

# Liquid Markets



## TSLF expansion

21 August 2008

### Summary:

While the current Term Securities Lending Facility (TSLF) has been enormously useful in terms of providing liquidity to primary dealers for some of their most difficult to finance assets, we believe there are some modest modifications that could make the program an even bigger success particularly in the future. Specifically:

- We recommend expanding the collateral eligible in the Schedule 2 program to include *all* investment grade MBS securities.
- We recommend that the term of the Schedule 2 program be made consistent with the newly extended TAF – with 3- month collateral swap auctions.

We believe these modifications to the TSLF program will increase usage and help address the need to fund what's likely to be a growing supply of non-eligible mortgage assets.

### Underutilization

Currently the TSLF program is underutilized. When the program was first adopted in early March, the Fed expected to swap \$200bn worth of its TSY collateral for primary dealers' MBS securities. However, nearly every auction over the last several months has failed to generate adequate demand and, as of 13 August, the total amount of TSLF collateral outstanding was just under \$130bn (\$55bn AGY, 75bn AAA)

### Declining Eligibility:

- Nearly 50% of the 2006 and 2007 vintage AAA-rated Subprime mortgage bonds have been downgraded, amounting to roughly 15% of the outstanding AAA Non-Agency Mortgages issued during those years.
- Based on loss expectations and the rating agency criteria we expect another 25% of the dollar value outstanding of the 2006 and 2007 vintage AAA-rated mortgage securities will eventually be downgraded.
- This would bring the total share of these vintages ineligible as TSLF collateral to 40% -- or roughly \$400bn worth of formerly AAA-rated securities that dealers could not finance at the Fed.

We believe the solution to the underutilization of the TSLF program is to expand the definition of Schedule 2 collateral to include all investment grade MBS securities and extend the program to provide 3- month financing. The primary reason for the lack of demand and repeated low bid-to-cover ratios at Schedule 2 TSLF auctions is the lack of eligible collateral on dealer balance sheets.

We hope the Fed will consider expanding both the collateral eligible in the TSLF program and the length of the collateral swaps to 3 months. Unlike banks which have access to term funding for these 'fallen angels' via the TAF and discount window, dealers have only one mechanism -- the TSLF. And the TSLF only provides TSY collateral for 28-days. We do not believe it was the Fed's intention in setting up the TSLF program in March to exclude nearly half of non-agency mortgages from its liquidity operations. Allowing all investment grade mortgage collateral to be eligible together with an extension of the program to 3- months wouldn't necessarily increase the risk on the Fed's balance sheet. For instance, the Fed could limit the size of the 3- month operations relative to the one-month ones so that no more of the Fed's balance sheet was committed. Unlike the TAF, the TSLF would not require the sale of other Federal Reserve assets, if it was later decided to increase the size of the 3- month auctions.

### PDCF

We strongly believe that the PDCF program, which currently accepts most investment grade assets is not a good substitute for the TSLF.

- The PDCF is an overnight program that while it can be rolled daily, isn't meant to be a constant source of daily funding for mortgage assets as it imposes frequency of use fees.
- PDCF borrowing has a considerable stigma in spite of the Fed's efforts to cloak access and guarantee anonymity. Instead, primary dealers view the PDCF as a last resort and will exhaust all other financing sources before pledging collateral here. For this reason, borrowing at this program has evaporated since the BSC merger closed.

We believe that a modification in the terms of the TSLF would go a long way to alleviating the pressure in mortgage funding markets.

This material was prepared by Lehman Brothers Funding Desk and is not a product of Lehman Brothers Fixed Income Research Department. The views of the firm's trading desks may differ from those of the Research Department. This material is for information purposes only. Lehman Brothers makes no representation that the information contained in this document is accurate or complete. Opinions expressed herein are subject to change without notice. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the issuance of this document. Under no circumstances should this document be used or considered as an offer to sell or a solicitation of an offer to buy any financial instrument mentioned in it. The products mentioned in this document may not be eligible for sale in some states or countries, or suitable for all types of investors; their value and the income they produce may fluctuate and/or be adversely affected by exchange rates, interest rates or other factors. Clients are advised to make an independent review regarding the economic benefits and risks of purchasing or selling the financial instruments mentioned in this document and reach their own conclusions regarding the legal, tax, accounting and other aspects of any transaction in the financial instrument in relation to their particular circumstances. Lehman Brothers enters into transactions on an arm's length basis and does not act as advisor or fiduciary to its counterparties except where a law, rule or written agreement expressly provides otherwise. Lehman Brothers and/or its affiliated companies may make a market or deal as principal in the financial instruments mentioned in this document or in related securities, options or other derivative instruments based on them. In addition, Lehman Brothers, its affiliated companies, shareholders, directors, officers and/or employees, may from time to time have long or short positions in the financial instruments, including loans, securities or in options, futures or other derivative instruments based on them. One or more directors, officers and/or employees of Lehman Brothers or its affiliated companies may be a director of the borrower or issuer mentioned in this document. Lehman Brothers or its predecessors and/or its affiliated companies may have acted as agent or arranger with respect to the loans of the borrowers mentioned in this report, and may have managed or co-managed a public offering of or acted as initial purchaser or placement agent for a private placement of any of the securities of any issuer mentioned in this document within the last three years, or may, from time to time perform investment banking, lending or other services for, or solicit investment banking or other business from any company mentioned in this document.

No part of this document may be reproduced in any manner without the written permission of Lehman Brothers. © 2008 Lehman Brothers Inc. All rights reserved. Member of SIPC.

**Dealers**

**Primary Dealer Credit Facility (PDCF)**

**Description** Overnight loan facility that will provide funding to primary dealers in exchange for a specified range of eligible collateral and is intended to foster the functioning of financial markets more generally.

**Term** O/N

**Offering Size** Unlimited

**Rate** Fed Funds + 25bps

**Eligibility** Investment Grade Securities

**Utilization** Not used since JPM - Bear merger completed

**Treasury Securities Lending Facility (TSLF)**

**Description** Collateral Upgrade Securities Lending Auction - FED Lends TSY Collateral and Borrows Eligible Collateral

**Term** 28 days

**Eligibility** Schedule 1 AGY DEBT, AGY PT's

Schedule 2 AGY CMO's, AAA MBS, AAA ABS - (NO CDO / CLO or Support Bonds)

**Auction Freq** Weekly, Alternating Eligibility Schedules

**Auction Minimum** Schedule 1 10bps  
Schedule 2 25bps

Utilization	Offering Size	Award Size	Bid to Cover	Utilization	Lending Fee	Minimum Fee
Schedule 1	55	55	1.82	100%	13	10
Schedule 2	139	75	0.54	54%	25	25
	194	130	0.90	67%		

**Banks**

**Discount Window**

**Description** Functions as a safety valve in relieving pressures in reserve markets and helps ensure the basic stability of the payment system by supplying liquidity during times of systemic stress

**Term** up to 90 days

**Offering Size** Unlimited

**Rate** Fed Funds + 25bps

**Eligibility** Investment Grade Securities and Loans

**Utilization** 17.5bn

**Term Auction Facility (TAF)**

**Description** Auction of Term Funds to depository institutions that are eligible to borrow under the primary credit discount window

**Term** 28 days and 84 days

**Eligibility** Investment Grade Securities and Loans

**Auction Freq** Bi-weekly

**Auction Minimum** Fed Funds OIS

Utilization	Offering Size	Award Size	Bid to Cover	Utilization	Lending Rate	Minimum Rate
28 days	125	125	1.33	100%	2.39	2.01
84 days	25	25	2.19	100%	2.75	2.04
	150	150	1.47	100%		

**AAA Downgrade Summary**

	% Balance Downgraded				% Balance Not Downgraded, on Watch				% Balance Not Downgraded, Not on Watch			
	2005	2006	2007	Total	2005	2006	2007	Total	2005	2006	2007	Total
Jumbo	0%	0%	1%	0%	0%	1%	0%	100%	99%	99%	93%	93%
Alpha Fixed	0%	3%	0%	14%	70%	72%	83%	28%	28%	28%	28%	28%
Alpha ARM	0%	2%	0%	9%	48%	42%	90%	51%	51%	57%	57%	57%
Option ARM	0%	2%	0%	8%	9%	20%	92%	90%	90%	80%	80%	80%
Alpha-B	8%	7%	3%	18%	69%	63%	74%	34%	34%	32%	32%	32%
Subprime	7%	42%	48%	8%	5%	9%	84%	52%	52%	43%	43%	43%
<b>Total</b>	<b>3%</b>	<b>17%</b>	<b>11%</b>	<b>8%</b>	<b>24%</b>	<b>28%</b>	<b>89%</b>	<b>59%</b>	<b>59%</b>	<b>60%</b>	<b>60%</b>	<b>60%</b>

**AAA Total Notional Outstanding by Vintage**

	2005	2006	2007	Total	% of Outstanding
<b>Collateral</b>					
Jumbo Fixed	18,622,944,468	28,530,622,900	98,649,011,301	145,802,578,669	11%
Jumbo ARM	52,204,705,838	27,831,602,499	41,594,547,227	121,630,855,564	22%
Alpha Fixed	52,694,829,640	45,544,098,470	81,707,259,039	179,946,187,148	33%
Alpha ARM	47,388,424,468	49,044,964,058	33,108,019,795	129,541,408,322	24%
Option ARM	47,520,602,417	97,076,349,215	66,095,611,875	210,692,563,607	39%
Alpha-B	24,748,724,197	63,248,652,577	48,187,048,187	136,184,424,961	25%
Subprime	81,230,838,591	185,461,926,994	101,404,181,099	368,096,946,684	67%
<b>Total</b>	<b>324,401,069,618</b>	<b>496,738,216,812</b>	<b>470,745,678,524</b>	<b>1,291,884,964,954</b>	<b>33%</b>
<b>Total Downgraded</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>Total</b>	
	8,416,827,438	86,331,162,953	52,274,555,135	147,022,545,526	11%
<b>Total on Watch</b>	27,280,685,257	118,406,451,751	133,728,295,171	279,415,432,179	22%
<b>Total Expected Downgrade</b>	35,617,512,605	204,737,614,704	186,002,850,306	426,357,977,705	33%