# **FMS Seminar**

# Coping with New Investment Guidelines

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# **QRM**

#### Qualified Residential Mortgage

- Documentation and verification of financial resources relied upon to qualify the mortgagor;
- Standards with respect to:
- Residual income of the mortgagor after all monthly obligations;
- The ratio of the housing payments of the mortgagor to the monthly income of the mortgagor;
- The ratio of total monthly installment payments of the mortgagor to the income of the mortgagor;
- Mitigation of the potential for payment shock on adjustable rate mortgages through product features and underwriting standards;
- Mortgage guarantee insurance or other types of insurance or credit enhancement obtained at the time of origination, to the extent such insurance or credit enhancement reduces the risk of default; and
- The prohibition or restriction of the use of balloon payments, negative amortization, prepayment penalties, interest-only payments and other features that have been demonstrated to exhibit a higher risk of borrower default.
- Loan issuance is low but deposits continue to grow forcing banks to make sound investments in a low-interest environment.

# What the OCC and FDIC are Expecting in Terms of Due-Diligence as it Pertains to Investing.

	Key factors	Corporate bonds	government general obligations	Revenue bonds	Structured securities
$\Longrightarrow$	Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	X	Х	Х	X
	quality		.,	.,	
	quality	X	X	X	X
	analytics, as appropriate for the particular security  Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, di-	X	X	Х	Х
	versity of revenue sources, taxing authority, and management experience Understand local demographics/economics. Consider unemployment data,		X		,
	local employers, income indices, and home values		X	X	
	and nature of project			X	
	structure				X
	Assess the position in the cash flow waterfall				X

#### **MBS** Securities

 Low treasury rates are enabling refinancing opportunities for those that can

Those that are unable to refinance go into foreclosure

The agencies are forced to pay off bond investors

Both of these factors result in higher prepay speeds

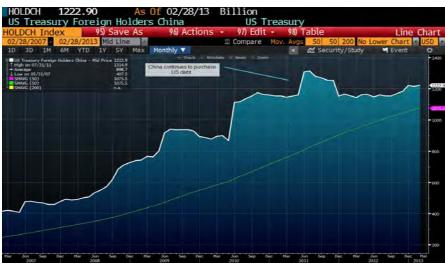
#### **MBS Securities**

Key factors	Corporate bonds	government general obligations	Revenue bonds	Structured securities
Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	х	X	х	X
quality	X	X	X	X
Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security  Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, di-	х	X	x	х
versity of revenue sources, taxing authority, and management experience		X		
Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values		X	Х	
service and debt coverage ratio, credit enhancement, legal covenants, and nature of project			X	
Understand the class or tranche and its relative position in the securitization structure  Assess the position in the cash flow waterfall	namananana namananananan			X X

Is a bond going to shorten of extend too much to be in a bank portfolio? How is the current economic and interest rate environment going to affect MBS?

# Despite an Improving Economy, Rates are Even Lower than Last Year.





Foreign Central Banks Continue to Purchase US Debt.

Fed has Repeatedly said They Will Keep Rates Low

This Results in Low Mortgage Rates Enticing Borrowers to Refinance

Those that Can't Refinance Face Foreclosure as ARM loans Reset

This Results in Higher CPR Speeds

Investments in Agency Backed MBS Requires High Scrutiny

# Foreclosure Rate is Still High

This Chart represents the Mortgage Bankers Association Foreclosure/Pct of Total Loans



# All subprime loans are at 20 % delinquency rate

 According to the MBA, Subprime delinquencies are falling although still high compared to pre-crisis levels.



### Fannie Mae 30 Year Collateral CPR

							Aı	nounts	in \$ Billions				Ma	r 2013				Histo New FN	rical C Disclo	
Coupon	Orig. Year	WAC	WAM	Age #	# of Pools	Factor	Cur. Bal Ma	ır 2013	Amt. in CMO	Float	1mo % CPR Chg.	1mo PSA	1mo CPR	3mo CPR	6mo CPR 1	2mo CPR Life C	:PR	Feb Ja	in Der	c Nov
3.50	2013	4.01	355	2	1619	0.996	20.511	7.996	0.458	20.054	19.2	309	1.3	1.4	-	-	0.9	1.1 0	.5	
	2012	4.01	346	10	9769	0.882	205.358	0.277	6.450	198.908	-13.7	587	11.8	14.4	17.1	17.7 1	1.1	13.7 17	.6 18.0	) 18.7
	2011	4.02	338	18	1274	0.703	35.408	0.082	0.720	34.688	-22.7	527	19.1	25.1	29.7	26.2 2	0.6	24.7 30	.9 34.4	4 35.9
	2010	4.12	324	29	660	0.644	14.989	0.000	0.917	14.072	-9.4	412	23.9	27.0	30.2	26.1 1	5,3	26.3 30	.6 35.2	2 33.4
	2009	4.01	303	46	130	0.682	0.863	0.000	0.003	0.860	-1.4	350	21.0	22.2	22.8	18.7	8.0	21.3 24	.4 25.8	3 23.1
	2008	4.02	298	55	24	0.681	0.056	0.000	0.000	0.056	52.1	536	32.2	27.1	21.2	16.0	7.3	21.2 27	.4 12.1	1 17.8
	2004	4.11	244	107	7	0.575	0.041	0.000	0.000	0.041	35.4	283	17.0	20.9	24.2	19.5 1	0.4	12.5 25	.1 28.3	3 24.5
	ALL	4.02	345	12	13504	0.844	277.243	8.355	8.548	268.695	-17.5	542	12.8	16.5	20.2	21.6 1	2.2	15.5 20	.2 21.7	7 22.6
4.00	2013	4.45	353	2	479	0.995	2.653	0.823	0.126	2.527	127.6	434	1.9	0.8	-	// -	1.3	0.8 0	.7 ·	
	2012	4.47	344	11	6111	0.886	66.259	0.014	12.051	54.208	4.1	582	13.3	13.5	14.3	14.0	9.9	12.8 14	.5 14.7	7 14.0
	2011	4.47	335	21	4146	0.689	81.068	0.011	4.383	76.685	-3.0	602	25.0	27.1	28,3	24.4 1	9.1	25.8 30	.5 30.8	3 28.9
	2010	4.49	324	30	3194	0.570	71.920	0.006	3.772	68.148	-2.3	505	29.6	31.3	33.1	29.2 1	9.2	30.3 33	.8 35.9	9 34.4
	2009	4.56	305	46	1848	0.418	49.701	0.000	0.968	48.733	-3.7	658	39.5	41.2	42.2	38.5 1	9.7	41.0 42	.9 44.4	4 41.9
	2008	4.60	289	58	36	0.444	0.302	0.000	0.001	0.301	-17.7	497	29.8	36.5	38,7	35.0 1	9.3	36.2 42	.8 36.8	3 42.9
	2007	4.92	279	71	15	0.370	0.123	0.000	0.000	0.123	4.1	497	29.8	30.1	33.0	32.5 2	1.8	28.7 32	.1 35.7	7 32.2
	2006	4.81	271	80	16	0.434	0.109	0.000	0.000	0.109	69.9	891	53.5	40.5	38.1	34.2 2	0.5	31.5 34	.1 30.3	3 38.8
	2005	4.80	255	96	23	0.451	0.173	0.000	0.079	0.093	-10.9				33.8	28.4 1	3.2	43.8 29	.0 33.3	3 31.4
	2004	4.83	243	106	40	0.368	0.100	0.000	0.002	0.098	Prepaysp		00.0		even	34.9 2	0.9	31.0 31	.1 37.1	1 46.1
	2003	4.77	230	116	117	0.326	0.240	0.000	0.032	0.208	Įģr <sub>7</sub> 0	collatera	lissued	ın 20 <u>12</u> .	31. <b>2</b>	29.4 1	2.5	26.0 38	.2 28.9	33.4

Even relatively low coupon collateral continues to see high prepay speeds. What is this due to ?

## There is a Silver Lining

• According to Realty Trac Inc., home foreclosure filings are starting to fall. This may also be a reflection of fewer loans being originated.



#### Pre-trade Analysis

- -Collateral Composition
- -Historic Prepays on the Bond
- -How to prepays affect the cash flows of this bond?
- -Where should this bond trade?
- -Is it too volatile for my portfolio?

### There are bonds that have lower prepay speeds.

Always ask for bonds with a low prepay history.



# Understanding What Backs the Collateral Can Help Avoid high prepay speeds going forward.

• Make sure that you are looking at bonds where loans are in states with stabilized housing markets.

327)26 FNCL	E NI			nposition
	5 N	95) Buy	96) Sell	
V		Group 3	3: 30YR/5.0/FNMA	/G3 💌
Apr'13	Dec '11	Loans that come from e	rractic housing markets	
nics (04/13)	(12/11)			Dec '11
14.2	14.3	FNCL	100.0	100.0
9.4	9.1			
5.2	4.9			
4.5	4.6	Origination Year		
4.2	4.3	2011	52.6	49.5
62.5	62.8	2010	42.5	44.7
al Count		2009	4.9	5.8
54	54			
tion Term		Amortization Type	:	
100.0	100.0	Level FRM	100.00	100.00
0.0	0.0	ARM	0.00	0.00
0.0	0.0	Non-Level FRM	0.00	0.00
(Current)		Loan Size (\$M)		
•	5.25 - 5.32		3.8 (100.0%) Orig	Min/Max
				0.0/150.0
				,
	Apr'13 hics (04/13) 14.2 9.4 5.2 4.5 4.2 62.5 al Count 54 ation Term 100.0 0.0 0.0 s (Current) 2 - 317 WAC 5 7 - 328 8 - 337	Apr'13 Dec '11 hics (04/13) (12/11)  14.2 14.3 9.4 9.1 5.2 4.9 4.5 4.6 4.2 4.3 62.5 62.8  al Count  54 54 hition Term  100.0 100.0 0.0 0.0 0.0 0.0 s (Current) 2 - 317 WAC 5.25 - 5.32 7 - 328 5.32 - 5.36 3 - 337 5.36 - 5.42	Apr'13 Dec '11 hics (04/13) (12/11) 14.2 14.3 FNCI 9.4 9.1 5.2 4.9 4.5 4.6 Origination Year 4.2 4.3 2011 62.5 62.8 2010 al Count 100.0 100.0 Level FRM 0.0 0.0 0.0 Non-Level FRM 100.0 5 (Current) 2 - 317 WAC 5.25 - 5.32 WA Orig 123 7 - 328 5.32 - 5.36 WA Curr 118 8 - 337 5.36 - 5.42 Avg Orig 126 7 - 342 5.42 - 5.67 Avg Curr 118	Apr'13 Dec '11 hics (04/13) (12/11)

# Using Pre-Pay Models and Historical Speeds to Measure Performance



### Investing in the Municipal Bond Market

	Key factors	Corporate bonds	government general obligations	Revenue bonds	Structured securities
$\Longrightarrow$	Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality  Confirm risk of default is low and consistent with bonds of similar credit	Х	Х	х	X
$\Longrightarrow$	quality	Х	Х	X	х
$\Rightarrow$	Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security  Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, di-	Х	X	X	х
	versity of revenue sources, taxing authority, and management experience Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values	(1914) Harrison	X	······································	
	Assess the source and strength of revenue structure for municipal authorities. Consider obligor's financial condition and reserve levels, annual debt service and debt coverage ratio, credit enhancement, legal covenants, and nature of project		۸	x	
$\Rightarrow$	Understand the class or tranche and its relative position in the securitization structure  Assess the position in the cash flow waterfall				X X

#### Financial Analysis of the Issuer

"A-1"

#### TOWNSHIP OF BRIDGEWATER

#### CURRENT FUND

#### STATEMENTS OF OPERATIONS AND CHANGES IN FUND BALANCE - REGULATORY BASIS

	REF.	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2010
REVENUE AND OTHER INCOME REALIZED			
Fund Balance Utilized Miscellaneous Revenue Anticipated Receipts From Delinquent Taxes Receipts From Current Taxes Non-Budget Revenue Other Credits to Income:	A-1 :A-2 A-2 A-2 A-2 A-2	\$ 3,116,859.31 13,566,701.87 1,157,959.74 163,523,102.75 410,006.72	\$ 3,584,732.98 14,499,963.24 1,554,249.75 161,788,216.45 323,134.17
Unexpended Balance of Appropriation Reserves Grants Appropriated Canceled Accounts Payable Canceled Reserves Canceled Accounts Receivable	A-14 A-23 A-11	600,364.07 128,251.55 54,219.59 907.78 1,500.00	525,061.81 87,074.00 25,846.65 1,942.19
TOTAL REVENUE AND OTHER INCOME		\$ 182,559,873.38	\$ 182,390,221.24
EXPENDITURES			
Budget Appropriations Special Fire District Taxes County Taxes Regional School District Taxes Municipal Open Space Taxes	A-3 A-22 A-20 A-21	\$ 36,019,862.98 2,199,096.00 32,798,260.70 109,277,842.74	\$ 36,045,498.97 2,167,745.00 34,764,775.45 106,302,430.34 314.58
Grants Receivable Canceled Interfunds Advanced Prepaid Fire District	A-25	129,743.86 2,998.33	87,074.00 31,263.23 1,500.00
Refund of Prior Year Revenue TOTAL EXPENDITURES	A-4	\$ 9,562.82 180,437,367.43	12,418.53 \$ 179,413,020.10
Excess in Revenue		\$ 2,122,505.95	\$ 2,977,201 14

Financial Statements provide intelligence on credit risk

### Financial Analysis Within a State.

Download Limited To 100 Tickers

Selected Screening Criteria
Sector = GO and Fund Type = General and State = New Jersey

Muni Issuer Screenin

Muni Issuer Screenin

Financial Analysis by county, town,
city. Do a comparable analysis.

Name	Ticker	Туре	Current Fiscal Year	Tot GF Rev	Net Chg Fd Bal	Tot Assets	GF Tot Liab	Total Operat Expens
State of New Jersey	STONJ1 US Equity	GEN	2012	30321.62	-860.73	5105.11	2204.38	32665
City of Newark NJ	9982MF US Equity	GEN	2010	879.53	25.76	550.26	115.32	853
County of Essex NJ	10176MF US Equity	GEN	2011	777.92	4.28	157.34	10.40	773
City of Jersey City NJ	9610MF US Equity	GEN	2011	709.07	12.59	97.54	29.61	709
County of Monmouth NJ	10216MF US Equity	GEN	2011	564.48	36.48	199.86	39.58	528
County of Bergen NJ	13773MF US Equity	GEN	2011	519.82	19.87	110.76	24.89	499
County of Hudson NJ	9432MF US Equity	GEN	2011	513.68	27.58	120.67	15.55	486
County of Union NJ	14112MF US Equity	GEN	2011	510.70	14.19	97.34	71.86	496
County of Passaic NJ	10232MF US Equity	GEN	2011	455.15	18.92	97.66	16.90	441
County of Middlesex NJ	9433MF US Equity	GEN	2011	429.76	6.69	116.34	1.57	423
City of Atlantic City NJ	12855MF US Equity	GEN	2011	424.95	0.24	97.99	19.01	424
County of Camden NJ	10157MF US Equity	GEN	2011	386.89	10.32	169.94	46.99	376
County of Ocean NJ	10226MF US Equity	GEN	2011	383.68	17.67	98.38	4.55	366
Township of Edison NJ	14340MF US Equity	GEN	2011	373.18	8.39	38.73	5.65	370
County of Morris NJ	9434MF US Equity	GEN	2011	357.53	22.19	116.84	10.55	335
Township of Woodbridge NJ	9636MF US Equity	GEN	2012	343.06	6.30	25.39	5,55	336
County of Mercer NJ	13991MF US Equity	GEN	2011	326.69	11.53	97.13	10.64	315
City of Paterson NJ	10011MF US Equity	GEN	2011	324.74	0,00	50,54	20,98	330
Township of Cherry Hill NJ	10361MF US Equity	GEN	2012	309.82	8.90	21,31	2.38	300
City of Elizabeth NJ	9608MF US Equity	GEN	2011	309.56	19.69	96.47	21.77	289
	77.001.2 (1.2 )	22.	11.1	20120	12.2	2722	2722	723

#### **Demographics**

95) Filter Regions 96) Detailed Sear	ch	Page 1/3 BLS Employment by Superse	ect
Employment Data as of 2/2013	Region M	SAs Change 1 Year	r
1) Total Nonfarm	% Chg	4) Total Private % (	Cŀ
11) Edison, NJ Metropolitan Division	2.0%	26) Edison, NJ Metropolitan Division	2
12) Bergen-Hudson-Passaic, NJ	1.9%	27) Bergen-Hudson-Passaic, NJ	1
13) Trenton-Ewing, NJ	1.5%	28) Trenton-Eventor data is one way to understand	1
14) Camden, NJ Metropolitan Division	1.3%	29) Camden, Nocal demographics of areas you are thinking of investing in.	1
15) Newark-Union, NJ-PA Metropolita	0.8%	30) Newark-Union, NJ-PA Metropolita	1
2) Government		5) Service Providing	
16) Bergen-Hudson-Passaic, NJ	3.9%	31) Bergen-Hudson-Passaic, NJ	2
17) Trenton-Ewing, NJ	2.1%	32) Edison, NJ Metropolitan Division	2
18) Camden, NJ Metropolitan Division	1.4%		2
19) Newark-Union, NJ-PA Metropolita	-0.2%	34) Trenton-Ewing, NJ	1
20) Edison, NJ Metropolitan Division	0.1%	35) Newark-Union, NJ-PA Metropolita	1
3) Federal Government		6) Professional and Business Services	
21) Camden, NJ Metropolitan Division	-3.5%	36) Camden, NJ Metropolitan Division	5
22) Edison, NJ Metropolitan Division	-3.1%		3
23) Newark-Union, NJ-PA Metropolita		38) Newark-Union, NJ-PA Metropolita	2
24) Bergen-Hudson-Passaic, NJ	-1.1%	39) Bergen-Hudson-Passaic, NJ	2
25) Atlantic City, NJ	0.0%	40) Trenton-Ewing, NJ	0
51) Employment by Supersector 52) Employment by K	ey MSA	<u> </u>	

Understanding local demographics is vital to assessing underlying financial strength of municipalities. This includes employment, housing, median income.

### Using Price Transparency to Assure Better Execution

70	)31	304F	Muni					MSRB	Trade	History:	Individual	Trades
Is	sue	er	PATERSON	I NJ						CUSI	P 703130	4F8
Is	sue	9	REF					Transparency on	where bond transacted.	trades are being		
Co	oup	on	3.10000	Maturity	03	/15/21	Is	sued 03/28,		State	NJ	
			/ /-						\			
Tr	ad	e Date	e 03/27/2	2013 Size	•	All Sizes			_\			
			Sale Type			Par Volume	e(M)	Price		Yield	Assumed	Settle
1		09:31	I Inter-Dea	aler			100	98.9	\	3.257		
2		09:38	Inter-Dea	aler			100	99.589		3.158		
3		09:38	Inter-Dea	aler			100	99.649	1	3.15		
4		11:12	Inter-Dea	aler			430	99.301	V	3.2		
5		11:12	Inter-Dea	aler			430	99.225	\	3.21		
6		14:08	3 Purchase	from Custo	mer		100	98.8		3.272		
7		14:44	Inter-Dea	aler			100	98.8		3.272		
8		15:37	7 Sale to C	ustomer			25	101.393		2.902		
9		15:39	Sale to C	ustomer			75	101.393		2.902		

First step to relative value is price transparency Look at where bonds trade on the day Obtain lists of similar bonds with similar characteristics

#### Corporate and Agency bonds

Key factors	Corporate bonds	government general obligations	Revenue bonds	Structured securities
Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	X	X	X	Х
Quality	Х	X	Х	Х
levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security	Х	Х	Х	х
Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority, and management experience Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values  Assess the source and strength of revenue structure for municipal authorities. Consider obligor's financial condition and reserve levels, annual debt		X X	Х	
service and debt coverage ratio, credit enhancement, legal covenants, and nature of project			Х	
Assess the position in the cash flow waterfall				X

These types of securities are generally more liquid than MBS
Easier to generate a list of comparable bonds as it pertains to spread vs. Treasuries
Still need to understand financial strength and default risk of corporate bonds regardless of ratings.

#### **Confirming Consistent Spread to Treasuries**



#### **Understanding Default Risk**



There are models available that help measure default risk without relying on Ratings Agencies.

# Portfolio Risk Management

- -Maintain Risk Exposure
- -Generate Trade Ideas
- -Current Pricing
- -Performance in different interest rate scenarios
- -Segregate by different parameters

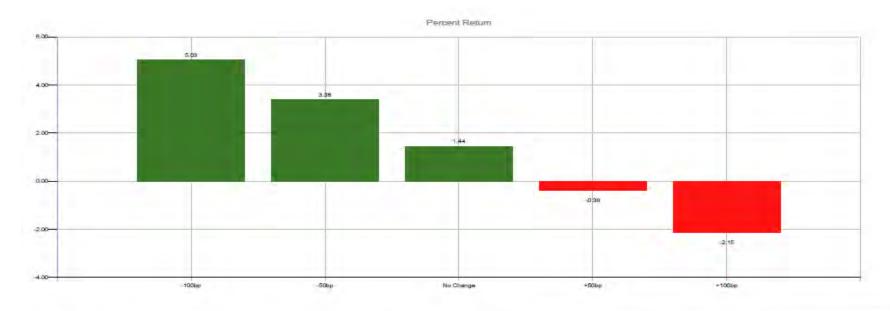
#### Managing Key Rate Duration



- -Understand where most of the risk lies by looking at curve exposure
- -Helps to make decisions based on the shape of the treasury curve
- -Break out by each individual position

#### WHAT IS MY RETURN WHEN INTEREST RATES CHANGE?

Portfolio: FREDDIECMO	Currency: USD			Scienario: +/- 50, 100bp			Settlement Date:	8/26/2011	Horizon Date: 2/22/2012		
Portfolio at Horizon											
The second second	Principal (M)	Accrued Interest (M)	CF (M)	Horizon Value (M)	Duration	Convexity	BPV	Yield To Worst	Dollar Return (M)	Percent Return	
Initial Portfolio Values	59,734.37	171.24	-	59,905.61	1.09	-2.42	6,575.21	2.58		_	
-100bp	57,899.96	141.65	4,874.90	62,918.03	-0.92	-3.24	-4,213.84	1.77	3,012.42	5.03	
-50bp	56,913.54	141.65	4,873.63	61,931,18	-0.26	-2.80	-292.51	2.09	2.025.57	3.38	
No Change	55,750.22	141.65	4,871.44	60,767.43	0.69	-2.65	4,921.64	2.58	861.82	1.44	
+50bp	54,660.25	141.65	4,866.52	59,674.53	1.74	-2.86	10.344.30	3.07	-231.08	-0.39	
+10000	53,609.09	141.65	4,861.56	58,620.39	2.78	-3.02	15,509.89	3.56	-1.285.22	-2.15	



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#### USING EXCEL FOR PORTFOLIO SURVEILLANCE

	3m CPR	1m CPR	12m CPR	Factor	Price	Geography	Collateral
FHR 2543 LL Mtge	1:	2 9	25	0.9	109.4	CA 19.5	FGLMC5.5
FHR 2686 CL Mtge	1	0 8	15	1.0	106.6	PA 11.3	FGCI 3.5
FHR 2770 AU Mtge	1	1 7	20	1.0	107.0	CA 32.8	FGCI 4
FHR 2990 FE Mtge		9 7	25	0.4	99.8	TX 9.8	FGLMC 6
FHR 3462 SD Mtge	1	3 7	25	0.5	15.5	TX 14.3	FGLMC6.5
FHR 3516 KA Mtge	1	0 9	27	0.5	104.9	FL 19.0	FGLMC 5
FHR 3636 MJ Mtge		8 10	17	0.9	110.1	FL 10.0	FGLMC 5
FHR 3762 SH Mtge		7 6	17	0.9	102.3	CA 8.6	FGLMC 5
FHR 3769 MD Mtge		4 6	10	1.0	102.1	NC 13.0	FGLMC 4
FHR 3769 QI Mtge	(	6 6	17	1.0	28.6	FL 9.4	FGLMC 5
FHR 3780 PL Mtge	;	5 5	10	1.0	101.3	CA 19.0	FGLMC 4
FHR 3784 BM Mtge	(	6 9	15	0.9	103.1	CA 21.5	FGCI 3.5
FHR 3786 GN Mtge		4 5	10	1.0	107.7	NC 10.0	FGLMC 4
FHR 3790 PA Mtge		5 7	16	1.0	108.4	TX 9.9	FGLMC4.5
FHR 3794 PB Mtge		8 6	16	1.0	108.4	TX 8.1	FGLMC4.5
FHR 3796 PA Mtge		7 6	17	1.0	104.7	FL 8.6	FGLMC 5

<sup>-</sup>Use Excel to bring collateral data from Bloomberg to monitor your portfolio

<sup>-</sup>Data is automatically updated every time a sheet is opened

<sup>-</sup>Customize reports that are easy to read

#### Conclusion

- Interest rates are at historic lows due to foreign central bank buying, economic uncertainty
   Fed intervention
- Low loan volume and increased deposits have increased AUM dramatically for many banks
- Important to invest wisely in an extreme low rate environment
- The OCC has put in guidelines as it comes to fixed income investing
- Guidelines include price transparency, relative value, financial analysis and portfolio risk management