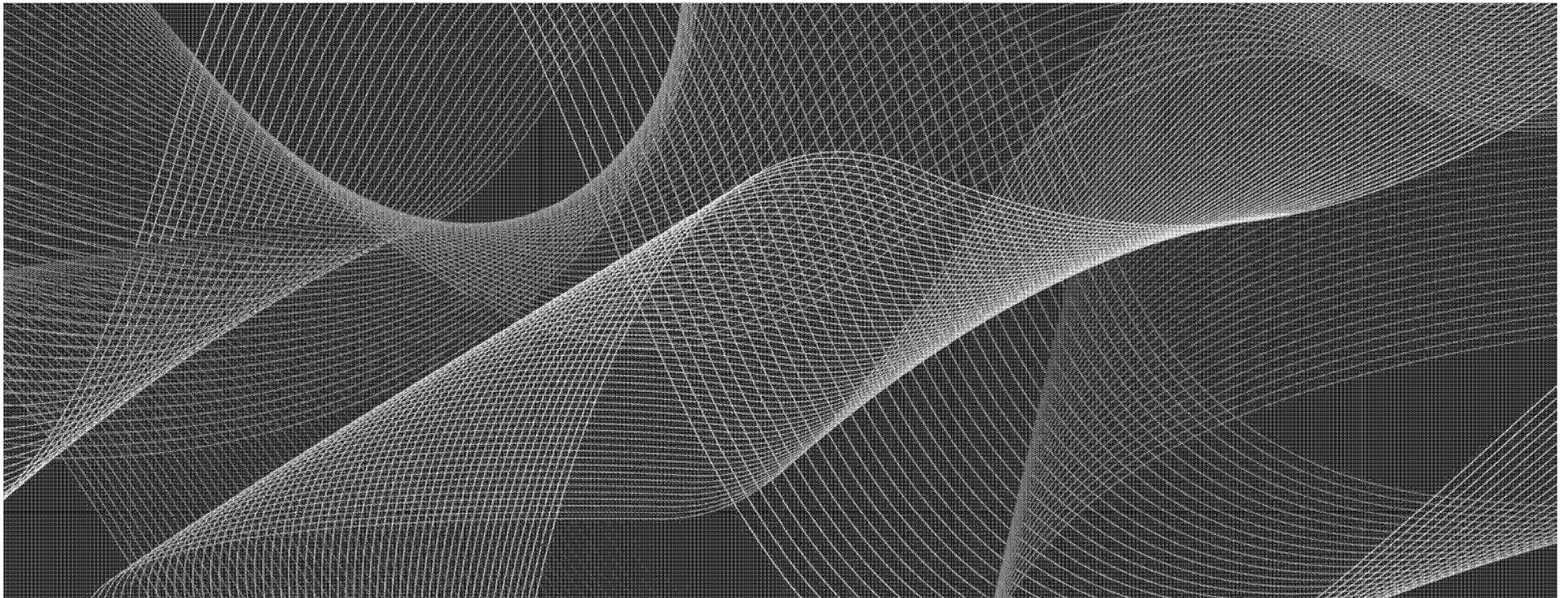


LEHMAN BROTHERS

July 2, 2008

# Presentation to the Federal Reserve & SEC Updated Stressed Liquidity Scenario



Confidential Presentation

# Overview Of Lehman's Funding Framework

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- ◆ Established in the aftermath of the liquidity event of 1998, the Lehman Brothers Funding Framework is based on a set of conservative principles guiding the funding of assets and mitigating our liquidity risk. It has been refined and augmented over the years as Lehman enters new businesses and as the liquidity risk of existing businesses changes.
- ◆ At its core are the following principles
  - Remain in a state of constant liquidity readiness
  - Do not rely on asset sales, increase in operational effectiveness or access to the unsecured debt market in a time of crisis
  - Be proactive with your key stakeholders before and during a liquidity event: regulators, creditors, trading counterparts and rating agencies
- ◆ It is structured around three dimensions
  - Liquidity pool to cover cash outflows over a 12 month horizon at the Holdings Company
  - Cash capital to cover funding of illiquid assets as well as contingent liquidity risk
  - Secured funding plan to mitigate the liquidity risk associated with short-term secured funding, including the prime broker business
- ◆ In the aftermath of the near collapse of Bear Stearns and our own experience the week of March 17, we have made a series of adjustments in our secured funding plan
  - Increased average tenor of repo book from 22 to 35 days during the quarter
  - Increased overfunding/excess collateral borrowed from \$15 billion to \$27 billion during the quarter
  - Grew Holdings' liquidity pool from \$34 billion to \$45 billion during the quarter
  - Introduced a stress liquidity scenario focused on a substantial loss of our repo capacity

# Role Of Stress Funding Scenarios In Funding Framework

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- ◆ Stress scenarios are an integral part of how we build funding frameworks
  - Liquidity pool sized to sustain a severe liquidity event
    - No unsecured debt issuance for 12 months
    - Rating downgrade
    - Draw on unfunded loan commitments
  - Cash capital policy built around funding assets in a stressed liquidity environment
    - Inventory is funded with cash capital by default. Exceptions are made only when there exists a secured funding market for an asset class that is deep and broad in all market environments
  - Secured funding plan built around a loss of liquidity in secured funding markets
    - Repo assets with counterparties that know Lehman Brothers and the assets well
    - Build overfunding cushion to mitigate loss of secured funding
  
- ◆ We constantly refine the assumptions used in our Funding Framework
  - In recent months, we have built a scenario modeling a significant loss of secured funding incorporating the liquidity lessons of recent market events. We have refined this scenario since our last meeting on May 28.
  - Objective is to maintain a liquidity pool of at least \$10 billion during the first month without selling assets supporting client franchise or reducing client funding

# Liquidity Stress Funding Scenario (I) – Liquidity Outflows

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- ◆ Purpose of this stress funding scenario is to model a severe liquidity event over the course of a month. Over the course of one month, liquidity outflows total \$60 billion.
  - Significant loss of secured funding capacity on non-Government or Agency securities (\$41 billion)
  - Inability to roll unsecured debt, coupled with debt buybacks (\$7 billion)
  - Rating downgrades and draws on unfunded loan commitments (\$7 billion)
  - Withdrawal of customer free credits (\$4 billion in LBIE; LBI free credits covered by segregated cash (15c3 lockup))
  - Payments on derivative margin disputes (\$1 billion)

# Liquidity Stress Funding Scenario (II) – “Mitigants”

- ◆ Offsetting these cash outflows are \$73 billion of “liquidity risk mitigants,” leaving Lehman with a \$13 billion liquidity pool after one month
    - First and foremost, liquidity pools at Holdings, broker dealers and Lehman Brothers Bankhaus (\$51 billion)
      - \$42 billion at Holdings; \$4 billion in LBIE and \$1 billion in LBI, our broker dealers; \$4 billion in Bankhaus
      - Because of the substantial loss of secured funding in this scenario, LBI and LBIE needs to borrow from Holdings and good quality collateral previously funded with third parties becomes available for funding with Bankhaus. As a result, liquidity becomes fungible across these entities
    - Draw on our committed facilities (\$4.5 billion)
      - We draw on our committed facilities 30-50% of the time in the normal course of business, thereby removing any signaling effect that could be associated with a draw
    - Term overfunding and excess collateral borrowed, which mitigates the loss of secured funding (\$12 billion impact)
      - Term overfunding = Unused term repo capacity
      - Excess collateral borrowed = Repo funding that does not support Firm or client activities
    - Additional funding through the ECB tender auction facilities (\$5 billion)
      - ECB through its tender auction facilities fund more than \$700 billion of collateral for Euro-domiciled banks
      - Lehman Brothers funds \$11 billion of collateral through the ECB. Even with the additional \$5 billion funding envisaged in this scenario, we would still not be in the top 10 users of these facilities.
    - Unwind of matched book positions supporting proprietary positions (\$1 billion impact)
- \$17 billion of secured funding “mitigants”
- ◆ The following have **not** been included as “liquidity risk mitigants” in this scenario
    - Use of the Federal Reserve’s PDCF or TSLF
    - Reduction of balance sheet impacting client-facing activities
    - Reduction of prime broker client funding

# Liquidity Stress Scenario Assumptions

Loss of Secured Funding			Loss of Unsecured Funding		
◆ Repos			◆ Unsecured debt		
	<u>% Rolled</u>	<u>% Lost</u>	– CP and LCs: 0% roll at maturity		
Governments & Agencies	100%	0%	– Buybacks: \$1 billion per month		
Corporates			– Deposits at US banking affiliates: 80% roll at maturity		
High Grade	70%	30%	• In practice, no impact on liquidity (operate with significant excess liquidity)		
High Yield	0%	100%	– Ability to draw on committed facilities		
Asset Backs / Private Labels			◆ Loan funding		
High Grade	40%	60%	– Per funding schedule for leveraged loans		
High Yield	0%	100%	– \$2 billion of loan commitments drawn outside of the bank entities		
Commercial Paper Repo	70%	30%	◆ Derivatives		
Muni	40%	60%	– Cash collateralization on derivative payables per CSA requested on day 1 (paid on day 2 per industry practice)		
Equities / Convertibles			– Margin disputes against us paid on day 3 and 4		
E1	70%	30%	– 2 notch downgrade during second week		
E2 / C1	0%	100%	• Note: The vast majority of the credit rating downgrade-related posting requirements come from derivative transactions with structured vehicles, which have a 30 day cure period, which gives us to assign or restructure the transactions, thereby avoiding the posting of additional collateral.		
E3 / C2	0%	100%	◆ Other		
◆ Munis TOB – 7 day put exercised on day 1			– \$0.5 billion every other week to cover operational cash expenses (PE and NPE)		
– Customer collateral returned /liquidated over 1 week			– Sale of assets at pledge value with an additional 5% writedown		
– Firm collateral liquidated					
◆ Prime broker					
– Free credit balances withdrawn on day 1					
◆ Dealer-based matched book					
– Unwound to release haircut (\$1.0 bn)					
◆ Central banks					
– No PDCF or TSLF					
– Able to use ECB tender facility through Bankhaus, consistent with normal practice					

# Stress Scenario Assumptions Vs. Week Of March 17

- ◆ The assumptions used in our liquidity stress scenarios are far more severe than what we experienced during the week of March 17.
- ◆ Since our last meeting on May 28, we have refined our assumptions and made them more conservative.
  - 100% of repos funding less liquid collateral (high yield, non major index equities) do not roll

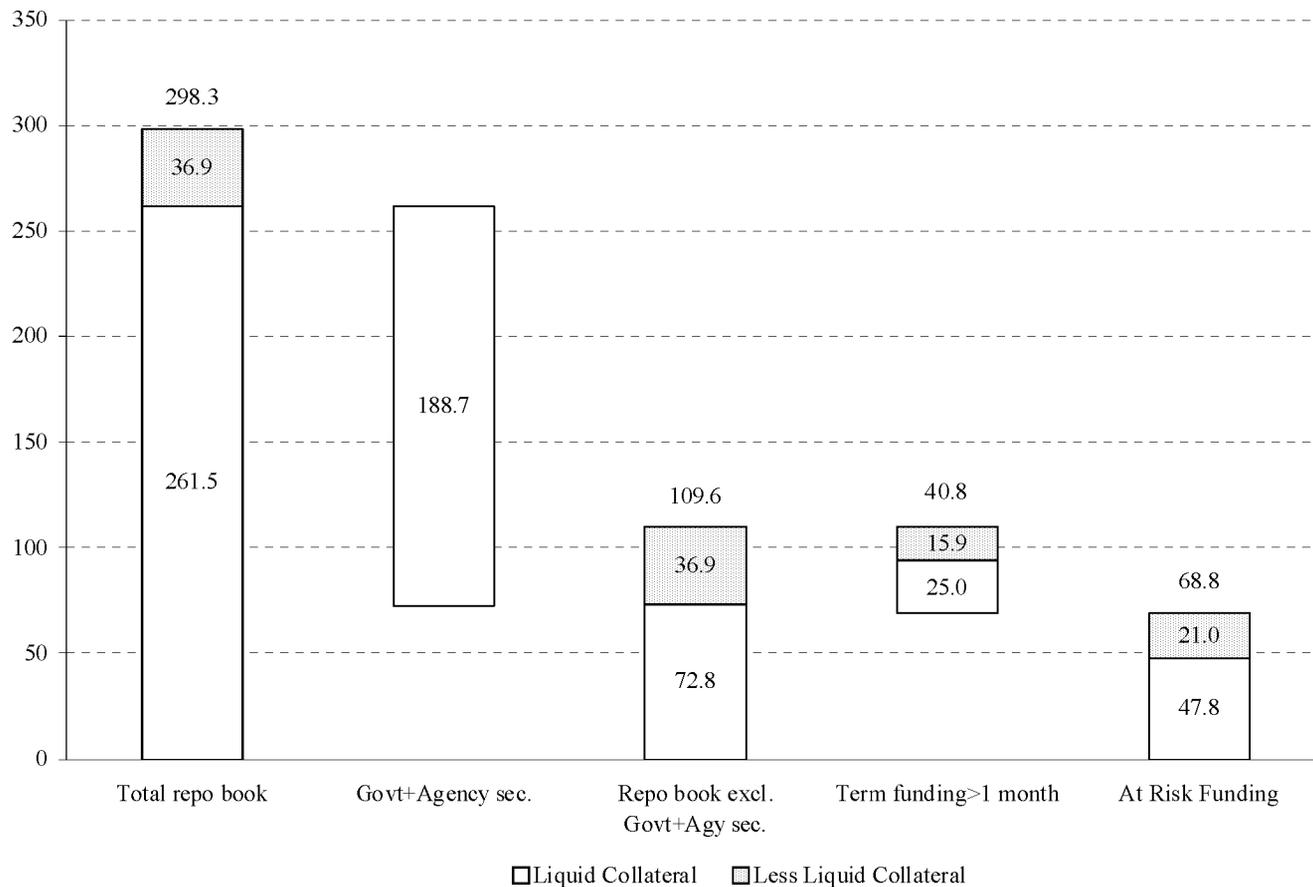
	% Lost		
	Experienced During Week of 3/17	Stress Scenario Shown At 5/28 Meeting	Stress Scenario Shown In Today's Presentation
<b>Secured Funding</b>			
Governments & Agencies	0%	0%	0%
Corporates			
High Grade	0%	20%	30%
High Yield	13%	80%	100%
Asset Backs / Private Labels			
High Grade	7%	50%	60%
High Yield	0%	100%	100%
Commercial Paper Repo	10%	20%	30%
Munis	0%	50%	60%
Munis TOB Program	0%	100%	100%
Equities / Converts			
Major Index (E1)		20%	30%
Other Index (E2 / C1)	14%	80%	100%
Non Major Index (E3 / C2)		100%	100%
Collateral Upgrade (E1)	3%	10%	30%
<b>Prime Broker Free Credit Balances</b>	30%	100%	100%
<b>Unsecured Funding</b>			
LEH Commercial Paper	29%	100%	100%
LTD Buybacks (\$Billions)	0.11	0.25	1.0
Derivatives			
Cash Collateralization per CSA	~25%	100%	100%

# Repo Book Analysis

- ◆ As of June 25, our tri-party repo book amounted to \$298 billion - \$189 billion of Government and Agency securities; \$73 billion of liquid collateral (investment-grade fixed income securities and major index equities); \$37 billion of less liquid collateral (high yield fixed income securities and non major index equities). the amount of repo funding “at risk” (i.e., maturing within a month) was \$69 billion - \$48 billion in liquid collateral and \$21 billion in less liquid collateral.

## Composition Of Lehman’s Tri-Party Repo Book As of 6/25

\$ Billions

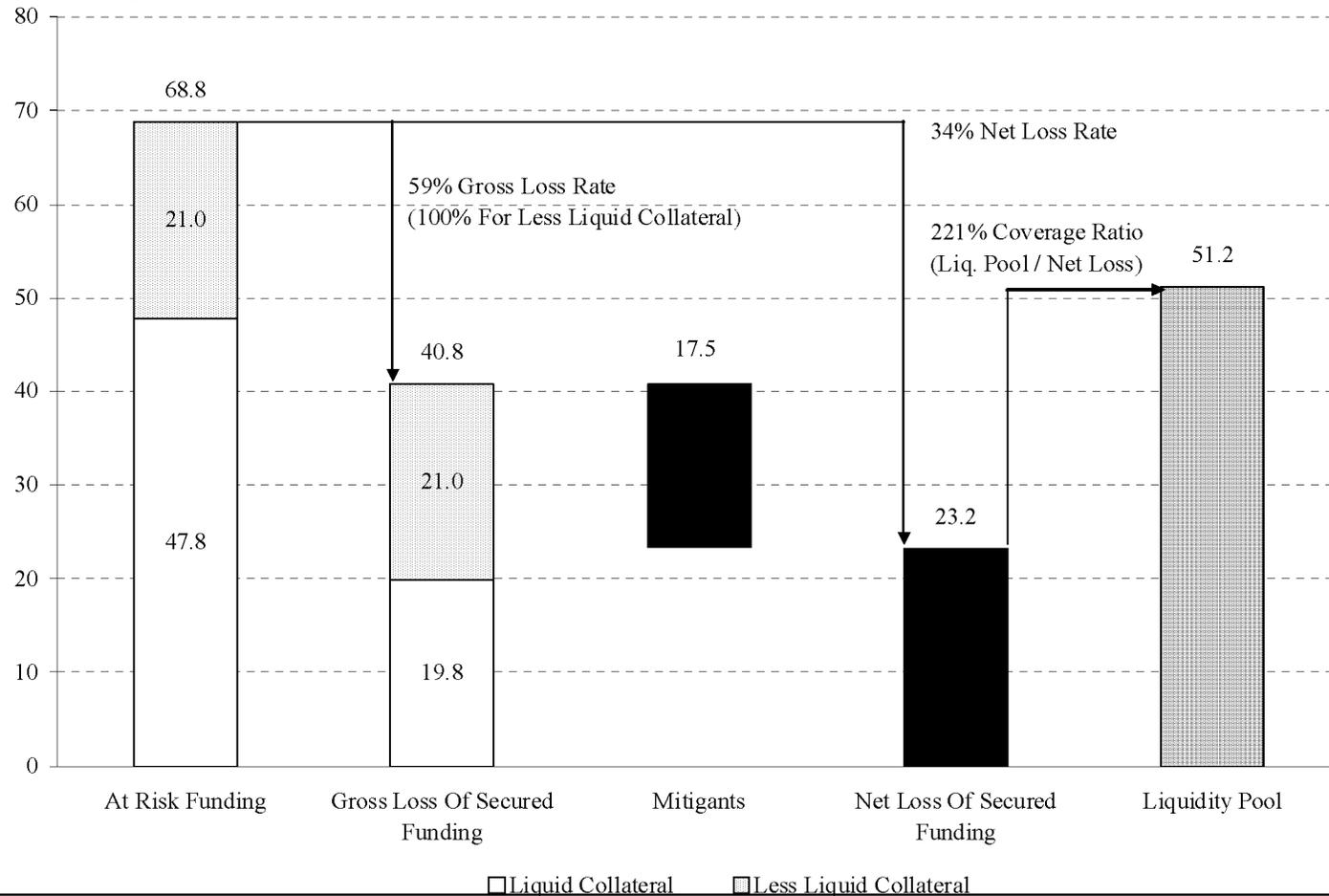


# Loss Of Secured Funding

- ◆ Stress scenarios result in a \$41 billion gross loss of secured funding over one month (i.e., 59% of secured funding being lost, 100% for the less liquid collateral). Including “mitigants” (e.g., \$12 billion due to overfunding, excess collateral borrowed, \$5 billion due to pledging eligible assets to the ECB and \$1 billion due to the unwind of our proprietary matched book), the net loss of secured funding amounts to \$23 billion. The liquidity pool available to the broker-dealers of \$51bn exceeds the net secured funding loss by 221%.

## Loss Of Secured Funding

\$ Billions



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## Appendices

# Stress Liquidity Scenario: Overall Impact

	26-Jun	27-Jun	30-Jun	1-Jul	2-Jul	3-Jul	7-Jul	8-Jul	9-Jul	10-Jul	Week 3	Week 4	Total
<b>Beginning Cash Position <sup>(1)</sup></b>	51.2	37.4	31.8	33.1	32.1	30.8	27.6	26.9	24.9	22.5	20.3	13.7	13.7
<b>Net Loss Secured Funding</b>	(11.0)	(2.8)	1.0	(0.2)	(0.7)	(3.0)	(0.4)	(1.2)	(1.3)	(0.0)	1.6	(5.2)	(23.2)
<b>Unsecured Funding</b>													
Unsecured Debt													
CP	(2.6)	(0.7)	(0.3)	(0.2)	(0.1)	(0.1)	-	(0.0)	(0.0)	-	(0.5)	(0.2)	(4.7)
STD excluding CP	(0.0)	(0.0)	(0.0)	-	(0.0)	(0.0)	-	(0.0)	(0.0)	(0.0)	(1.2)	-	(1.3)
LTD	(0.0)	(0.0)	(0.1)	0.1	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	-	(0.2)
Buybacks	-	(0.5)	-	-	-	-	-	-	-	(0.5)	-	-	(1.0)
Deposits of Banking Affiliates	(0.2)	-	-	-	-	-	-	-	-	-	-	-	(0.2)
Committed Facility Drawdown	-	-	4.5	-	-	-	-	-	-	-	-	-	4.5
Net Loan Funding	-	-	(1.4)	-	-	-	-	-	(1.0)	-	(1.0)	-	(3.4)
Derivative Activity													
Posting of Uncalled Collateral	-	(1.5)	(1.5)	-	-	-	-	-	-	-	-	-	(3.0)
Downgrade (2 Notches)	-	-	-	-	-	-	-	(0.7)	-	-	-	-	(0.7)
Disputed Margin Payments	-	-	(0.3)	(0.3)	-	-	-	-	-	-	-	-	(0.6)
Cash outflows to fund operations (PE, NPE, etc.)	-	-	-	(0.5)	-	-	-	-	-	-	(0.5)	-	(0.9)
<b>Total Net Loss Unsecured Funding</b>	(2.8)	(2.7)	0.9	(0.9)	(0.1)	(0.1)	(0.0)	(0.8)	(1.0)	(0.5)	(3.2)	(0.2)	(11.5)
<b>Ending Cash Position</b>	37.4	31.8	33.1	32.1	30.8	27.6	26.9	24.9	22.5	21.9	20.3	13.1	13.1

Details  
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1. \$47.8 billion liquidity pool as of 6/26 SOD is comprised of \$42.2 billion of Holdings liquidity, \$1.2 billion of LBI liquidity (trapped) and \$4.1 billion of Bankhaus liquidity. In this stress scenario, which involves significant funding losses at the broker dealers, cash positions become practically fungible across legal entities because LBI and LBIE require additional funding from Holdings and Bankhaus
2. Net loss of secured funding also includes the positive impact of the reduction in the funding of prime broker clients and of balance sheet reduction

# Stress Liquidity Scenario: Loss Of Secured Funding

Secured Funding	Total Repo Book	Total At Risk	26-Jun	27-Jun	30-Jun	1-Jul	2-Jul	3-Jul	7-Jul	8-Jul	9-Jul	10-Jul	Week 3	Week 4	Total
<b>Lost Capacity</b>															
<b>LBJ</b>															
E1 - Major Index Equities	0.3	0.1	-	-	-	-	-	-	-	-	0.0	-	-	0.0	0.0
E2 & E3 - Non-Major Index Equities	1.3	0.4	-	-	-	-	-	-	-	-	0.2	-	-	0.2	0.4
Total LBJ	1.6	0.5	-	-	-	-	-	-	-	-	0.2	-	-	0.2	0.4
<b>LBIE</b>															
Government Agency	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sovereigns	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset Backs - Investment Grade	18.1	0.9	0.1	-	0.2	-	0.0	-	0.0	-	0.1	-	-	0.1	0.5
C1 - Investment Grade Convertibles	0.6	0.2	0.0	0.0	0.0	-	0.1	-	-	-	0.0	-	0.0	0.1	0.2
C2 - Non-Investment Grade Convertibles	1.4	0.6	0.0	0.0	0.1	-	0.2	0.0	0.0	-	0.2	-	0.0	0.1	0.6
Corporates - Investment Grade	7.4	5.2	0.5	0.2	0.3	0.1	0.0	0.0	0.3	-	0.1	0.0	0.0	0.0	1.5
Corporates - Non-Investment Grade	2.5	0.8	0.4	0.0	0.1	0.0	0.1	-	0.0	-	0.1	-	0.0	0.1	0.8
E1 - Major Index Equities	5.0	3.3	0.0	-	0.1	0.1	0.2	-	0.1	0.0	0.0	-	0.3	0.2	1.0
E2 & E3 - Non-Major Index Equities	7.9	3.3	0.5	0.2	0.3	0.2	0.3	0.0	0.3	0.1	0.2	-	0.9	0.3	3.2
EMG	6.4	3.6	0.7	0.1	0.4	0.0	0.3	0.1	0.2	0.0	0.0	-	0.1	1.7	3.6
Money Markets	0.2	0.2	0.1	-	-	-	0.0	-	-	-	-	-	-	0.0	0.1
Total LBIE	59.5	18.2	2.3	0.4	1.5	0.4	1.2	0.1	1.0	0.1	0.7	0.0	1.4	2.5	11.6
<b>LBI</b>															
Government Agency	34.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MBS	93.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sovereigns	50.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset Backs - Investment Grade	5.9	4.4	1.5	0.0	-	-	-	-	0.2	0.1	-	-	0.0	0.9	2.6
Asset Backs - Non-Investment Grade	1.6	0.9	0.7	-	-	-	-	-	-	0.1	-	-	0.1	-	0.9
C1 - Investment Grade Convertibles	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	0.5
C2 - Non-Investment Grade Convertibles	0.9	0.9	0.9	-	-	-	-	-	-	-	-	-	-	-	0.9
Corporates - Investment Grade	9.3	8.4	2.4	-	-	-	0.0	-	-	-	-	-	0.1	-	2.5
Corporates - Non-Investment Grade	5.2	5.0	3.8	-	-	-	-	-	0.1	-	-	-	1.0	0.1	5.0
E1 - Major Index Equities	2.5	2.2	0.7	-	-	-	-	-	-	-	-	-	-	-	0.7
E2 & E3 - Non-Major Index Equities	5.8	2.8	1.9	0.0	-	0.8	-	-	-	-	-	-	-	-	2.8
Money Markets	9.9	9.9	2.7	-	-	0.2	0.2	-	-	0.0	-	-	-	0.0	3.0
Muni	3.9	3.9	2.3	-	-	-	-	-	-	-	-	-	-	-	2.3
Private Labels - High Yield	2.1	1.8	1.2	0.0	-	-	0.5	-	0.0	-	-	-	0.0	0.0	1.8
Private Labels - Investment Grade	10.2	9.2	1.4	0.6	-	-	0.1	-	0.2	0.1	-	-	0.1	3.0	5.5
Total LBI	236.5	49.8	20.0	0.7	-	1.0	0.8	-	0.4	0.2	-	-	1.3	4.1	28.5
<b>LBHI</b>															
Wholeloan Residential	0.6	0.2	0.0	0.0	-	-	-	-	-	0.2	-	-	-	-	0.2
<b>Total Lost Capacity</b>	<b>298.3</b>	<b>68.7</b>	<b>22.3</b>	<b>1.1</b>	<b>1.5</b>	<b>1.4</b>	<b>2.0</b>	<b>0.1</b>	<b>1.4</b>	<b>0.6</b>	<b>0.9</b>	<b>0.0</b>	<b>2.7</b>	<b>6.8</b>	<b>40.7</b>
<b>Mitigants and other stress elements</b>															
<b>LBIE</b>															
Prime Broker Customer Free Credits			(3.5)	-	-	-	-	-	-	-	-	-	-	-	(3.5)
Prime Broker Reduction			-	-	-	-	-	-	-	-	-	-	-	-	-
Excess Collateral Returned			2.1	0.2	0.6	0.2	0.8	0.0	0.4	0.1	0.4	-	1.2	0.6	6.8
ECB			0.1	0.2	0.3	0.1	-	-	0.3	-	0.2	-	-	0.1	1.3
Bankhaus Funding ECB Eligible			3.2	0.3	-	-	-	-	-	-	-	-	-	-	3.5
Bankhaus			0.1	0.0	0.6	0.1	0.4	0.1	0.2	0.0	0.1	-	0.1	1.7	3.4
Total LBIE			2.1	0.7	1.5	0.4	1.2	0.1	1.0	0.1	0.7	-	1.3	2.5	11.5
<b>LBI</b>															
Prime Broker Customer Free Credits			(2.5)	2.5	-	-	-	-	-	-	-	-	-	-	-
Unwinding of Muni TOB Prog. (\$6 billion gross)			-	-	-	-	-	(3.0)	-	-	-	-	3.0	-	-
Balance Sheet Reduction			-	-	-	-	-	-	-	-	-	-	-	-	-
Writedowns on balance sheet reduction			-	-	-	-	-	-	-	-	-	-	-	-	-
Dealer-based Matched Book Reduction			-	-	1.0	-	-	-	-	-	-	-	-	-	1.0
Excess Collateral Returned			4.0	0.0	-	0.8	-	-	-	-	-	-	-	-	4.9
Term Overfunding excl. TSLF			7.8	(4.9)	-	-	0.1	-	-	(0.8)	(1.1)	-	-	(0.9)	0.2
Total LBI			9.3	(2.4)	1.0	0.8	0.1	(3.0)	-	(0.8)	(1.1)	-	3.0	(0.9)	6.0
<b>Net Loss Secured Funding</b>			<b>(11.0)</b>	<b>(2.8)</b>	<b>1.0</b>	<b>(0.2)</b>	<b>(0.7)</b>	<b>(3.0)</b>	<b>(0.4)</b>	<b>(1.2)</b>	<b>(1.3)</b>	<b>(0.0)</b>	<b>1.6</b>	<b>(5.2)</b>	<b>(23.2)</b>

# Rating Downgrade-Related Margin Postings

- ◆ In June 2008, long-term ratings of Lehman Brothers were downgraded by S&P and Fitch to A and A+, respectively. As of a result of these downgrades, the margin posting requirements if Lehman Brothers were to be further downgraded by one or two notches would be as follows:

## Margin Posting Requirements

\$ Billions

	<u>1 Notch Downgrade</u>	<u>2 Notch Downgrade</u>
"Standard" trades	0.2	0.5
"Non standard" trades	3.1	1.3
<b>Total</b>	<b><u>3.4</u></b>	<b><u>1.7</u></b>

- ◆ Standard trades are derivatives transactions where the margin posting requirement is equal to the mark-to-market of the positions above the rating-dependent threshold. The lower the rating, the lower the threshold: hence the need for additional margin postings in case of a downgrade. This posting requirement is immediate post the downgrade.
- ◆ Non standard trades are derivatives transactions with structured vehicles (securitization trusts, CDOs), where the margin posting requirement is primarily driven by a requirement by the rating agencies for Lehman Brothers to post an independent amount to act as a volatility buffer. This independent amount is typically calculated as a percentage of the notional of the trade. The requirement would typically kick in if Lehman Brothers were downgraded below A or A2 by S&P or Moody's, respectively.
  - This requirement would not become effective immediately. Instead, Lehman Brothers would typically have 30 days to assign the transaction or renegotiate the terms, thereby avoiding the posting requirement
    - Post the downgrade by S&P on June 2, we have started renegotiating a large number of these transactions as a precautionary measure. As a result to date, we have already avoided approximately \$0.7 billion of posting requirements if S&P were to downgrade us to A-.

# Customers' Independent Amounts

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- ◆ Street practice is to require certain counterparties on the riskier end of the spectrum to post ISDA collateral with respect to derivative transactions above and beyond the mark-to-market of the trade. This collateral, known as independent amount or initial margin, is to protect the dealer from the possibility that, upon the counterparty's insolvency, the mark-to-market could increase before the dealer can fully liquidate the portfolio.
  
- ◆ Hedge funds have approached banks to segregate their independent amounts so that it would be protected in the event of insolvency. In the case of Lehman Brothers, they have asked us to segregate \$1.7 billion of independent amounts - \$1.1 billion in LBIE, our European broker dealer with its own segregated liquidity pool and \$0.6 billion in LBSF, our main derivative subsidiary, and other entities in the Holdings' chain.
  - Agreeing to the hedge funds' requests could result in a small decrease in the liquidity pool of Holdings of \$0.6 billion and a \$1.1 billion decrease in the liquidity pool of LBIE, which would be covered by LBIE liquidity pool, if the independent amounts were segregated in a non-Lehman bank account
  - However, we are working with these clients to segregate their independent amounts in a GDPF-insured account at Lehman Brothers Bankhaus.
    - German Depositors Protection Fund ("GDPF") insures accounts for up to \$400 million
    - Lehman Brothers Bankhaus can use this cash to fund Lehman assets, thereby mitigating the impact of the segregation

# Role of the Federal Reserve's PDCF and TSLF

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- ◆ Although we do not rely on the existence of the PDCF and TSLF in our stress liquidity scenario, we believe that terminating these facilities without providing an alternative liquidity backstop facility would be perceived negatively by the markets
  - Would increase uncertainty about how the Federal Reserve and S.E.C. would react to another Bear Stearns-type event
  - Would make it more difficult to fund some asset classes – particularly asset-backed securities. This would negatively impact
    - Price transparency, as securities firms would reduce their market making activities on these types of securities
    - Underlying lending activities as it would make it more difficult to distribute the risk without a well functioning securitization market