

Bloomberg terminals have long been the standard in the financial services industry. Most attribute this longevity to Bloomberg's commitment to product innovation and enhancement. Below, I will highlight a recent improvement made in the Mortgage Backed Securities (MBS) arena. For the longest time, the Bloomberg Yield Table (YT) has been considered the industry benchmark when estimating mortgage yields.

A common question is: **Where do these prepayment estimates come from?**

The YT screen relies on prepayment estimates from up to 9 primary broker dealers and computes the median of those inputs. It is possible to view each individual contributor on a **VALL** screen. The shortcomings of this method are likely obvious: too few contributors, wide ranging contributions, and stale data.

Good news! What was originally the Barclays Prepayment Model has been incorporated into Bloomberg and rebranded as the Bloomberg Agency MBS Index Prepayment Model (BAM). **BAM utilizes a model (instead of contributors) to estimate mortgage yields.** Simplistically, BAM assumes prepayments come from five subcomponents:

- Rate/term refinancing
- Housing turnover
- Cash-out refinancing
- Curtailments (all voluntary prepayments)
- Delinquency buyouts (involuntary prepayment)

Below you will find two yield tables for a Fannie MBS FN AS7542, one is the traditional YT page (Fig 1) and one is YT BAM (Fig 2).

Bloomberg YT Page - Figure 1

FN AS7542 Mtg												Actions			Settings			Yield Table					
FNCL 3.5 M												3.904(304)43			CUSIP 3138WHLY6			Pool Level			As of 01/2020		
1/2020	143P	8.6C	B	Traits	CL, 30/360	Coupon	3.50%	Maturity	7/1/46	FL	7%	2016	100%										
3Mo	155	9.3	--	06/01/2016	81,915,092	LTV/HLTV	74/61	Accrual	2/1-2/29	MI	6%	2015	0%										
6Mo	168	10.1	--	1/1/2020	56,733,126	MAXLS	110,000	Next Pay	3/25/20	TX	6%												
12Mo	162	9.7	--	Factor	0.69258454	WAOLS	100,122			IL	6%												
Life	197	7.9	--	# Loans	630																		
}) Price-to-Yield																							
Settle	02/12/20			+300 MED		+200 MED		+100 MED		0 MED		-100 MED		-200 MED		-300 MED							
Vary	0			93 PSA		102 PSA		127 PSA		254 PSA		465 PSA		625 PSA		683 PSA							
Price	106-12			2.6659		2.6364		2.5521		2.0764		1.1418		0.3191		-0.0067							
Avg Life				9.32		8.95		8.04		5.06		2.89		2.09		1.88							
Mod Duration				7.62		7.38		6.75		4.56		2.78		2.07		1.88							
Prin Win	Date			3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45							
I Spread				106		104		98		63		-28		-112		-145							
Jan20	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	GOVT(1)	6M	1Y	2Y	3Y	5Y	7Y	10Y	30Y			
143P	159	162	223	164	156	100	163	155	251	144	121	10:58	1.57	1.51	1.44	1.42	1.44	1.54	1.62	2.07			
8.6C	9.5	9.7	13.4	9.9	9.3	6.0	9.8	9.3	15.0	8.6	7.3	Disc	30/360			5Y	99-21+	7Y	99-23+				

Bloomberg YT BAM Page - Figure 2

FN AS7542 Mtge				Actions		Settings				Yield Table										
FNCL 3.5 M				3.904(304)43		CUSIP 3138WHL6		Pool Level		As of 01/2020										
1/2020	143P	8.6C	B	Traits	CL, 30/360	Coupon	3.50%	Maturity	7/1/46	FL	7%	2016	100%							
3Mo	155	9.3	--	06/01/2016	81,915,092	LTV/HLTV	74/61	Accrual	2/1-2/29	MI	6%	2015	0%							
6Mo	168	10.1	--	1/1/2020	56,733,126	MAXLS	110,000	Next Pay	3/25/20	TX	6%									
12Mo	162	9.7	--	Factor	0.69258454	WAOLS	100,122			IL	6%									
Life	197	7.9	--	# Loans	630															
1) Price-to-Yield																				
Settle	02/12/20	7.6 CPR		8.2 CPR		9.3 CPR		11.0 CPR		16.5 CPR		23.5 CPR		29.7 CPR						
Indices		C+300		C+200		C+100		C+0		C-100		C-200		C-300						
Vary	0	100% BAM		100% BAM		100% BAM		100% BAM		100% BAM		100% BAM		100% BAM						
Price	106-12	2.5578		2.5202		2.4524		2.3498		1.9693		1.4351		0.9240						
Avg Life		8.07		7.72		7.16		6.45		4.69		3.38		2.64						
Mod Duration		6.78		6.53		6.13		5.60		4.27		3.22		2.60						
Prin Win	Date	3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45						
I Spread		99		96		91		84		53		1		-50						
Jan20	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	GOVT(1)	6M	1Y	2Y	3Y	5Y	7Y	10Y	30Y
143P	159	162	223	164	156	100	163	155	251	144	121	10:59	1.57	1.51	1.44	1.42	1.44	1.54	1.62	2.07
8.6C	9.5	9.7	13.4	9.9	9.3	6.0	9.8	9.3	15.0	8.6	7.3	Disc	30/360				5Y	99-21+	7Y	99-24

The output of the two models varies significantly (2.08% yield vs 2.35% yield). The primary reason for this is the LOW LOAN BALANCE feature on this security. The traditional YT page does not take this into account while YT BAM does include this collateral characteristic in their analysis.

It is also possible to incorporate user-defined prepayment expectations by building vectors (Fig 3). The blue represents the base case BAM result (10.9cpr). Vector "100 V3" in red has user defined speeds of 20cpr for 6 months then 15cpr for the next 6 months, ultimately prepaying at 10cpr for the rest of the bond's life. The "100 V3" vector results align with the base-case BAM, illustrating the robust scenarios contained in the BAM model. There is not necessarily a correct way to incorporate vectors. Their use is the ability to stress test potential outcomes.

Bloomberg YT BAM Page with User-Defined Vector - Figure 3

FN AS7542 Mtge				Actions		Settings				Yield Table										
FNCL 3.5 M				3.904(304)43		CUSIP 3138WHL6		Pool Level		As of 01/2020										
1/2020	143P	8.6C	B	Traits	CL, 30/360	Coupon	3.50%	Maturity	7/1/46	FL	7%	2016	100%							
3Mo	155	9.3	--	06/01/2016	81,915,092	LTV/HLTV	74/61	Accrual	2/1-2/29	MI	6%	2015	0%							
6Mo	168	10.1	--	1/1/2020	56,733,126	MAXLS	110,000	Next Pay	3/25/20	TX	6%									
12Mo	162	9.7	--	Factor	0.69258454	WAOLS	100,122			IL	6%									
Life	197	7.9	--	# Loans	630															
1) Price-to-Yield																				
Settle	02/12/20	7.6 CPR		8.2 CPR		9.3 CPR		10.9 CPR		CF		23.4 CPR		29.6 CPR						
Indices		C+300		C+200		C+100		C+0		CF		C-200		C-300						
Vary	0	100% BAM		100% BAM		100% BAM		100% BAM		100 V3		100% BAM		100% BAM						
Price	106-12	2.5581		2.5209		2.4535		2.3528		2.3338		1.4460		0.9309						
Avg Life		8.07		7.72		7.17		6.47		6.39		3.40		2.65						
Mod Duration		6.78		6.53		6.13		5.62		5.55		3.23		2.61						
Prin Win	Date	3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45		3/20-5/45						
I Spread		96		94		89		81		80		0		-52						
Jan20	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	GOVT(1)	6M	1Y	2Y	3Y	5Y	7Y	10Y	30Y
143P	159	162	223	164	156	100	163	155	251	144	121	16:01	1.57	1.53	1.46	1.45	1.47	1.56	1.65	2.10
8.6C	9.5	9.7	13.4	9.9	9.3	6.0	9.8	9.3	15.0	8.6	7.3	Disc	30/360				5Y	99-18	7Y	101-07+



Using a diverse and varied approach when analyzing mortgage securities is important given how different your results can be. With BAM, this is now much easier than before. If you would like to discuss this more, please contact your CMG Investment Representative.

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