The World Bank Group

Government Bond Market Advisory Services Peer Group Dialogue

Meeting #11: Minutes

The Target Cash Buffer

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<tr><td>Date:</td><td>May 7, 2014</td></tr>
<tr><td>Place:</td><td>Conference call led by the WB/Government Bond Market Advisory Services Team in DC
Supported by GoToMeeting conference tool</td></tr>
<tr><td>Time:</td><td>8 am- 9:30 am (EST time)</td></tr>
<tr><td>Attendees:</td><td><u>Country Participants</u>:

Kenya: Racheal Njoroge, Felister Kivisi, Charles Kairu, Robert Osudi, Bernard Gibet (Minsitry of Finance)
Lebanon: Rania Shaar (Minsitry of Finance)
Morocco: Soumaya Sabounji (Minsitry of Economy and Finance)
Nigeria: Patience Oniha, Johnson O. Amadi, Joe C. Uoala, Oladele Afolabi (Debt Management Office)
Pakistan: Amin Lodhi, Athar Ghafoor (State Bank of Pakistan)
Peru: Luis Cubas, Oscar Pinedo (Ministry of Finance)
Uruguay: Victoria Buscio (Minsitry of Economy and Finance)

<u>World Bank Group Participants (staff and consultants)</u>:

Anderson Silva, Mike Williams, Indhu Raghavan, Zauresh Kezheneva, Tanya Konidaris, Carlos Senon, Sunita Kikeri, Ketut Ariadi Kusuma, Baudouin Richard, Raymond Sabbah, Yelena Slizhevskaya, Maryna Sidarenka

<u>Other Participants:</u>

IMF: Guilherme Pedras, Gulsun Bor Guner
Mongolia Ministry of Finance: Enkhamgalan Lhagvabar
Belarus Ministry of Finance: Tamara Gruzinskaya, Ludmila Gurianova
Belarus National Bank: Gennadiy Barzdov, Sergei Ilyukevich
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<tr><td>Topic:</td><td>The Target Cash Buffer</td></tr>
<tr><td>Objectives:</td><td>
Introduction of the topic by the World Bank
Roundtable on recent developments in other Peer Group Countries
Discussion and Q&A
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Issues discussed:	<u>**The Target Cash Buffer**</u> • **Definition:** "The minimum level of cash balances to be sure of meeting day to day cash requirements, at all times, under all circumstances, taking into account the availability of other liquid resources". • **Perspective of a cash buffer:** The need for cash buffers has been long understood, but became more pronounced following the financial crisis that highlighted liquidity risk both in LC and FX markets and the importance of a "financing continuity plan". Cash balance management **focuses** first on ensuring right amount of cash at hand and then on how this cash at the Treasury Single Account (TSA) can be best managed. • **Determinants** of the size and the role of the cash buffer are (1) the volatility of daily cash flows; (2) the ability to forecast daily cash flows; (3) the scope and timeline to manage unanticipated fluctuations (through T-bill issuance); and (4) availability of safety nets (such as borrowing arrangements with commercial banks or a central bank). <u>**Calculating the Target Cash Buffer**</u> • **Assessing historical daily volatility** allows the cash manager to model the relationship between size of a cash buffer and sufficiency of cash based on prior volatility. However, such a model may not be the best approach, given that the underlying data may not be normally distributed and that tail events can be more complicated than the model suggests. • **Good cash flow forecasting** allows cash managers to plan an effective smoothing strategy and keep the cash buffer at a minimum. In a forecast, a **cumulative forecast error over a short period** is important. For instance, if T-bills are issued every two weeks with no mechanism for outside-of-cycle issuances, then the forecast should identify the maximum cumulative outflow that could occur over these two weeks. • **Two components:** a) **Transactions buffer** – a buffer for unanticipated fall in cash balance addressing the combination of volatility and forecasting errors. b) **Safety buffer** – a buffer for unanticipated fall in cash balance addressing sudden disruptions in the capital market for a certain period when no bond/bill issuances would be possible. It is advisable to consider this safety buffer on top of a transactions buffer. <u>**Managing Cash Buffer and Structural Surpluses**</u> • Normally, the buffer is part of the TSA and is held in the Central Bank. It should be remunerated at a market rate to reflect the opportunity cost and provide the right incentives to the Ministry of Finance. The

	opportunity cost should be transparent on both sides. Even where the Central Banks recycle their surplus back to the Ministries of Finance, there is a strong case for a market-related interest rate to be paid. • It is important to distinguish managing the cash buffer from managing structural cash surplus. Such cash surplus may be held above the buffer as structural cash reserves or part of a stabilization fund. **A cash surplus not associated with daily cash management should normally be managed separately.** **<u>Country Experiences</u>** • Some north European countries (e.g. including the UK, France, Germany, Netherlands, Belgium, and Sweden) operate with small cash balances given their liquid money markets. On the other hand, many other countries prefer to signal prudence and maintain safety reserves, debt redemption/servicing balances or a fixed buffer (Italy until 2011). • Experience among Peer Group countries has been discussed in the context of the "Target Cash Buffer" survey ("**Survey**") filled-out by the country participants prior to the meeting. Based on the results of the Survey, general trends have been summarized. • In general, among the respondents to the Survey, the benefits of a cash buffer are recognized, but for different purposes: emphasis is normally split between addressing transactions volatility and cushioning in financial stress. Cash is also retained to support debt management operations or to reduce refinancing risk. Some respondents have no formal buffer, but all the respondents have some safety net mechanism. No responding Peer Group Country raised the cash buffer following the 2007-2008 financial crisis, with the exception of Hungary. • **Uruguay:** Cash buffer in Uruguay is designed to strengthen the government's financial position and shield against vulnerability and rollover risk. The policy is to have cash to cover financial needs for the next 12 months. A model for calculating the optimal cash buffer assumes that all financial obligations are covered through debt issuance and suggests a scenario of closed financial markets from 9 to 14 months with varying probability rates. The model requires enough liquidity to meet debt amortization and the estimated fiscal gap taking into account that probability. Based on this model, the optimal buffer to cover 12 months of debt servicing and an estimated maximum fiscal gap was established as a target. Uruguay discloses the availability and the role of a cash buffer in the public debt report. The buffer is maintained in the local currency only. • **Peru:** The country is in the process of adopting a target cash buffer. Currently, the cash managers are working on exploring historical error distribution and calibrating the models used for calculations. The plan is

	to have a new buffer methodology in the new public debt law. • **Kenya:** TSA has yet to be fully developed, but the cash buffer may still be deemed necessary. In Kenya, Treasury's main cash flows go through the Central Bank. There is not a big volume of cash held outside of the Central Bank. • **Mongolia:** The methodology for calculating a buffer is based not on the future cash flows, but on the historical flows. The main challenge and work are focused on producing accurate daily cash flow forecasts. Central Bank financing is a safety net, but it is not used frequently. **Other Discussion Points** • **Borrowing from Central Banks:** The practice varies a lot around the world. In many countries in Sub-Saharan Africa and South Asia, borrowing from the Central Banks is allowed. In the Eurozone, such borrowing is legally prevented. In the UK, it is not allowed as a matter of policy. • **Foreign currency swap arrangements with Central Banks:** Some countries may have such arrangements, but usually such practice is not formalized and foreign currency is provided on a spot basis. When a Central Bank gets foreign currency, it credits the TSA in domestic currency right away; then the FX risk is carried on the Central Bank's balance sheet. • **Signaling:** It is important to let the market know of the buffer availability. Signaling can help to properly reflect market interest in government debt auctions. As cash managers are often price-takers, it is prudent to tell what the cash buffer policy is, but not down to the details regarding specific size.
Documents discussed:	• Survey on the Target Cash Buffer
Next steps:	• Follow-up on getting more responses to the Survey. • Solicit other topics for discussion in future PGD meetings.