

Liquidity Needs in the Post Crisis World & Liquidity Provision for Bank Resolution

Brookings Institution

“Liquidity and the Role of the Lender of Last Resort”

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The opinions in this presentation are those of the author
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Hard-Wired Liquidity Rules are Expensive

- LCR says every large bank, everyday must be prepared to meet a 30-day bank run
- NSFR—under stress, a bank must have a favorable funding maturity roll-off out to 1-year
- Every large bank, everyday, self-insures for a very prolonged period of funding stress
- Much too much liquidity locked up to meet rules
 - Rules will restrict bank credit and push intermediation out of the banking system

Need a Market for Systemic Liquidity

- Federal Reserve should sell “systemic liquidity options”
 - If the system needs liquidity to avoid crisis, the Fed will have to provide it
 - So why not get paid to provide liquidity insurance?

Systemic Liquidity Options

- Periodically (once a month), the Fed auctions 1-month options that allow the holder to repo collateral overnight with the Fed
 - Fed sets a haircut and repo-rate on specific eligible collateral
 - Could offer a series of haircuts (small, large, larger)
 - Different contracts for different collateral
 - Contracts should span active repo collateral in markets
 - takes bids from dealer banks on option premium rate and quantity
 - Decides how much insurance to sell (like TAF auctions)
 - Repo option gives the holder the right repo the collateral with the Fed overnight for as many nights in the option-active month

Liquidity Options

- Dealer banks can resell liquidity options
- Can allow secondary trading in liquidity options—even partially-used options
 - Primary and secondary market prices allow Fed to monitor liquidity conditions in repo market in real time
 - Anticipate liquidity problems much earlier than possible now
- By selling options with appropriate terms on common collateral, the Fed can routinely provide and ***charge for*** systemic liquidity support to the market

Liquidity options vs Liquidity regulations

- LCR and NSFR rules would need to be modified to give appropriate credit for liquidity options
- Not all institutions need to fully self-insure each and every day
- With appropriate regulatory incentives for non-bank financial institutions, or if institutions realize market funding cost advantages
 - There will be significant demand for systemic liquidity options from outside the regulated banking system
 - Market-based substitute for Governor Stein's "uniform regulatory haircut rule" or Gary Gorton's limited purpose bank proposal

Liquidity for SIFI Resolutions

- Current FDIC Single Point of Entry Approach relies on taking the top-tier HC into a bridge bank
 - Keeps all subs open and operating
 - Imposes losses on top-tier equity and debt holders
 - FDIC cannot take an equity interest
 - Taxpayers must be paid back

SPOE requirements

- Must have enough equity and debt in the top tier BHC to be able to allow bridge bank to:
 - Recapitalized failing subsidiary
 - Recapitalize the bridge HC
 - Replace subsidiary deposits and wholesale funding that runs--- if not, asset fire sale
 - In Wachovia, nearly 10 percent of deposits ran in short order
 - In WAMU, about 9 percent ran very quickly

FDIC resources

- Can pledge up to 10% of consolidated assets to Treasury for funding or to guarantee market funding
 - After complete asset revaluation, can pledge up to 90 percent of assets to Treasury....but this will take months
- Is 10 percent going to be enough?

Wells Fargo SIFI Structure

Wells Fargo IDIs	Assets	Equity	liabilities	Equity/Asset	deposits
A	\$13,024,000	\$1,495,000	11,529,000	0.115	\$10,703,000
B	\$28,834,000	\$3,463,000	25,371,000	0.120	\$25,350,000
C	\$555,064	\$384,981	170,083	0.694	\$696
D	\$1,373,600,000	\$137,637,000	1,235,756,000	0.100	\$1,095,578,000
E	\$5,742,869	\$1,009,770	4,733,099	0.176	\$2,404
total IDI assets	\$1,421,755,933	\$143,989,751	1,277,559,182	0.101	
total consolidated holding company (Y-9c)	\$1,527,015,000	\$170,142,000		0.111	
percent assets in IDIs	0.93	0.85			
parent BHC	\$283,443,000	\$170,142,000	113,301,000	0.600	
parent BHC assets/IDI assets	0.199361222				
parent BHC equity over IDI assets	0.119670329				
parent BHC equity/ consolidated BHC assets	0.111421302				
parent BHC equity /largest IDI assets	0.123865754				

Wells Fargo Distress Scenario

Now the largest IDI and the holding company are both deeply undercapitalized

Loss in Largest IDI (10 percent loss rate)	\$137,637,000			
Wells Fargo IDIs	Assets	Equity	liabilities	Equity/Asset
A	\$13,024,000	\$1,495,000	11,529,000	0.115
B	\$28,834,000	\$3,463,000	25,371,000	0.120
C	\$555,064	\$384,981	170,083	0.694
D	\$1,235,963,000	\$0	1,235,756,000	0.000
E	\$5,742,869	\$1,009,770	4,733,099	0.176
total IDI assets	\$1,284,118,933	\$6,352,751	1,277,559,182	0.005
total consolidated holding company (Y-9c)	\$1,389,378,000	\$32,505,000		0.023
percent assets in IDIs	0.92	0.20		
parent BHC	\$145,806,000	\$32,505,000	\$113,301,000	0.223
parent BHC assets/IDI assets		0.114		
parent BHC equity over IDI assets		0.025		
parent BHC equity/ consolidated BHC assets		0.023		
parent BHC equity /largest IDI assets		0.026		

Wells Parent Debt Structure

	sub debt	\$18,800,000
	CP	\$4,877,000
	other <1yr	\$4,830,000
	>1yr	\$56,894,000
	balances due subs & affiliates	\$20,902,000



So, I will use SPOE and convert all outstanding liabilities of the parent to equity except balances due subs and affiliates

Initial Bridge Bank Positions

Loss in Largest IDI (10 percent loss rate)	\$137,637,000			
Wells Fargo IDIs	Assets	Equity	liabilities	Equity/Asset
A	\$13,024,000	\$1,495,000	11,529,000	0.115
B	\$28,834,000	\$3,463,000	25,371,000	0.120
C	\$555,064	\$384,981	170,083	0.694
D	\$1,235,963,000	\$0	1,235,756,000	0.000
E	\$5,742,869	\$1,009,770	4,733,099	0.176
total IDI assets	\$1,284,118,933	\$6,352,751	1,277,559,182	0.005
total consolidated holding company (Y-9c)	\$1,389,378,000	\$1		0.000
Bridge Bank	\$145,806,000	\$124,904,000	\$20,902,000	0.857
parent BHC assets/IDI assets	0.114			
parent BHC equity over IDI assets	0.097		sub debt	\$18,800,000
parent BHC equity/ consolidated BHC assets	0.090		CP	\$4,877,000
parent BHC equity /largest IDI assets	0.101		other <1yr	\$4,830,000
			>1yr	\$56,894,000
			balances due subs & affiliates	\$20,902,000

Wells Bridge after raising \$79 billion in new debt and down streaming proceeds as new equity to IDI

Loss in Largest IDI (10 percent loss rate)	\$137,637,000	New Equity Injection		\$79,000,000
Wells Fargo IDIs	Assets	Equity	liabilities	Equity/Asset
A	\$13,024,000	\$1,495,000	11,529,000	0.115
B	\$28,834,000	\$3,463,000	25,371,000	0.120
C	\$555,064	\$384,981	170,083	0.694
D	\$1,314,963,000	\$79,000,000	1,235,756,000	0.060
E	\$5,742,869	\$1,009,770	4,733,099	0.176
total IDI assets	\$1,363,118,933	\$85,352,751	1,277,559,182	0.063
total consolidated holding company (Y-9c)	\$1,468,378,000	\$32,505,000		0.022
percent assets in IDIs	0.93	2.63		
Bridge Bank	\$224,806,000	\$124,904,000	\$99,902,000	0.556
parent BHC assets/IDI assets	0.165			
parent BHC equity over IDI assets	0.092			
parent BHC equity/ consolidated BHC assets	0.085			
parent BHC equity /largest IDI assets	0.095			

But Wells has \$1.131 Trillion in deposits

- What if it has a WAMU run when it gets hit with losses
 - 8.8 percent of deposits run very quickly
 - Bridge must replace \$100,000,000 in deposits

- Two Problems with loss & deposit run scenario
 - Bridge is now undercapitalized
 - Total new funding requirements to replace capital and deposit run off are 12 percent of the BHC's initial consolidated assets
 - FDIC can only guarantee 10% without full SIFI asset re-valuation
 - Will the bridge be able to fund itself in the market with limited FDIC guarantee?
 - If not, must dump assets

Loss in Largest IDI (10 percent loss rate)	\$137,637,000	New Equity Injection		\$79,000,000
Wells Fargo IDIs	Assets	Equity	liabilities	Equity/Asset
A	\$13,024,000	\$1,495,000	11,529,000	0.115
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total consolidated holding company (Y-9c)	\$1,468,378,000	\$32,505,000		0.022
percent assets in IDIs	0.93	2.63		
Bridge Bank	\$224,806,000	\$124,904,000	\$99,902,000	0.556
Bridge issues 100,000,000 in new debt to replace deposit run-off in subs	\$324,806,000	\$124,904,000	\$199,902,000	
parent BHC assets/IDI assets	0.165			
parent BHC equity over IDI assets	0.092			
parent BHC equity/ consolidated BHC asset:	0.085			
parent BHC equity /largest IDI assets	0.095			



Thanks. Looking forward to questions and discussion.