



ธนาคารแห่งประเทศไทย
BANK OF THAILAND

Path to monetary operations

RBNZ case study

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Overview

- RBNZ experience
- Things to work through moving from monetary to inflation target.
- Key points
- Next steps?
- Q&A

RBNZ – in brief...



http://www.rbnz.govt.nz/research_and_publications/reserve_bank_bulletin/2012/2012mar75_1grahamsmith.pdf

...6:45s



From newborn to today: RBNZ 1934-2014



Brief policy evolution

- RBNZ formed in 1934:
 - NZ used sterling until then;
 - Sterling area until 1971;
 - Many adjustments until free float in March 1985.
- RBNZ “independence” from 1989:
 - Pre-1989 monetary policy heavily influenced by government, and
 - Evolution from indirect to direct instruments since 1980’s.

Today's domestic market tools

- Official cash rate – policy tool
- Implemented by open market operations:
 - Repurchase/reverse repurchase
 - FX swaps/basis swaps
 - Issuing RBNZ bills
 - Purchasing government securities in last 6 months
- Standing facilities
 - Discount window (“auto-repo/ORRF”), bond lending

How did we get there?

- Hard work over a thirty year period!
- Re-start of bond and bill markets in the 1980's
- Development of market based tools since then.
- Learning from the way commercial banks trade and adapting/adopting commercial bank tools.
- Proactive/anticipating change.

What is required?

- Sound legal system and rule of law.
- Infrastructure:
 - IT and communications systems;
 - Accounting systems;
 - RTGS payment system and DvP securities settlement;
 - Treasury accounting and reporting systems;
- Financial markets

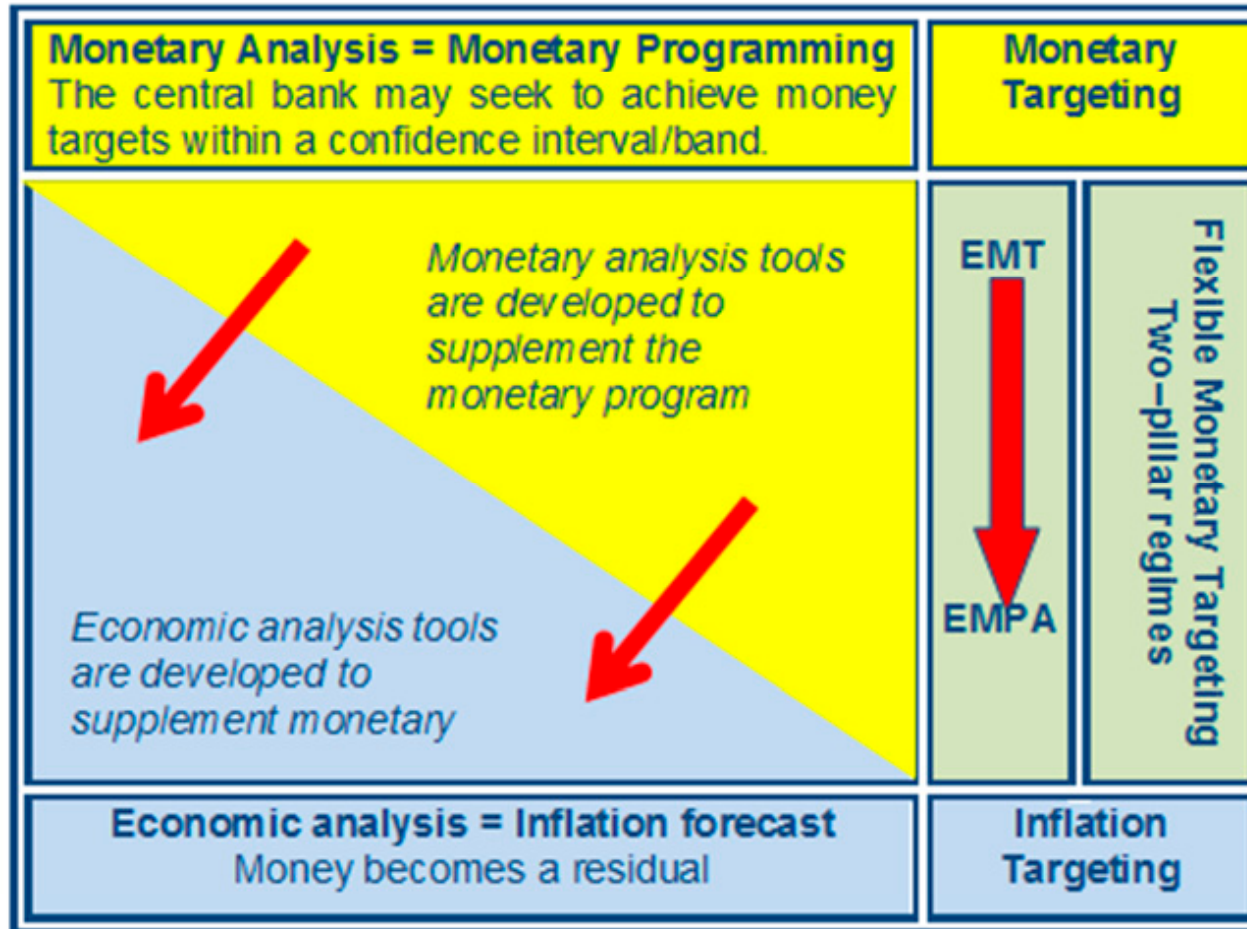
What else is required?

- Information
- Data may produce information
- Where can we get data from?
 - Market transactions/prices
 - Surveys (possible from administrative systems)
 - Dialogue with financial market participants

Going from A to B

- This section of the presentation is partially based on some recent work by the IMF Financial Markets Department's Central Banking Operations Division.

The two policy pillars



Key aspects of effective contemporary MP formulation and implementation

- Day-to-day liquidity management to ensure an effective transmission of policy actions and signals
- Determination of the level of interest rates and/or path of monetary aggregates over the policy horizon deemed consistent with achieving the policy objective
- Policy communications and commitment to anchoring expectations and addressing the time inconsistency problem.

“Monetary” versus “Inflation” targeting

- **Monetary Targeting**

- Controlling the quantity of liquidity and credit in the short run and over the medium term

- **Inflation Targeting**

- Controlling the price of liquidity and credit
- public communication and commitment

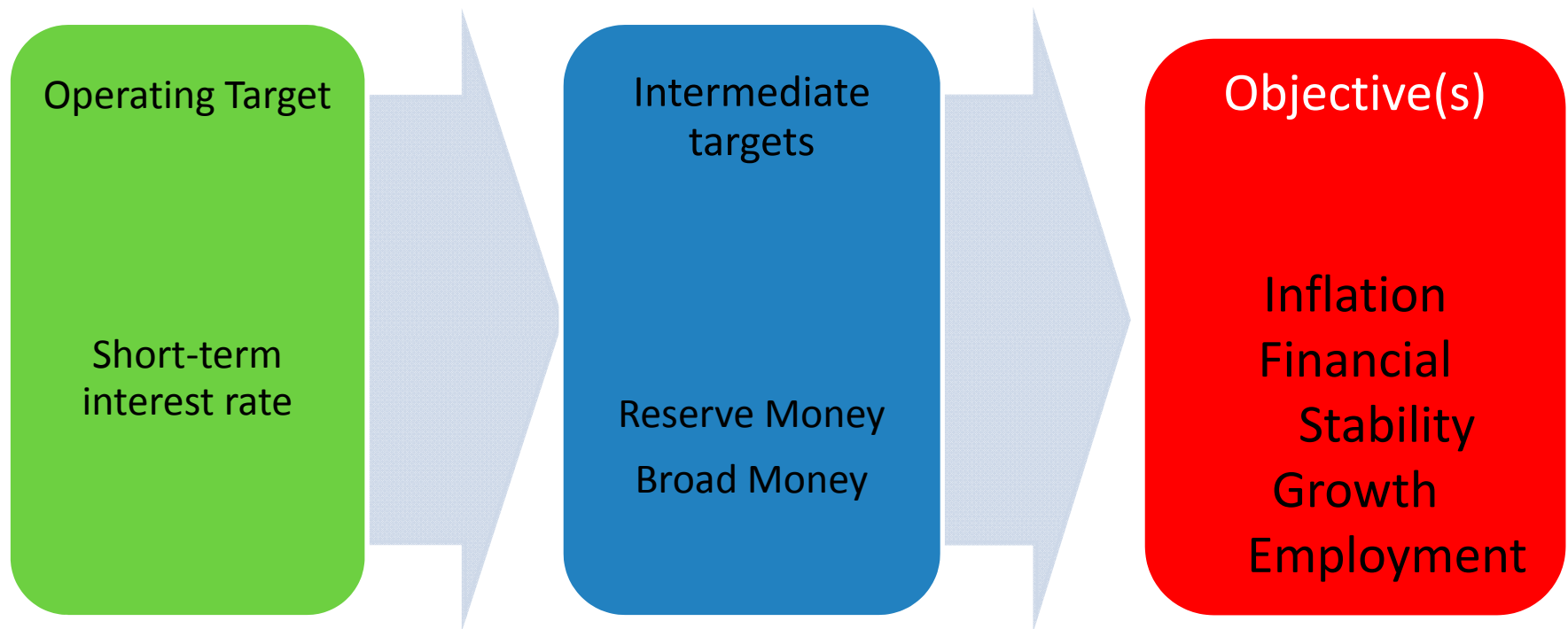
- **Operating Target derived from Inflation Target**

- Also for most targeting monetary aggregates

Interim regimes

- **Price targets for:**
 - Day-to-day operations
 - Communications
- **Quantity targets and Inflation Forecasts for:**
 - Determining the level of interest rates consistent with the targeted path of monetary aggregates and the Inflation Target
 - Broad Money as Intermediate Target
- ***Clarity, Relevance, and Consistency of policy signals and policy actions essential***

Flexible monetary targeting



Challenge - I

- Interaction of Long Term Monetary Targets and short term Interest rate focused operations:
 - Assessing an appropriate **time frame** over which to achieve money targets
 - Which monetary aggregate to target for what purpose?
 - Any role for reserve money?
 - Determining an **interest rate path or range** that **ex ante** is consistent with achieving the monetary target or path

Challenge - II

- Interaction of Long Term Monetary Targets and short term Interest rate focused operations *cont'd*
 - Understanding the **relationship** between monetary targets and the dynamics of short-term interest rates
 - Determine whether to change policy stance (liquidity operations and corridor) or revise monetary targets when interest rates and or monetary aggregates **ex post** turns out different than ex ante planned.

The Transition: Moving from quantities to prices

- Introduce instruments to stabilize short-term interest rates
 - Improve the signal for monetary policy
 - Strengthen the interest rate channel
- Consistent with achieving the medium-term reserve money targets
- With uncertainties about the relationship between the quantity and price:
 - setting a policy rate may be too precise
 - *therefore a* policy range could be considered
 - ⇒ ○ Standing Facilities without an explicit policy rate

Short-term liquidity management

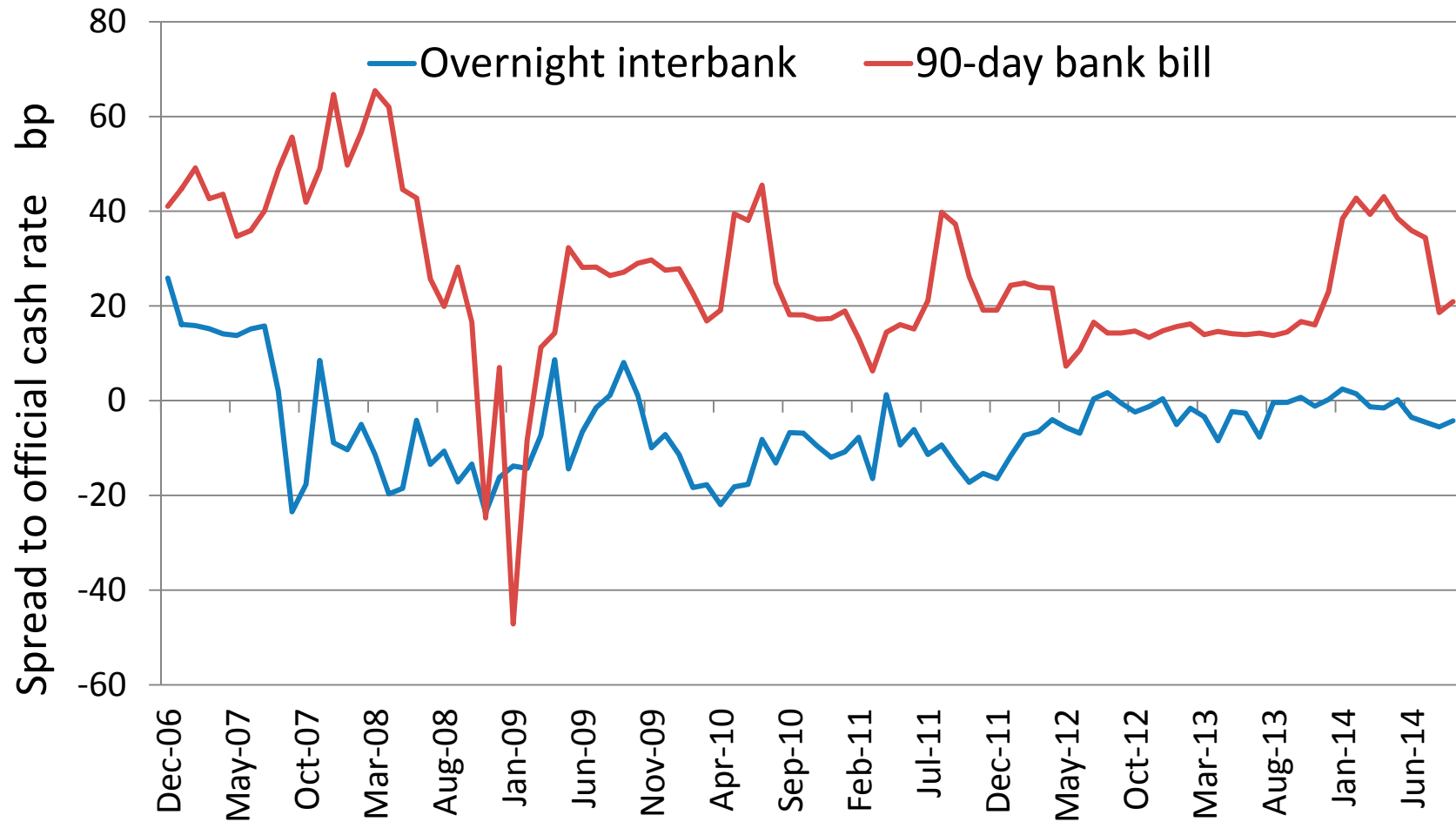
- **Goal: stabilizing short term interest rates**
 - Also for countries that mainly relies on monetary aggregates for guiding policy formulations
- **Key to strengthening the transmission mechanism**
 - Price signals better understood
 - Lower interest rate volatility help:
 - Anchoring the yield curve
 - Fostering security market development
 - Strengthen transmission along the yield curve to retail rates
- **Focus on Excess Reserves not Reserve Money**

Interest rate corridors and policy rates

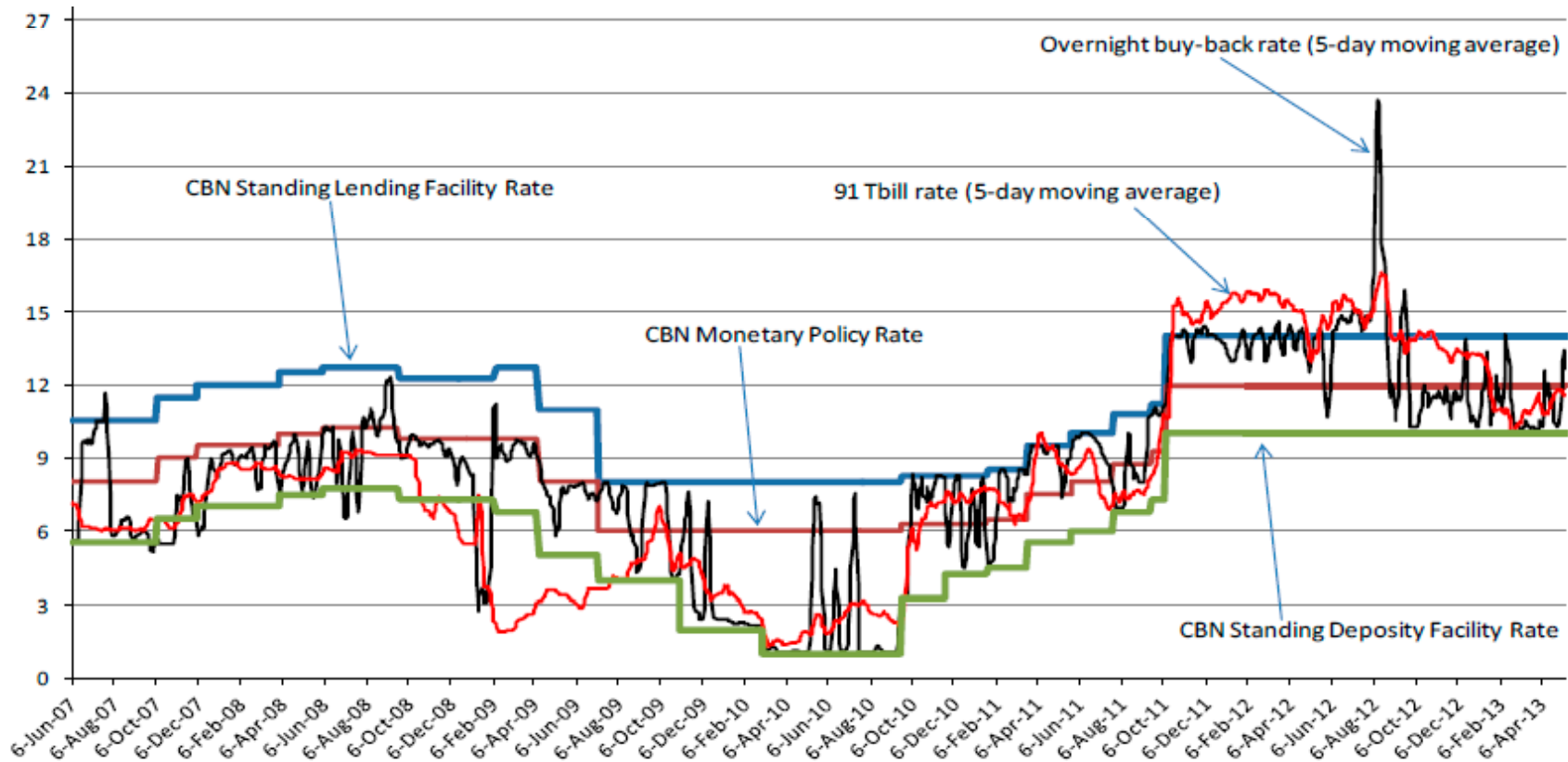
- **A corridor with no official central bank policy rate.**
 - The central bank may, or may not, have an internal target for the interbank rate
- **A floor system**
 - The rate on the central bank deposit facility that constitute the floor of the corridor both serve as the target for the interbank rate and as the official central bank policy rate
- **A mid-rate corridor system**
 - Policy rate either:
 - Announced target—central bank commitment to use OMO's to steer interbank rates to the target
 - The rate the central bank will transact fixed quantities with its counterparts (the “OMO rate”)

Role and relevance of policy rate

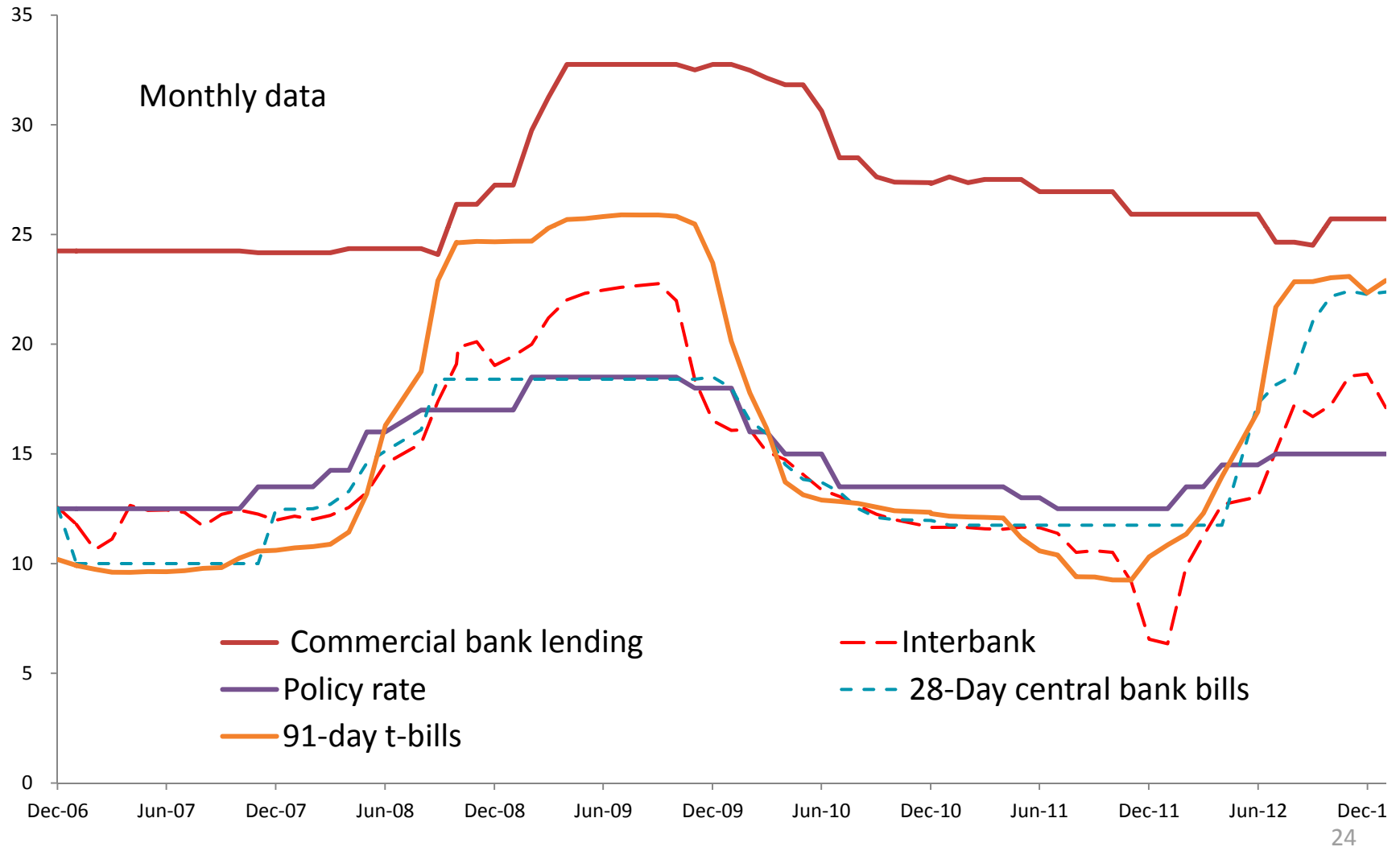
New Zealand



Relevance of policy rate - I



Relevance of policy rate - II



Reserve averaging to reduce volatility

(1-month or longer)

- Inter-temporal arbitrage—encourage trading
- Less need for frequent OMO interventions
- **But:** Need to anchor expectations for the end-of-maintenance-period interest rate
 - Fine-tuning OMOs on settlement day
 - Reduce width of corridor on settlement day
 - Carry over allowance
 - Penalty-free bands
 - Mid-week position of settlement day
 - MPC meetings at beginning of period
 - Align maturity of OMO instruments

Reserve money programme as guide

- Quarterly average reserve money target
- Band for reserve money target
- Lengthen the horizon for high frequency liquidity forecasts
 - Month, quarter
 - updated on a rolling basis
 - To ensure that the daily operations over the longer term are consistent with the monetary target
- Interest rate corridor
 - Allow interbank rate to drift within corridor
- What to do when rates are at the floor or ceiling?
 - Adjust corridor? Or revise monetary target?

Adherence to: monetary or interest rate target ?

- It depends!!
- *ex ante*: Can target money and interest rates simultaneously
 - They are linked through the money demand function => one can be derived from the other
- *ex post*: Will differ because of shocks to:
 - money demand
 - output and inflation, demand (incl. fiscal)
 - Shocks to the IS curve

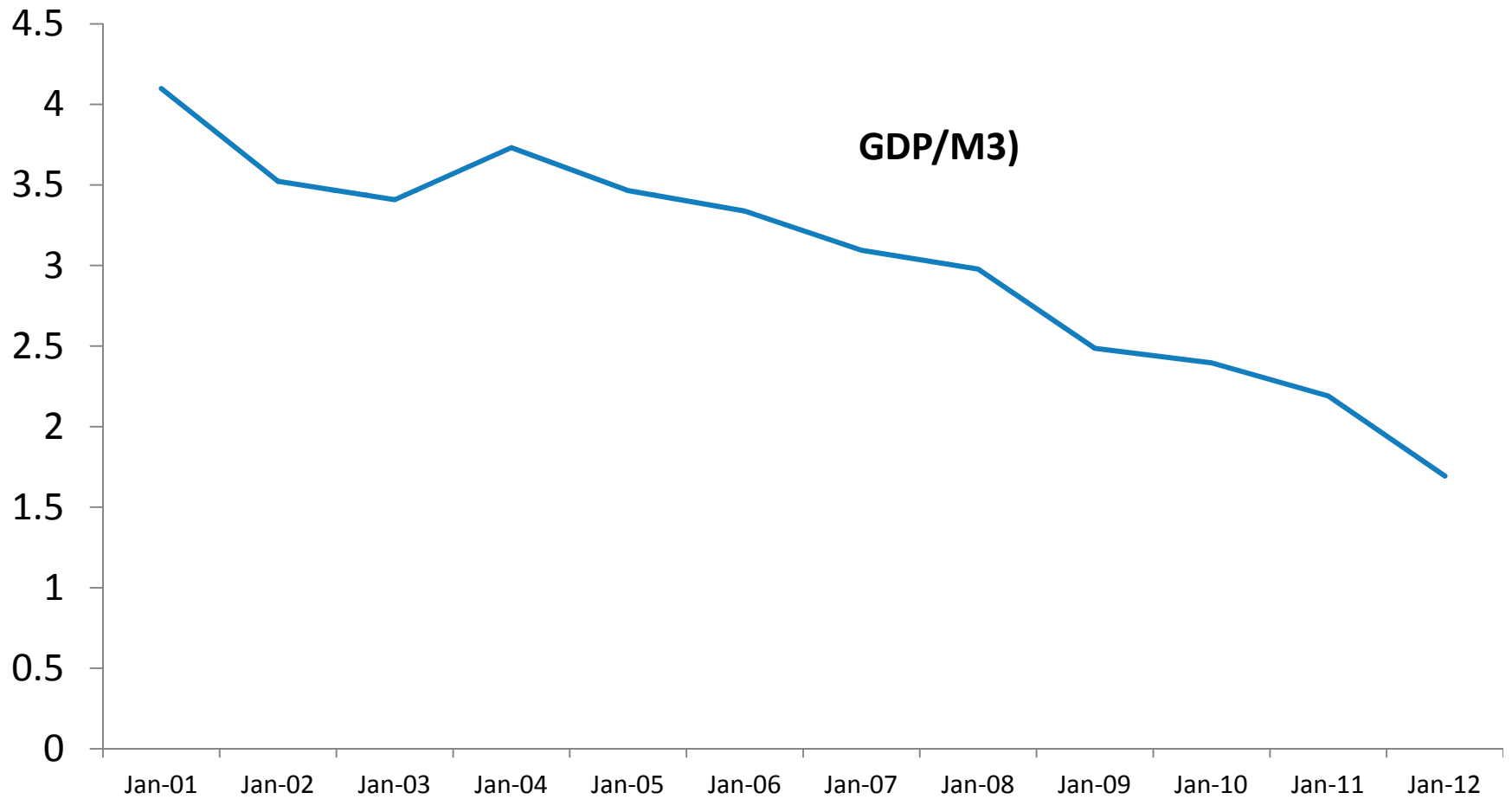
Role of models versus money - I

- Models:
 - Identification of shocks
 - Identification strength of policy response and path of policy tools needed to meet target
 - Communication of policy to decision makers and the public
- Model forecast of inflation
 - Always converge to target
 - Implied required policy response key
 - Forecasts are always wrong. Are they biased?
 - Implication for policy signal

Role of models versus money - II

- Money:
 - Robustness to shocks
 - Models are always wrong—also wrong policy prescription?
 - Information gaps
 - Anchoring of policy in the context of large semi persistent supply shocks
 - Accurate horizon of models shorter
- Base money targets on optimal forecast of money demand
 - Money demand curve is shifting systematically in LICs (monetary deepening, declining velocity)
 - Demand for currency, cash in vaults, and excess reserves are changing as the financial system improves
 - Financial deepening—multiplier is changing
 - **Can be predicted**

Velocity is changing



Transition: Foreign exchange operations

Clarify the changing role of the exchange rate

Distinguish between objectives:

1. Intermediation

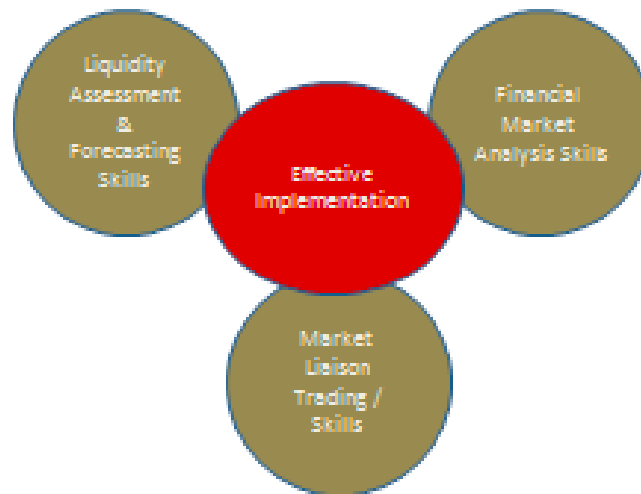
- Regular volumes / transparent / no signaling impact
- Direct dealing, or auctions

2. Intervention

- To impact the level or the volatility of the exchange rate
- Have a clear understanding of:
 - Levels inconsistent with fundamentals
 - Indicators that could signify market stress
- Direct dealing

The Transition: internal organisation

- A balance of skills is needed:
 - theoretical (mainly finance) and
 - practical / hands-on (market)
- Integrate FX and monetary operations – market skills
- The market is the partner in implementation
 - Develop a culture of *market-awareness* in the implementation area



Policy communications & commitment

- To anchoring expectations and addressing the time inconsistency problem.
- Clarity of policy objectives, policy signals, and consistency of policy actions

Clarity of policy objectives

- Clarity on price stability as the overriding mandate of the central
 - measures to ensure trust in the central bank's commitment to, and willingness/ability to act on accordance with mandate
 - Clarity on the specific inflation outcome the central bank expect/target—including numerical projections and/or targets
- Commitments have to be achievable—and over the long run achieved—to be credible
 - **Risk of premature adoption of “inflation targeting”**

Clarity and consistency of policy signals and actions

- Interest rate signals better understood than quantity
- Are changes in interest rates consistent with achieving the inflation target
 - Do the markets agree?
 - Do they understand?
- Actions may be ineffective, or have opposite effect if not perceived as consistent with achieving the target

Key points in transition

- Appropriate tools for state of market development.
- Understand and develop the markets.
- Act consistently to achieve operational targets.

What about you?

- Critically analyse where your country sits in this space.
- Where are you heading to over the next 5, 10 years?
- What is appropriate?

So what?

