

Tri-Party Repos and Collateral – Lehman – 9/11/08

- Tri-party investors held US\$4.7 billion margin on their tri-party repos on 9/11.
- Total financing was US\$120.5 billion against US\$125.2 billion in collateral.
- That included a US\$2.4 billion cash vs. cash interco repo that created no risk.

US\$ million Security Type	Count	Collateral Market Value	Overnight Financing by Tri-Party Investors	%	Overnight Margin	
Fed-Eligible - Total	4,736	81,480	79,756	65%	102.2%	
USTs	374	29,471	28,972	24%	101.7%	
Agency Securities	572	11,967	11,666	10%	102.6%	
Agency MBSs	2,691	35,431	34,667	28%	102.2%	
Agency CMOs	1,099	4,611	4,451	4%	103.6%	
DTC-Eligible - Total	8,089	37,924	34,965	30%	108.5%	← DTC haircuts have increased
ABSs	652	2,900	2,427	2%	119.5%	
CDOs	154	1,276	1,071	1%	119.2%	
ARS	0	0	0	0%	0.0%	
Corporates	1,714	10,352	9,819	8%	105.4%	
CPs	125	5,333	4,928	4%	108.2%	
Money Market	6	3	2	0%	105.0%	
Multilaterals	19	519	509	0%	102.0%	
Equities	2,904	8,668	7,975	7%	108.7%	← JPM has 125% intraday margin for equities
Munis	659	3,103	2,983	2%	104.0%	
Other	0	0	0	0%	0.0%	
CMOs	1,856	5,771	5,250	5%	109.9%	
Cash	2	2,405	2,405	2%	100.0%	
Trust Receipt	18	3,456	3,391	3%	101.9%	← Trust receipts are not unwound and do not create intraday credit risk for JPM
TOTAL	12,845	125,265	120,517	100%	103.9%	
Coll. El. for Intraday Financing Margin Held		121,809	4,749			

9/12 Unwind - Lehman

- After the morning unwind on 9/11 JPM had US\$10.7 billion margin covering its intraday financing:
 - US\$4.1 billion margin reflecting the tri-party investor margin excluding equities.
 - US\$2.1 billion representing the 125% margin for equities.
 - US\$4.5 billion locked up as extra collateral (adjusted to Gifford Fong's prices).
- Lehman's total intraday margin on 9/10 was sufficient to cover JPM's risk-based margin, which was calculated as US\$8 billion based on the estimated one-day liquidation risk and the price risk of the collateral.

9/12 PDCF Analysis – Lehman

In a worst-case scenario, if Lehman had no tri-party investor rolling over repos, it would need to rely on the PDCF for overnight financing. The analysis below reflects the impact for JPM:

US\$ million Security Type	Collateral Market Value	Securities Ineligible for PDCF	Eligible Securities for PDCF	Fed (PDCF) Financing	Collateral Coverage %
Fed-Eligible - Total	81,480	5,327	76,153	72,953	104.4%
USTs	29,471	0	29,471	28,752	102.5%
Agency Securities	11,967	71	11,896	11,383	104.5%
Agency MBSs	35,431	5,256	30,175	28,467	106.0%
Agency CMOs	4,611	0	4,611	4,350	106.0%
DTC-Eligible - Total	37,924	19,085	18,839	17,127	110.0%
ABSs	2,900	1,475	1,425	1,332	107.0%
CDOs	1,276	763	513	0	0.0%
ARS	0	0	0	0	0.0%
Corporates	10,352	3,754	6,598	6,166	107.0%
CPs	5,333	62	5,270	4,926	107.0%
Money Market	3	0	3	2	107.0%
Multilaterals	519	515	4	4	107.0%
Equities	8,668	8,668	0	0	0.0%
Munis	3,103	1,131	1,972	1,843	107.0%
Other	0	0	0	0	0.0%
CMOs	5,771	2,716	3,055	2,855	107.0%
Cash	2,405	0	2,405	2,405	100.0%
TOTAL	121,809	24,412	97,397	92,485	105.3%

- US\$24.4 billion in securities are ineligible for PDCF.
- Lehman would need to allocate US\$97.4 billion in eligible collateral against US\$92.5 billion in PDCF financing, with a US\$4.9 billion margin (higher than the tri-party investor margin).
- Lehman would be left with US\$24.4 billion in lower-quality tri-party collateral to cover a US\$24.6 billion financing¹ need.
- JPM's total intraday collateral, including the incremental US\$4.5 billion collateral provided by Lehman, would be US\$28.9 billion. JPM would therefore be 117% collateralized.

¹ US\$24.6 bi equals overnight tri-party investor financing (US\$117.1 bi) minus PDCF financing (US\$92.5 bi).