Considerations for Developing the Optimal Treasury Cash Balance
Historically, Treasury has sought to minimize cash balances, with a cash balance floor set at $5 billion.

This floor was established in the 1980s when auction sizes were substantially smaller than current auction sizes and Treasury faced a “negative carry” on cash balances which made holding large cash balances costly. Auctions were also less frequent in the 1980s than today.

Prudent risk management during the 2008-2009 financial crisis resulted in Treasury increasing cash balances, but no formal minimum cash balance was ever set.

- From 2002 – 2008, the average daily cash balance was $26 billion.
- From 2009 – 2014, the average daily cash balance was $63 billion.
Treasury’s Cash Balance Risks

- Projections of Treasury’s two main sources of cash are subject to risk:
  - **Revenue** (60 percent of total cash): Revenue projections are subject to fiscal forecast risk.
  - **Auction Proceeds** (40 percent of total cash): Auction proceed projections are subject to auction settlement and market access risk.

- Historically, Treasury has focused only on risks associated with fiscal projection forecast errors.
  - There is a large amount of data available for analysis and “proceeds risk” has historically been deemed to be very low.

- However, several events made it clear that other risks, including settlement and market access risks, are real and could have a significant impact.
  - December 2, 2013 delay of a 4-week bill auction due to IT issues
  - Super Storm Sandy in October 2012
  - September 11, 2001
Loss of market access – estimating how long

- Historical experience suggests that it is possible for financial markets to be disrupted for several business days.
  - Hurricane Sandy: 1.5 days
  - September 11th: 2-3 days
- Cash required to cover the worst 1-5 days since FY2009 is relatively constant at approximately $331 billion

![Cash Required to Last X Number of Days*](chart)

- Worst case scenario since FY2009
  - Includes bills, notes, bonds maturing
  - Fiscal flow includes interest payments on marketable debt, Medicare/Medicaid and social security payments, etc.
Treasury’s Current Level of Coverage

- Historically, Treasury has only had enough cash to withstand a loss of market access for approximately 2 days.
  - Treasury would have been protected against losing market access for 1 day roughly 80 percent of the time.
  - Treasury would have been protected against losing market access for 5 days less than 10 percent of the time.
- Treasury’s current level of protection against losing market access is roughly the same as it was prior to the financial crisis.

Frequency with which Treasury has had enough cash to pay all obligations w/o market access

![Bar chart showing the frequency of having enough cash to pay obligations without market access from 2002 to 2008 and 2009 to 2014. The x-axis represents the number of business days, and the y-axis represents the frequency in percentage.]
Cash Shortfall from Loss of Market Access

- If Treasury lost market access for a short period of time, the U.S. government would face a substantial cash shortfall.
  - Since the beginning of the financial crisis, on average, Treasury would have faced an $28 billion cash shortfall if market access had been lost for 3 days.
  - This shortfall increases to $89 billion if market access had been lost for 5 days and $239 billion if market access had been lost for 10 days.
Framework Discussion