LIQUIDITY MANAGEMENT AND FORECASTING

Recent challenges with large persistent excess liquidity

OUTLINE

- Liquidity Management and forecasting

  the traditional paradigm

  recent developments and liquidity management

- Liquidity Management and forecasting under the new norm

  Shift of focus

- Liquidity Management and forecasting under the new norm

  Outline of a new regime

LIQUIDITY MANAGEMENT AND FORECASTING

The traditional paradigm and how recent developments jolted it

THE TRADITIONAL PARADIGM

Main output is the calibration of regular short-term OMO

- CB targeting a predefined level of excess reserves/reserve growth
- OMO used to achieve objective based on autonomous factors forecast

Short-term horizon

- Horizon of forecast typically short term
- Main horizon until the maturity of next OMO
- Hardly extending beyond the horizon of the end of the maintenance period

Relationship between short term liquidity development and market conditions

- Liquidity management also focused on analyzing and forecasting the relationship between short term liquidity swings and money market conditions
- This could inform deployment of fine-tuning operations
- Data publication is geared to facilitate market participants understanding of market developments and their relationships with liquidity conditions
- Also to guide their bidding at OMOs

RECENT DEVELOPMENTS IN MANY ADVANCED ECONOMIES (AND EME)

Large, persistent excess liquidity

- It results from large scale asset purchases
- It may also result from FX interventions
- It may also result from longer term credit/refinancing operations offered at advantageous terms (with/without conditionality)

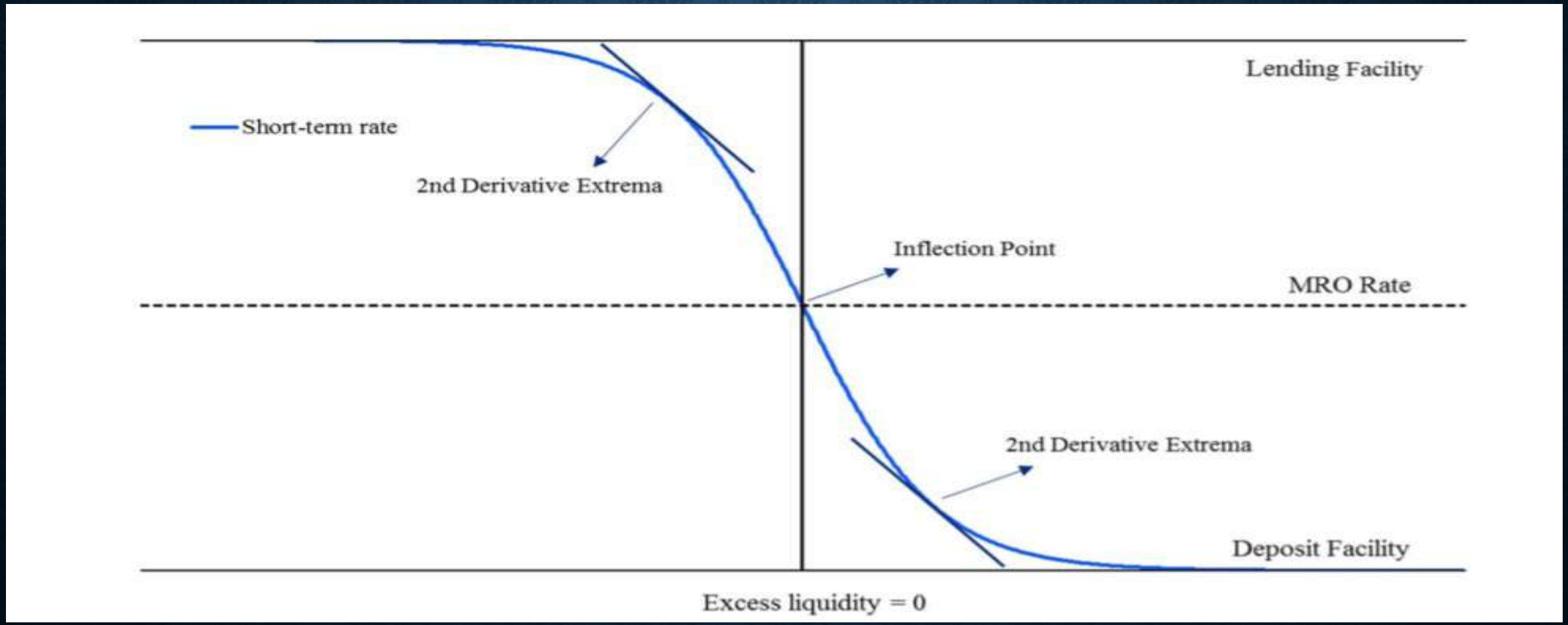
Short term OMO marginalized

- With large, persistent, broad-based excess liquidity short-term OMO marginalized
- Policy stance/short term rates anchored by IOER rate
- They mostly serve as backstop
- When regularly conducted, they are demand driven (fixed rate full allotment)

Short term liquidity developments irrelevant for market conditions

- With large, persistent, broad based excess liquidity, little short-term swings in liquidity conditions have little impact on market conditions
- Short-term rates become inelastic to even relatively larger swings in liquidity conditions (see next chart)

WITH LARGE BROAD-BASED EXCESS LIQUIDITY RATES BECOME INELASTIC



KEY QUESTION

If short-term liquidity developments become irrelevant with large, broad based, persistent excess liquidity, does liquidity management and forecasting becomes equally irrelevant?

LIQUIDITY MANAGEMENT AND FORECASTING UNDER THE NEW NORM

Shift of focus

THE ANSWER IN A NUTSHELL

Liquidity management and forecasting remain topical for decision making and analysis purposes but their focus should shift

1. UNDERSTAND WHAT A PARSIMONIOUS FLOOR MAY BE

Minimum level of excess liquidity

- Understand what is the minimum level of excess liquidity necessary to anchor short term rates to the floor
- Understand how it may change over time

But is there a maximum level?

- Rates may drift lower and get dis-anchored from floor as banks have limited intermediation capacity
- Larger excess liquidity fueled by long term assets may expose CB balance sheet to interest rate risk

Identify optimal range

- Like in a corridor, in a floor there might be a relatively wide optimal liquidity range within which liquidity should be steered
- Liquidity management should contribute analyzing and defining the optimal range with financial stability, risk management input

2. UNDERSTAND AND ANTICIPATE MEDIUM- TO LONG TERM LIQUIDITY DEVELOPMENTS

Short-term rates relatively inelastic to short-term liquidity swings

- Short-term, liquidity swings may not matter
- Rates are inelastic to little fluctuations

But long-term, major liquidity changes do matter

- Medium- to long-term liquidity developments continue being topical
- They may push liquidity outside the optimal range
- This may take place very rapidly leaving little scope to react

Medium- to long-term developments may require proactive response

- OMO and other policy instruments may need to be deployed on a timely basis to steer liquidity within the parsimonious floor optimal range
- Else a state transition (e.g. from floor to mid corridor) needs to be prepared or e.g. financial regulation relaxed/balance sheet composition adjusted

3. ANTICIPATE AND FORECAST SHORT- TO MEDIUM TERM LARGE SWINGS

Short-term rates may react abruptly to large liquidity swings

- This might be the case in case of large, unexpected dips in excess liquidity pushing excess liquidity below the minimum level and toward the elastic segment of the curve
- This might also be the case if sudden rises stretch banks' intermediation capacity

Central banks should be able to anticipate such larger swings and not be caught off guard

- This is what happened in the US when a temporary, large rise in Treasury account balance resulted in short term money market dislocations
- This might require a regular short- to medium term forecast focusing on major liquidity changes

Such forecast may enable a timely deployment of short-term fine-tuning operations

- Ad hoc, short-term OMO may be deployed ahead of short-term, large swings
- Terms of existing OMOs may be adjusted
- Central bank's liquidity forecast may facilitate and guide bidding behaviour and market participants prepositioning

4. COMMUNICATION ON LIQUIDITY CONDITIONS AND FORECAST MAY NEED TO BE ADAPTED

Traditional communication is daily and short term

- It focuses on daily liquidity condition changes
- It focuses on short term autonomous factors forecast
- It aims at guiding bidding at short-term OMOs
- It sheds light on relationship between short term liquidity swings and market reaction

Communication may need to adapt if market inelastic to sort term liquidity swings

- Is daily frequency still necessary?
- Should horizon be lengthened?
- Should ranges be provided as uncertainty increases the longer the horizon of the forecast?
- Should assumptions around longer term forecast be better spelled out?
- Should the focus still be on AF or should it shift on excess reserves?

Should further info be published?

- Should forecast per autonomous factor be contemplated?
- Should info on the distribution of excess liquidity also be contemplated?
- Should a higher frequency operational forecast be complemented by a lower frequency strategic forecast?

LIQUIDITY MANAGEMENT AND FORECASTING UNDER THE NEW NORM

Outline of a new regime

1A. TWO REGULAR FORECASTS TO BE PRODUCED – OPERATIONAL FORECAST

A regular, higher frequency operational forecast

- Necessary to ensure that in the short-term excess liquidity remain within the optimal range in medium-term
- Ensure that in the short-term there are no potentially disruptive liquidity swings

Two main outputs

- Inform short-term OMO deployment
- Inform market participants on their bidding

Modalities of the operational forecast

- Longer term than the current forecast
- Possibly reaching the end of MP and the following one
- Not necessarily to be updated daily. Weekly update may suffice

1B. TWO REGULAR FORECASTS TO BE PRODUCED – STRUCTURAL FORECAST

A lower frequency, longer term structural forecast

- Necessary to project balance sheet in the medium- to long-term
- Necessary to assess policy and risk implications of different balance sheet trajectories

Two main outputs

- Inform policy making
- Inform deployment of non standard operations and structural balance sheet management tools

Modalities of the structural forecast

- One year or longer
- Input to decision making and policy meetings
- To be synchronized with policy meetings
- Scenario analysis possible to identify different possible forward based balance sheet configurations
- To be based on stable, well-understood assumptions

2. RICHNESS AND SCOPE OF DATA PUBLICATION MAY NEED TO BE BROADENED

Focus shifts to medium to-long term developments

- Such developments are scenario dependent
- Forecast may vary depending on different assumptions

More granular data facilitates market understanding

- Component of the forecast may matter more than the aggregate
- With more granular data, market participants may make their own assessment and based on their own assumptions draw up an adjusted forecast

More granular data may include

- Per autonomous factors forecast
- Main set of assumptions on which forecast is based
- Scenario analysis or range forecast

3. STRUCTURAL, AD HOC STUDIES BECOME A MORE INTEGRAL PART OF LM

In the medium to long term relationships may change

- For instance: the minimum level of EL necessary to anchor short term rates may vary; banknote demand patterns may vary; government deposits do not depend exclusively by short term cash management but may depend on opportunity costs, refinancing risks

It is important to regularly analyze how these relationships change.

- While in the short term they may be taken as given, in the medium to long term they may vary
- Such variables may both influence forecast, define scenarios, or the policy reaction to given forecast
- Traditional time series models not good for longer term forecast

Analyzing daily liquidity changes may pave the way to more ad hoc studies

- Such studies may be ad hoc, or conducted at lower, regular frequency

THANK YOU

Questions and Answers