'USD liquidity', which can be obtained from borrowing abroad or FX Swap market
- **Panic** on drastic changes in ER would result in an aggressive buying or selling Forward and led to a big jump in ER

Hedging behavior of exporters

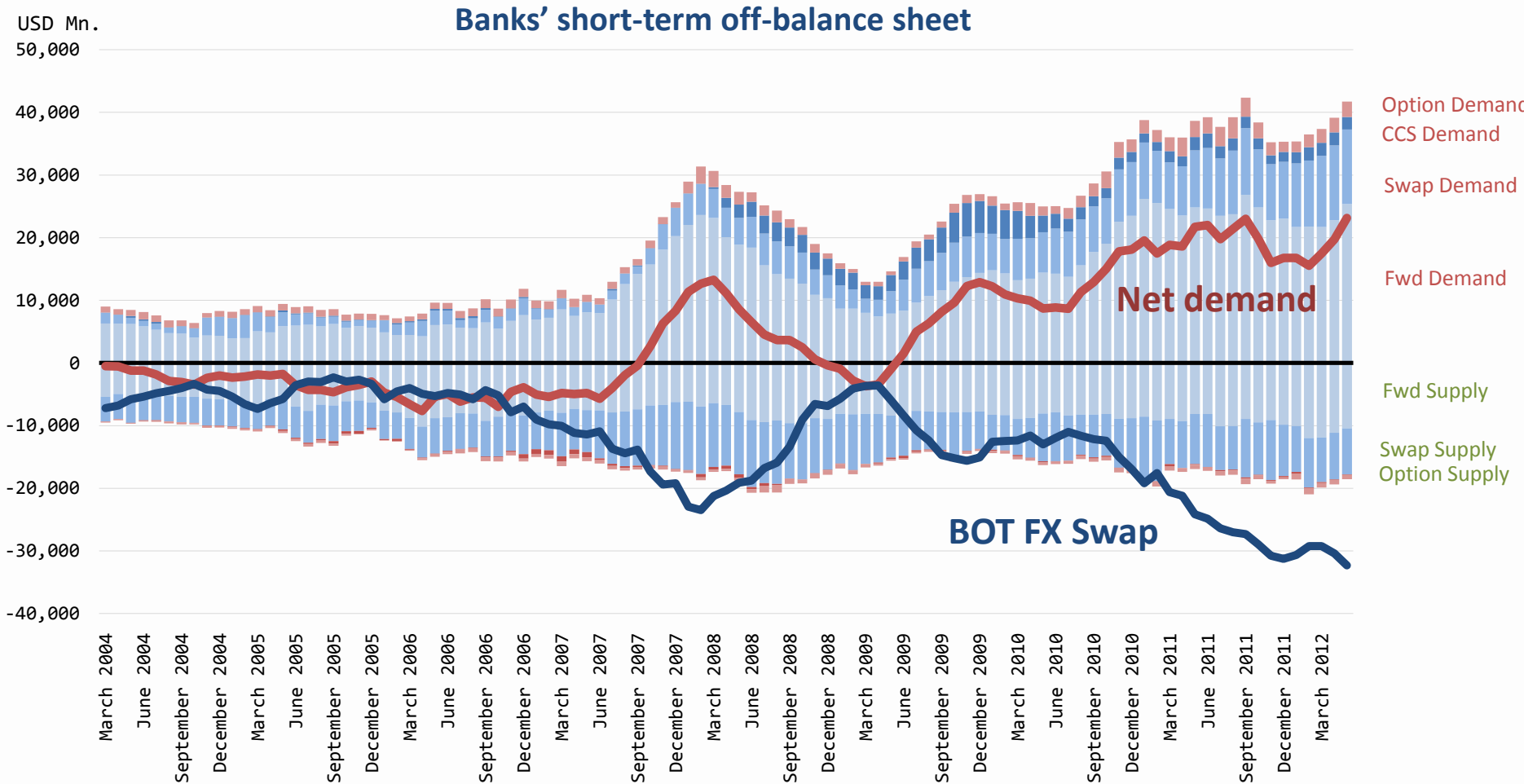


Hedging ratio of NR's Portfolio Investment





## Selling USD Forward (exporter's demand) exceeds USD supply, therefore BOT has to support USD liquidity in the market





## Currency Futures

- **Currency Futures** is a standardized contract between two parties to buy or sell standardized quantity of currency for a price agreed today with payment (in netting) occurring at a specified future date.
- Aims for **helping SME or individual**, who has limited access to bank services, to hedge against FX risks
- First Trading on June 5, 2012

Summary of Currency Futures Contract Specifications

Heading	Contract Specifications
Underlying Asset	US Dollar
Ticker Symbol	USD
Contract Size	1,000 USD
Settlement Months	3 nearest consecutive months plus the next quarterly months (March, June, September, or December)
Price Quotation	The price is quoted in term of Baht per 1 US Dollar (with 2 decimal points)
Minimum Price Fluctuation	Tick size is 0.01 Baht (10 Baht per contract)
Daily Price Limit	Initial price limit is $\pm 2\%$ from the latest settlement price. Should traded price reach the limit, trading will be halted for a certain period announced by TFEX. After trading resumes, the price limit will be expanded to $\pm 4\%$ of the latest settlement price
Trading Hours	Pre-open: 9:15 – 9:45 hrs. Morning session: 9:45 – 12:30 hrs. Pre-open 14:00 – 14:30 hrs. Afternoon session: 14:30 – 16:55 hrs.
Speculative Position Limit	Net 5,000 contracts on one side of the market in any contract month or all contract months combined
Last Trading Day	The business day immediately preceding the last business day of the contract month. The trading of an expire-series shall be ceased on 11:00 hrs.
Final Settlement Price	Calculated from the exchange rate announced by Thomson Reuters at 11:00 hrs (BKK time) on the last trading day (4 decimal points)
Settlement Method	Cash Settlement
Exchange Fee	THB 2 per contract
Brokerage Commission	Freely negotiable



Bloomberg

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Reuters

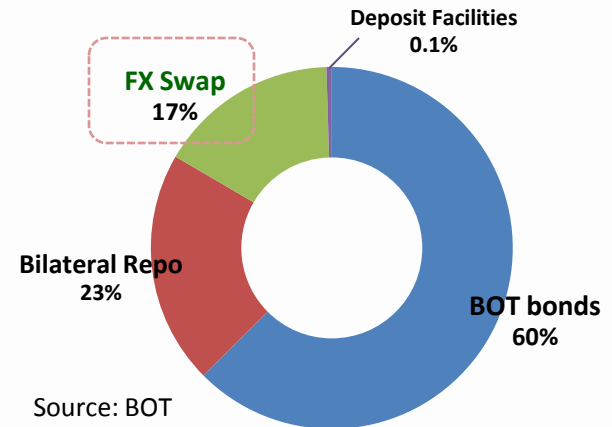
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## FX Swaps

- **FX Swaps** is a simultaneous purchase and sale of identical amounts of one currency for another with two different value dates (normally spot to forward).
- Banks use FX Swaps for **managing FX liquidity and hedging FX exposure** among interbank counterparties . While *the BOT* also mops up the excess THB liquidity through FX Swaps.
- **Swap rates** are normally driven by market forces and moves in line with other assets' interest rates e.g. IRS and bond yields. It is also affected by fear of USD liquidity squeeze.
- **Interest rate fixing** (CCS, IRS, corporate loans) employs '**implied interest rate**' from FX Swaps market.

Structure of BOT's Sterilization



6-month THBFIX and Global Financial Stress Index



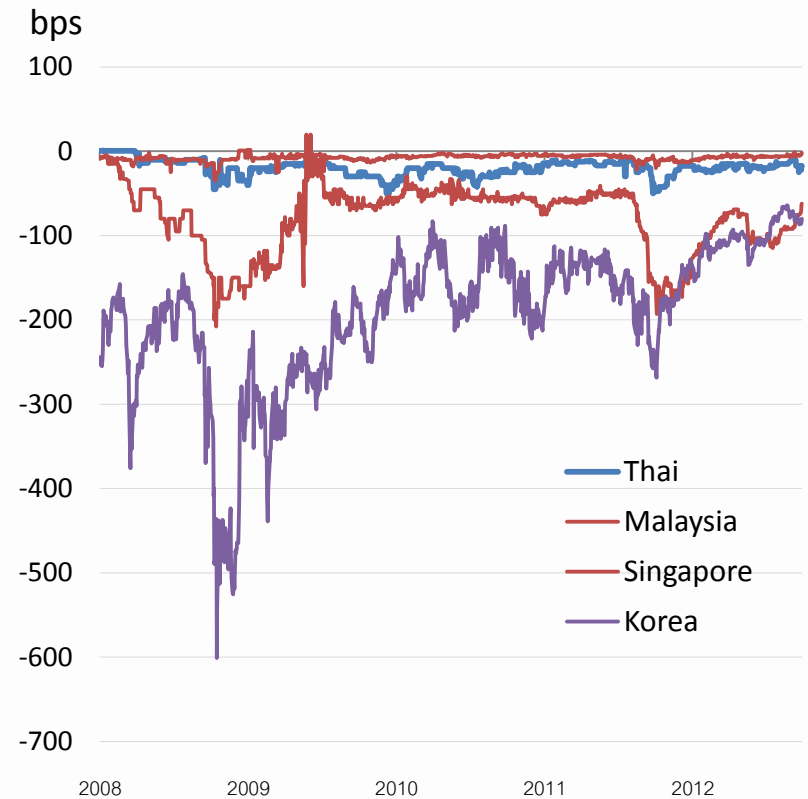
Source: BOT and Bloomberg



## Cross Currency Swaps (CCS)

- **Cross Currency Swaps (CCS)** is an agreement between two parties to exchange interest payments and principals denominated in two different currencies
- A major tool for managing **long-term FX liquidity**, mainly for hedging LT FX debt and investment abroad (outward direct investment , FIF)
- Negative basis swaps widened from fear on global USD liquidity squeeze

Basis Swaps of regional countries and Thailand



Source: BOT