Cash and Debt Management Coordination and the Financial Crisis

Sovereign Debt Management Forum

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Outline

- Cash management – and its interaction with debt management
- The Financial Crisis
  - Problems
  - Responses
  - Lessons
- Messages for the Future
  - Cash Buffers
  - Some propositions

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Objectives of Cash Management

Ensuring cash is available to meet commitments

Overriding objective – other objectives must be subject to it

- Economising on cash within government
  - Saving costs [avoiding the cost of carry]
  - Reducing risk
- Managing efficiently the government's aggregate short-term cash flow
  - Both cash deficits and cash surpluses
- In such as way as also to benefit
  - Debt management
  - Monetary policy
  - Financial markets (market liquidity and infrastructure)

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Debt and Cash Management

- Integration of (or close coordination between) debt and cash management ensures:
  - Debt issuance decisions are taken in the context of the seasonal nature of government's cash flows
  - There is a single overview of whole market – debt managers best placed:
    - To take decisions about the future balance of short- and long-term debt, including TBills
    - Trading-off demands of the strategy, demands of the market, and the government's need for cash, taking account of price
- Integration tending to become the norm in OECD and many other countries

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Operational Coordination

- Other day-to-day coordination requirements include:
  - Linkage of issuance dates with redemption dates, to maximise the opportunities for investors to roll over into a new issue
  - Maturity dates chosen to avoid weeks, and especially days, of heavy cash outflow (e.g. salary payments): instead target days of cash inflow (the due date for tax payments)
  - Debt managers can mitigate the cash management problems that potentially arise when large bonds come to maturity
  - Debt managers can correct repo market distortions or disruptions
- As interaction with the market develops, integration of debt and cash management functions becomes especially important.
  - In time, through active management of cash position, combined function can weaken link between timing of cash flows and bond issuance: allows bond programme to be announced in advance
  - Ensures that the government presents a consistent face to the market

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Financial Crisis: the Headline Problems

Fiscal deterioration, large & rapid

- Average deficit in 2009 c.8% points of GDP > deficit in 2007 for advanced countries; c.5% points for EMEs of G20. *[Source: IMF]*
- Variety of experiences and causes:
  - Advanced countries: reflected support to the financial sector, fiscal stimulus, and revenue losses
  - EMEs declining commodity and asset prices; also impact on export demand, tourism etc

Exposure to external markets

- Spikes in sovereign spreads and CDS spreads affecting EMEs
- Negligible sovereign external issuance Q3&4 2008
- Outflows affecting local markets (esp Europe, C.Asia, S.S.Africa)
- Turbulence in eurozone and pressures on foreign-owned banks having a continuing impact for some countries

⇨ Difficult to anticipate in bond programme

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Some "Technical" Problems too…

- Weakened primary dealers
  - Fragile balance sheets
  - Numbers reduced by mergers etc
  - Affects competition at auctions and secondary market liquidity
- Additional competition – eg from Gov-guaranteed bank bonds
- Market liquidity drying up:
  - Widening of LIBOR-OIS spreads: reached c.350 bps in US; 250 bps in UK and 200 bps in Eurozone in October 2008
  - For EMEs backwash effects damaging activity in local bond markets; some faced increases in domestic interest rates, despite lower activity
- Implications
  - Much greater risk of auction failure [or longer auction tail]
  - Reduced secondary bond market liquidity – affecting funding costs
  - Cash and debt managers challenged by less liquid money markets
  - Especially difficult for countries with heavy refinancing burden

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Some Responses: OECD Countries

- Massive increases in TBill issuance relative to bonds
  - Notably US, but also UK, Netherlands, Mexico. others…)
- Changes in issuance techniques
  - Auction schedules becoming more flexible and opportunistic (UK issued TBills outside normal cycle)
  - Greater use of mini-tenders, syndication and post-auction options, alongside conventional auctions
- Greater emphasis on staying long of cash
  - Sticky repo markets ⇨ greater willingness to invest unsecured
  - Front-end loading auction programme
- Government securities (and guarantees) used to unlock liquidity blockages
  - E.g. UK's Special Liquidity Scheme allowed banks to swap high quality but illiquid assets for liquid TBills, for up to 3 years

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Some Responses: EMEs & LICs*

- Constrained set of options
  - Less liquid local markets, and pressure on banks' balance sheets ⇨ difficult to rely only on TBills without creating other problems
  - Concern about impact on interest rates and debt servicing costs
- Widening the range of borrowing sources:
  - Drawing down on excess cash held in TSA or term bank deposits
  - Use of non market funding sources such as multilaterals,
    - IMF approved 15 SBAs between Sept 2008 and July 2009; 3 countries with Flexible Credit Line
    - Growth in lending by World Bank, EU, ADB etc
    - Very important for some LICs
  - Borrowing from central bank (or bank buying government bonds)
  - Expanding the investor base by using new debt instruments and distribution channels – especially retail debt

** This and the next slide borrow heavily from Anderson et al "Public Debt Management in Emerging Market Economies: Has This Time Been Different?" World Bank August 2010*

More Responses: EMEs & LICs

- Adapting the financing programme to the structure of demand
  - Suspending external issuance
  - Focusing on shorter maturities and floaters
  - Many EMEs (almost) stopped issuing medium-term debt locally
  - In some, pension funds acted as a buffer absorbing part of the excess of supply of medium-long term paper
- Use of liability management operations to support market
  - Buybacks and exchanges to help stabilize markets
  - Reduced market pressure and help adjust the debt structure to the changing characteristics of the demand profile
- In practice, several countries still relied very heavily on TBills
  - Hungary, South Africa, others…

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Some Lessons

- The importance of a liquid money market to debt managers. It is important in "normal" circumstances:
  - Anchors short end of the yield curve
  - Facilitates intermediaries' liquidity management
    - Strengthens competition in financial intermediation
    - Reduces risk premiums, enabling investors to hold larger portfolios
  - Wider benefits to monetary policy and private sector markets
- In a crisis money market is an additional short-notice source of funds
  - Emphasises importance of cash and debt managers working together
  - Potentially scope for innovation
- But past decisions may limit room for manoeuvre once in a crisis
  - Stuck with money market limitations
  - Heavy or spiky refinancing profile
- Relevance of cash buffers

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What Determines the Cash Buffer?

1. The volatility of daily cash flows
2. The ability to forecast those cash flows
   - The standard deviation of errors in the forecast will [should] be much less than standard deviation of outturn
3. The scope to manage unanticipated fluctuations and the timescale over which they can be managed
   - How soon can additional TBills be issued?
4. Safety nets
   - Emergency credit facilities or cash reserves
   - End of day borrowing from commercial banks
   - [Short-term borrowing from central bank]

Note: Cost of carry important only after minimum is met

- Optimisation models relevant – but difficult to cope with awkwardness/illegality of borrowing from central bank
- Concern about black swans

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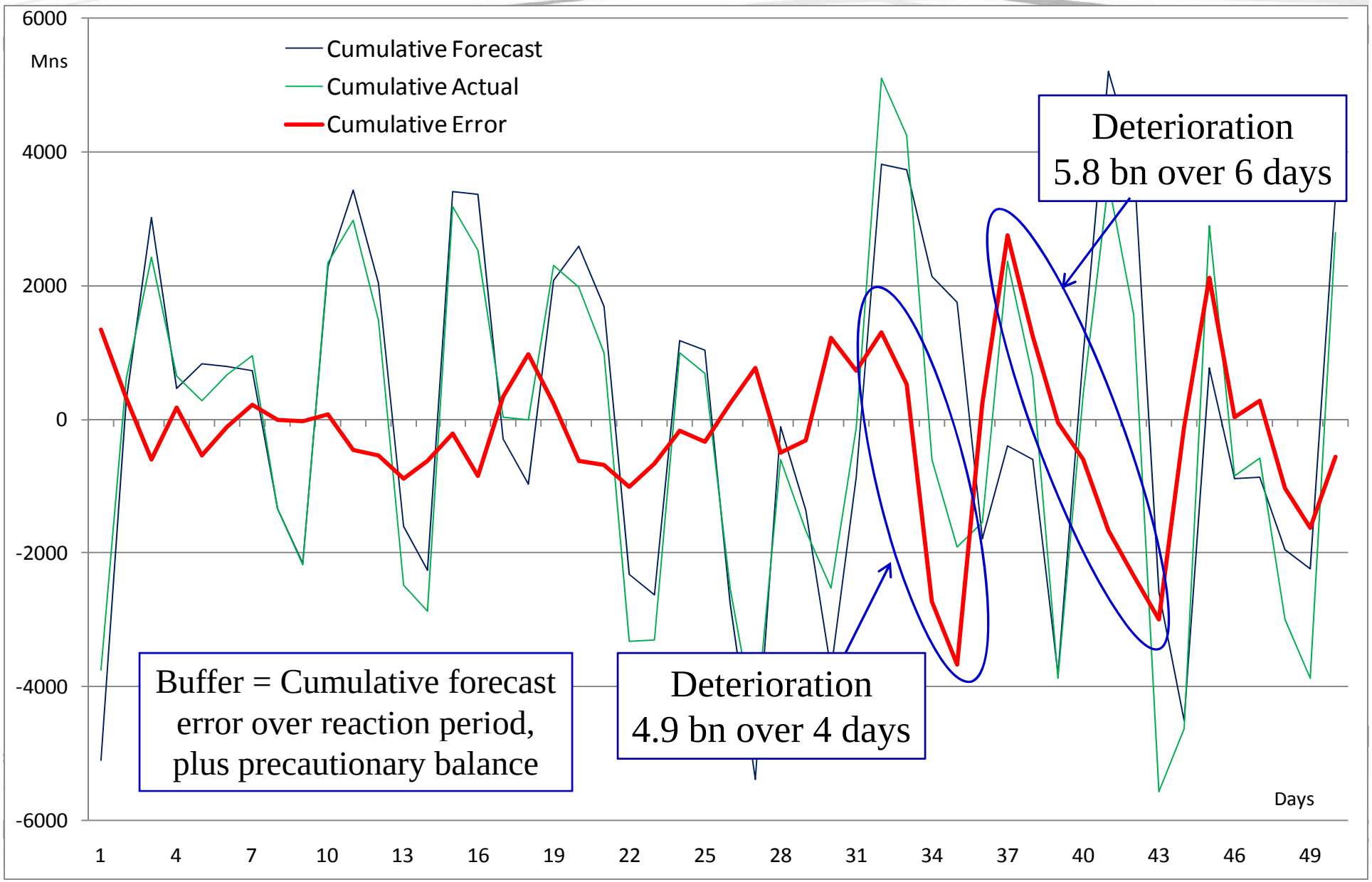
Cash Buffers in Practice

- Several northern European countries operate with cash balances in the central bank << 0.1% annual central government expenditure.
  - But they have liquid money markets, sophisticated active cash management. Some plan to be long of cash and on-lend only when position is secure
  - Drying up of liquidity led some to be more cautious
- Some other approaches – the importance of signalling prudence:
  - Target balance calculated as a safety reserve in event of adverse market conditions – depends on expected time to return to normality
  - Maintaining balances as least as great as the debt redemptions due in the following month, implicitly allowing for a failed auction
  - To guarantee budget execution or debt service for [X] months
  - In Italy there is (was?) legal requirement for balances to exceed €10 billion – the peak of cumulative net outflows reached in any period
- Recommended buffer in absence of developed cash management:
  - Cumulative forecast errors over policy reaction period coupled with a cautionary balance for market disruption or auction failure
  - But the buffer has an opportunity cost – there is a trade-off with caution

Cash Flow Buffer: Illustration



Messages for the Future

- Debt management strategies:
  - More focus on liquidity risks
  - Reduce refinancing exposure: lengthen profile when possible, and smooth in-year redemptions; actively manage benchmark redemptions
  - Take account of non-resident holdings and FX risk
- Safety net for auction slippage or failure
  - Cash or other fallbacks (TBill issuance, credit facilities)
- Cash Management Reform Programme
  - Improve cash flow forecasting
  - Facilitate money market development:
    - Widen use of TBills, encourage development of repo, identify preferred money market intermediaries

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Conclusion: Some Propositions

- Crisis strengthens case for close coordination [integration] of cash and debt management
  - Facilitates issuance flexibility, and quick response
- Develop mechanisms to cooperate with central bank
  - Essential when banking sector under stress
  - Mutual interest in money market development
  - Share cash flow forecasts
  - Cooperation does not jeopardise operational independence [of monetary policy or debt management]
- Develop a "financing continuity plan"
  - Cash management safety nets – alongside the cash buffer
  - Procedures for short-notice issuance/[tapping] of TBills, bonds

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