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
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)
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
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

mike.williams@mj-w.net
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

mike.williams@mj-w.net
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

mike.williams@mj-w.net
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

mike.williams@mj-w.net
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…
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
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
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

Buffer = Cumulative forecast error over reaction period, plus precautionary balance

Deterioration 5.8 bn over 6 days

Deterioration 4.9 bn over 4 days
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
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 T Bills, bonds

mike.williams@mj-w.net