

Home Equity NAS IOs

Compared with many agency and nonagency mortgage-backed alternatives, nonaccelerated senior (NAS) interest only (IO) securities backed by fixed-rate home equity collateral benefit from a more stable prepayment profile and, sometimes, better structural features.¹⁰ Although the market for NAS IOs is still somewhat small, we believe that these securities offer good relative value for investors seeking opportunities among short HELs – especially given recent spread-tightening performance among more mainstream home equity ABSs. To further explore the risk/reward profile of this class of securities, we analyze the characteristics of Green Tree Home Improvement Loan Trust 1997-E Class HEA-7 (GT 97-E A7), a 2.6-year weighted average life NAS IO, priced at +80bp/curve.

Home equity NAS IOs can weather severe prepayment shocks and still deliver promised yields.

For investors more familiar with comparable average life agency PAC IOs trading at +500bp-600bp/curve (off 6.5% collateral, for example), GT 97-E A7 may first appear somewhat rich at +80bp/curve. The difference in pricing, however, is a function of the differences in collateral prepayment behavior and, to some extent, bond structure. For any IO, the key valuation questions revolve around how stable the yield remains under various interest-rate scenarios. Based on the Salomon Smith Barney HEL prepayment model, GT 97-E A7 can withstand a market rally of up to 200bp from current levels before it experiences any negative impact on yield. In contrast, most alternative agency structures begin to experience serious deterioration after only 100bp of falling rates. Likewise, given this yield stability, GT 97-E A7 maintains a significant yield advantage across a broad range of scenarios over comparable average life HEL sequentials trading 10bp tighter.

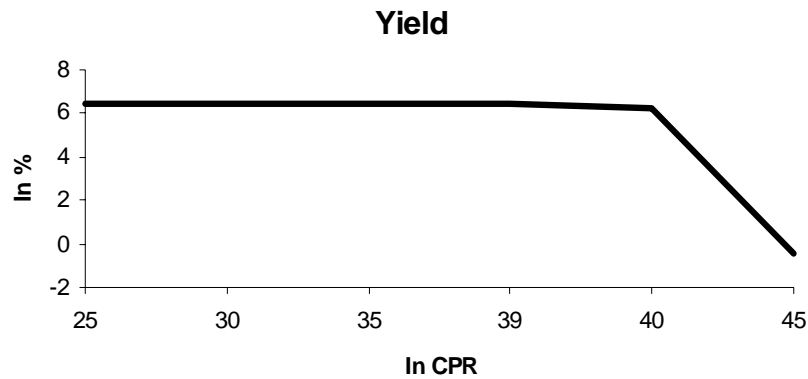
NAS IOs are paid a coupon based on the balance of the NAS bond in a HEL sequential-pay/NAS structure. In the case of GT 97-E A7, the coupon is 8% and is paid during the initial 36-month period, when the NAS bond is scheduled to receive no principal. The IO is paid through excess spread and is well protected against fast prepayments. For the NAS bond to receive any principal before the end of the first 36 months, prepayments would have to be fast enough to first pay off all five of the senior sequential-pay tranches, which make up 76% of the original pool's principal balance. Although it is possible for excess spread to decline as a result of fast prepayments or high losses, the NAS IO has the benefit of mezzanine and subordinated tranches, whose cash flows can be reallocated, if necessary, to cover potential shortfalls.

Given this structure, GT 97-E A7 can withstand a lifetime 39% CPR and still maintain its yield to maturity (see Figure 1). We believe that historical home equity prepayment experience — including February's numbers and what has so far been reported for March — suggests that sustained prepayment speeds of 39% CPR are highly unlikely. However, it is possible that some pools will generate *peak* speeds that hit or exceed 40% CPR for a temporary period. We do not anticipate that such peaks will have substantial negative impact even if sustained for an extended period. To demonstrate how robust the protection is, we have selected several stress cases to highlight. GT 97-E A7 maintains its yield under the following extreme scenarios:

¹⁰ See *Bond Market Roundup: Strategy*, January 23, 1998; February 13, 1998 and April 3, 1998.

1. 40% CPR for the next 30 months, followed by 30% CPR for life;
2. 50% CPR for the next 13 months, followed by 30% CPR for life;
3. 60% CPR for the next 8 months, followed by 30% CPR for life.

Figure 1. GT 97-E A7 Yield Profile



Source: Salomon Brothers Inc./Smith Barney, Inc.

Figure 2. Percentage of ABS Floating-Rate and Fixed-Rate Issuance, 1996 to Year-to-Date

	1996-97	1998
Floating-Rate	44.2%	36.3%
Fixed-Rate	55.8	63.7

ABS Asset-backed security.

Source: Salomon Brothers Inc./Smith Barney Inc.

Figure 3. Year-to-Date ABS Issuance by Sector, 1997-1998 (Dollars in Billions)

	1997	%	1998	%
Auto Loans	\$9.5	24.1	\$8.4	17.0
Credit Cards	10.6	26.8	10.6	21.4
Home Equity Loans	9.8	24.8	15.2	30.7
Manufactured Housing	1.5	3.8	3.9	7.9
Student Loans	2.8	7.1	4.2	8.5
Other	5.3	13.4	7.2	14.5
Total	\$39.5		\$49.5	

N/A Not Applicable. Source: MCM "Corporatetwatch"

Figure 4. Comparison of Quoted Spreads and Static Spreads

	Avg. Life (Yrs.)	Quoted Spread (bp/Curve)	Static Spread (bp)	Difference (bp)
3-Year Bullet	3.00	34	32	2
5-Year Bullet	5.00	40	36	4
Wide Window Auto ^a	1.81	40	38	2
Short Auto ^b	1.06	34	34	0
Wide Window HEL ^c	3.63	90	85	5
Short HEL ^d	1.16	65	65	0

^a Assumes collateral original WAM of 60 months and remaining WAM of 54 months, 9% coupon, 1.3% ABS prepayment speed. ^b Assumes collateral original WAM of 60 months and remaining WAM of 30 months, 9% coupon, 1.3% ABS prepayment speed. ^c Assumes collateral remaining WAM of 174 months, 11% coupon, 20% CPR prepayment speed. ^d Assumes collateral remaining WAM of 120 months, 11% coupon, 20% CPR prepayment speed, security maturity in 30 months. bp Basis points. HEL Home equity loan-backed securities. WAM Weighted average maturity.

Source: Salomon Brothers Inc./Smith Barney Inc.

Figure 5. Fixed-Rate ABS Secondary Market Spreads to Benchmark Treasuries

		AAA			A		
		1 May 98	1 Week	1 Year	1 May 98	1 Week	1 Year
		Spread	Change	SD of 1 Week	Spread	Change	SD of 1 Week
				Spread Changes			Spread Changes
2-Yr.	Auto	34bp	0bp	1.5bp	60bp	0bp	1.1bp
	Credit Card	32	0	1.3	52	0	0.9
	Home Equity	53	0	1.7	N/A		
	Man. Housing	53	0	1.7	N/A		
3-Yr.	Wholesale Auto	34	0	1.3	53	0	1.1
	Credit Card	34	0	1.3	53	0	1.1
	Home Equity	65	0	1.6	N/A		
	Man. Housing	55	0	2.3	N/A		
5-Yr.	Wholesale Auto	40	0	N/A	N/A		
	Credit Card	40	0	1.8	67	0	1.7
	Home Equity	90	0	1.6	N/A		
	Man. Housing	67	0	2.0	N/A		
7-Yr.	Wholesale Auto	46	0	N/A	N/A		
	Credit Card	46	0	N/A	70	0	N/A
	Home Equity	107	0	N/A	N/A		
	Man. Housing	83	0	N/A	N/A		
10-Yr.	Wholesale Auto	57	0	N/A	76	0	
	Credit Card	57	0	1.7	76	0	1.6
	Home Equity	125	0	2.4	N/A		
	Man. Housing	100	0	1.8	N/A		

bp Basis points. SD Standard deviation.

Source: Salomon Brothers Inc./Smith Barney Inc.

Figure 6. Floating-Rate ABS Secondary Market Discount Margins (Over One-Month LIBOR)

		AAA			A		
		1 May 98	1 Week	1 Year	1 May 98	1 Week	1 Year
		DM	Change	SD of 1 Week	DM	Change	SD of 1 Week
				Spread Changes			Spread Changes
2-Yr.	Auto	4bp	0bp	0.5bp	20bp	0bp	0.7bp
	Credit Card	4	0	0.5	20	0	0.7
	Home Equity	13	0	0.4	35	0	0.4
3-Yr.	Wholesale Auto	5	0	0.5	23	0	0.7
	Credit Card	5	0	0.5	23	0	0.7
	Home Equity	14	0	0.4	37	0	0.3
5-Yr.	Wholesale Auto	9	-0.5	N/A	29	0	N/A
	Credit Card	9	-0.5	0.6	29	0	0.7
	Home Equity	16	0	0.3	36	0	0.4
7-Yr.	Wholesale Auto	12	-0.5	N/A	33	0	N/A
	Credit Card	12	-0.5	0.6	33	0	0.6
10-Yr.	Wholesale Auto	17	0	N/A	38	0	N/A
	Credit Card	17	0	N/A	38	0	N/A

bp Basis points. LIBOR London Interbank Offered Rate. SD Standard deviation.

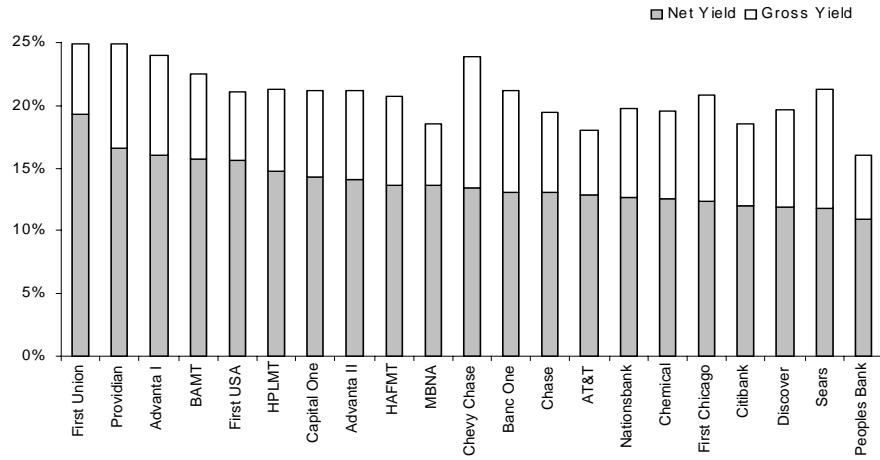
Source: Salomon Brothers Inc./Smith Barney Inc.

Figure 7. ABSs — Representative Secondary Trading Levels

Floating-Rate						
Issue	Avg. Life	DM	Price	Cap.		
FUSAM 95-1 A	0.9Yrs	1	100-03+	None		
ADVCC 95-A A	1.9	6	100-07	None		
FUSAM 95-2 A	3.9	8	100-18	None		
CCIMT 96-5 A	5.4	7	100-05	None		
MBNA 96-B A	7.9	12	100-28+	None		
Fixed-Rate						
Issue	Coupon	Avg.-Life	Spread	Price	Yield	Static Spread
FORD 95-B A	5.900	0.6@ 1.5 ABSYrs	40bp	100-02+	5.814@YTC	36bp
UAC 96-B A	6.450	1.2@ 1.6 ABS	52	100-10	6.102	51
PRAT 96-4 A4	6.400	1.4@1.6 ABS	34	100-24+	5.905	34
CCIMT 94-3 A	6.800	0.9	32	100-27+	5.836	31
MBNA 95-D A	6.050	2.1	32	100-12	5.910	32
CHEMT 95-3 A	6.230	4.3	47	100-19	6.146	47
CCIMT 94-2 A	7.250	7.9	55	105-26	6.316	55

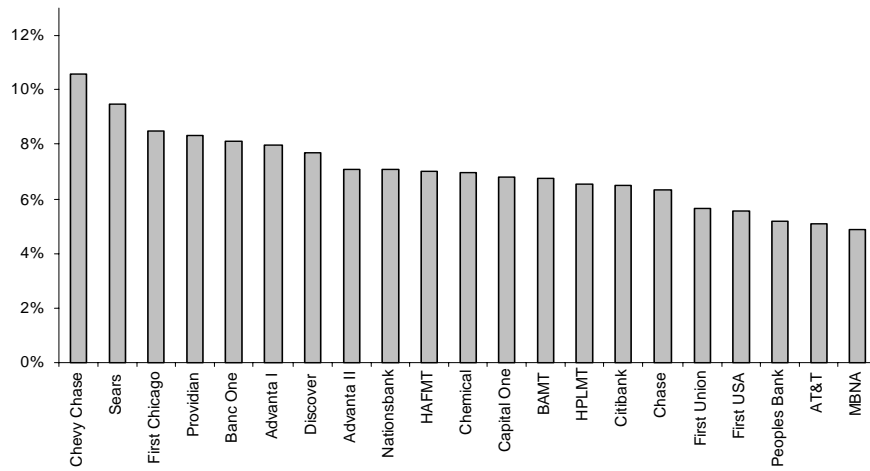
Source: Salomon Brothers Inc./Smith Barney Inc.

Figure 8. Credit Card Master Trust Gross and Net Portfolio Yields Reported for March 98



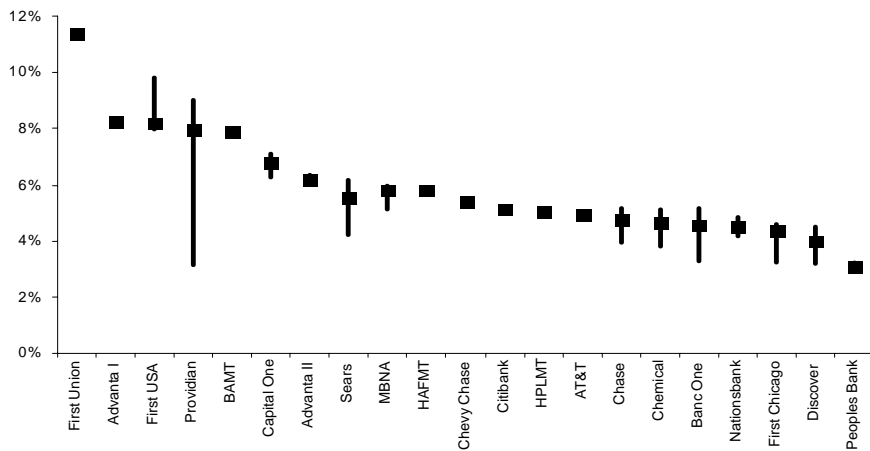
Source: Master Trust 8-Ks, Bloomberg, Bloomberg Credit Card Reports

Figure 9. Credit Card Master Trust Defaults Reported for March 98



Source: Master Trust 8-Ks, Bloomberg, Bloomberg Credit Card Reports

Figure 10. Credit Card Master Trust Excess Spreads Reported for March 98



Source: Master Trust 8-Ks, Bloomberg, Bloomberg Credit Card Reports.

Figure 11. Recent Issuance

Date	Issuer	Asset Type	Class	Size Mils.	Credit Enhancement	WAL	Pricing Speed	Spread
4/30/98	BA Master Credit Card Trust 1998-B	CC	A B	648.75 41.25	Sr/Sub	6.00 6.10	N/A	1ML+12 1ML+28
4/22/98	Green Tree Financial Corporation 1998-3	MH	A-1 A-2 A-3 A-4 A-5 A-6 M-1 B-1 B-2	21.00 28.00 60.00 30.00 105.00 178.00 35.00 22.50 20.00	Sr/Mezz/Sub	0.40 1.00 2.00 3.00 5.00 12.75 10.60 6.80 15.20	150% MHP	5ML-6 49/6.375 4/99 50/6.75 4/00 56/6.25 4/01 68/5.50 3/03 115/6.125 8/07 125/6.125 8/07 170/7.50 2/05 250/6.125 8/07
4/21/98	Fingerhut Master Trust 1998-1	CC	A B	337.50 51.14	Sr/Sub	2.97 3.70	7.2% MPR	53/6.25 4/01 73/6.125 12/01
4/21/98	Fingerhut Master Trust 1998-2	CC	A B	337.50 51.14	Sr/Sub	5.00 5.70	7.2% MPR	68/5yr 93/5.75 8/03
4/21/98	Harley-Davidson Eaglemark 1998-1	O	A-1 A-2 CTFS	100.00 49.60 10.40	Sr/Sub	0.92 2.60 3.21	2% ABS	12ML+2 41/5.75 11/00 87/6.625 7/01
4/21/98	Norwest Asset Acceptance 1998-HE1	HEL	A	219.70	100% AMBAC	2.74		1ML+18
4/16/98	EQCC Home Equity Loan Trust 1998-1	HEL	A-1 A-2 A-3 A-4 A-5 A-6 A-7 A-1A	251.36 49.11 145.55 64.60 57.50 52.74 47.46 70.50	100% AMBAC	0.95 2.05 3.10 5.00 9.49 5.04 7.84 2.96	N/A	50/Trsy 53/Trsy 64/Trsy 90/Trsy 125/Trsy 69/Trsy 80/Trsy 1ML+16
4/15/98	First Security Auto Grantor Trust 1998-A	AL	A B	478.12 22.53	Sr/Sub	1.62 1.62	1.5% ABS	48/5.625 11/99 63/5.625 11/99
4/13/98	Brazos Student Finance Corp 1998-A	SL	A-1 A-2 B-1	118.00 269.50 50.00	Sr/Sub	2.08 5.78 10.11	7% CPR	91D T-Bills+89 91D T-Bills+96 1ML+43
4/9/98	Green Tree Floorplan Receivables Master Trust 1998-1	DF	A B	400.40 20.48	Sr/Sub	2.91 2.91	N/A	1ML+5 (7DM) 1ML+27
4/9/98	Hyundai Auto Receivables Trust 1998-A	AL	A-1 A-2	220.00 80.15	100% MBIA	0.99 2.83	1.5% ABS	12ML+8 60/3yr
4/8/98	AIC Premium Finance Master Trust 1998-1	IP	A B	200.00 6.30	Sr/Sub	1.67 1.92	N/A	12ML+9 12ML+30
4/8/98	Chase Manhattan Auto Owner Trust 1998-B	AL	A-1 A-2 A-3 A-4 B	250.00 200.00 321.00 282.00 32.60	Sr/Sub	0.37 1.00 1.85 3.13 3.58	1.5% ABS	4ML-7 12ML+2 37/5.50 2/00 40/6.50 5/01 60/5.875 11/01
4/7/98	Advanta Equipment Receivables 1998-1	EL	A-1 A-2 A-3 A-4 B C	69.90 189.90 23.10 45.15 18.82 9.80	Sr/Sub	1.01 2.01 3.16 3.69 1.92 1.65	6% CPR	12ML+7 45/2yr 48/6.625 6/01 52/6.125 12/01 74/2yr 112.5/5.625 12/99
4/3/98	Discover Card Master Trust 1998-4	CC	A B	500.00 26.30	Sr/Sub	3.00 3.10	15.3% MPR	38/3yr 55/3yr
4/2/98	CitiBank Credit Card Master Trust 1998-6	CC	A B	750.00 48.00	Sr/Sub	3.00 3.00	19.9% MPR	33/3yr 48/3yr
3/26/98	Green Tree Home Equity Loan Trust 1998-A	HEL	A-1A A-1B A-1 A-2 A-3 A-4 A-5 IO M-1 M-2 B-1 B-2 HIL A-1	15.00 115.00 95.00 21.00 55.00 18.00 16.00 20.00 24.00 14.00 16.00 11.00 41.25	Sr/Mezz/Sub	2.02 2.56 1.00 2.02 3.00 4.86 4.57 2.96 7.50 7.71 4.24 7.49 0.75	30% CPR 5%-25% CPR 12 Month Ramp	64/2yr 1ML+22 60/6.25 3/99 63/2yr 74/5.375 2/01 99/5.50 1/03 82/5.875 9/02 N/A 145/6.50 8/05 170/5.875 11/05 225/6.50 5/02 290/6.50 8/05 57/5.875 1/99

ABS Asset-backed securities. AD Auto dealer floorplan. AIR Airplane leases. AL Auto loan. ALE Automobile lease. BL Boat Loan. CA Controlled amortization. CC Credit card. CCA Cash collateral account. CHC Charge card. CIA Collateral invested amount. CON Consumer loans. DF Dealer floorplan. EL Equipment loan. FEL Farm equipment loan. FF Fed funds. Whole 1st & 2nd liens. HEL Home equity. HIL Home Improvement loan. MB Mortgage backed. Mezz. Mezzanine. MH Manufactured housing. N/A Not available. O Other. OC Overcollateralized. RIC Retail installment contracts. RV Recreational vehicle. BA Small business association loans. SL Student loan. TL Truck loan. Sub. Subordinate. UBA Utility bill allocations. WAL Weighted average life. WHL Wholesale inventory. WI When issued.

Source: MCM "Corporatewatch."

MORTGAGES