

Securitized Products Modeling

Agency Fixed Rate Prepayment Model Update

This is a notice for users of Barclays' mortgage analytics (Single Security Analysis, Multiple Security Analysis, POINT and Index) that after the close of business, **Friday, January 23, 2015**, Pre-Beta (V1.36.4) will become the production agency fixed rate prepayment model, replacing the current production model, Prod (V1.23). Model version V1.23, along with Pre Beta (V1.36) and Pre Beta (V1.35) will be available for a limited time following the update by setting "FR Model Version" to the desired model in the Preferences tab of the mortgage calculator.

Calculator users should migrate away from other model versions in anticipation of the update. For detailed descriptions of V1.36.4 and V1.36, please see [Agency Fixed Rate Prepayment Model: Pre Beta V1.36.4: Incorporating FHA MIP changes](#) and [Agency Fixed Rate Prepayment Model: Pre Beta V1.36](#). The latest OAS impact reports can be found in the attached document.

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Appendix: OAS Effect of Model Changes, Production V1.23 vs. Pre Beta V1.36.4

FIGURE 1

FN 30y, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4								Change							
Coupon	Vintage	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life
3.0	TBA	102-11+	2.55	60	12	5.4	5.9	8.8	10.9	11.8	2.64	58	12	5.9	6.6	6.5	7.0	8.2	0.09	-2	0	0.5	0.7	-2.3	-3.9	-3.6
3.0	2013	102-11+	2.58	60	16	5.7	6.1	8.5	10.2	10.9	2.65	58	16	6.0	6.7	6.7	7.1	8.1	0.07	-2	0	0.4	0.6	-1.8	-3.1	-2.8
3.0	2012	102-17+	2.54	57	13	5.5	6.0	8.8	10.3	11.0	2.62	56	13	5.9	6.6	6.9	7.2	8.1	0.08	-1	0	0.4	0.6	-1.9	-3.1	-2.9
3.5	TBA	105-02+	2.22	62	-2	4.4	5.1	17.7	20.0	18.2	2.44	70	-3	4.3	5.7	11.6	14.2	14.5	0.22	8	0	-0.1	0.6	-6.1	-5.8	-3.7
3.5	2013	105-02+	2.53	67	21	5.1	5.7	12.1	12.9	12.4	2.65	71	21	5.1	6.2	8.7	9.6	10.1	0.12	4	0	0.0	0.4	-3.4	-3.3	-2.3
3.5	2012	105-02+	2.51	66	21	4.9	5.6	12.7	13.3	12.6	2.64	70	22	5.0	6.0	9.5	10.0	10.2	0.13	4	1	0.1	0.4	-3.2	-3.3	-2.4
3.5	2011	105-02+	2.38	62	11	4.3	5.2	16.7	16.4	14.7	2.54	69	13	4.5	5.7	11.3	11.8	11.8	0.17	7	2	0.2	0.5	-5.4	-4.6	-2.9
3.5	2010	105-02+	2.32	59	8	4.0	4.9	18.2	17.6	15.5	2.45	67	8	4.0	5.3	13.4	13.5	13.3	0.13	8	0	0.1	0.4	-4.8	-4.1	-2.2
4.0	TBA	107-01+	2.41	72	27	4.7	5.2	15.5	17.1	15.9	2.37	80	16	3.9	5.3	15.3	17.2	16.5	-0.04	7	-12	-0.8	0.1	-0.2	0.1	0.6
4.0	2013	107-01+	2.37	70	21	3.9	5.0	19.3	18.2	16.2	2.34	78	11	3.1	5.1	18.4	17.8	16.7	-0.03	8	-10	-0.8	0.1	-0.9	-0.4	0.5
4.0	2012	107-01+	2.66	80	47	5.1	5.5	12.9	13.0	12.1	2.73	85	46	4.8	5.7	11.7	11.6	11.1	0.08	5	-1	-0.3	0.2	-1.2	-1.4	-1.0
4.0	2011	107-01+	2.48	74	29	4.1	5.1	16.5	16.1	14.4	2.52	81	22	3.5	5.2	15.4	14.9	14.0	0.03	7	-7	-0.6	0.1	-1.1	-1.2	-0.4
4.0	2010	107-01+	2.41	70	25	3.8	4.9	17.9	17.1	15.1	2.44	78	18	3.2	5.0	16.4	15.8	14.8	0.03	8	-7	-0.6	0.1	-1.5	-1.3	-0.3
4.0	2009	107-01+	1.99	51	1	2.4	4.2	26.7	23.4	20.1	1.85	62	-10	1.6	4.2	24.2	22.9	22.1	-0.14	10	-11	-0.8	0.0	-2.5	-0.5	2.0
4.5	TBA	108-11+	2.34	84	43	3.5	4.6	20.2	20.0	18.2	2.07	83	19	2.2	4.4	23.2	22.4	21.2	-0.27	-1	-24	-1.3	-0.2	3.0	2.4	3.0
4.5	2013	108-11+	2.71	99	65	4.5	5.2	15.7	15.8	14.7	2.39	96	39	2.8	4.8	20.6	19.5	18.3	-0.32	-3	-26	-1.7	-0.4	4.9	3.7	3.6
4.5	2012	108-15+	2.85	101	77	5.1	5.4	13.2	13.3	12.5	2.84	104	74	4.7	5.4	13.0	13.1	12.6	-0.01	4	-3	-0.4	0.0	-0.2	-0.2	0.1
4.5	2011	108-13+	2.57	95	55	3.8	4.9	17.0	17.2	15.6	2.38	95	37	2.6	4.7	19.7	19.2	17.7	-0.19	0	-18	-1.2	-0.2	2.7	2.0	2.1
4.5	2010	108-13+	2.45	89	46	3.4	4.7	18.4	18.5	16.8	2.22	90	28	2.3	4.5	20.8	20.4	19.3	-0.23	0	-18	-1.1	-0.2	2.4	1.9	2.5
4.5	2009	108-11+	2.42	88	45	3.2	4.6	19.3	19.1	17.0	2.10	86	22	1.8	4.3	22.2	21.4	20.5	-0.32	-2	-24	-1.4	-0.3	2.9	2.3	3.5
5.0	TBA	110-14+	1.39	15	-11	1.9	3.5	30.0	27.8	25.8	1.25	16	-16	1.5	3.5	29.3	28.2	27.0	-0.14	1	-4	-0.4	0.0	-0.7	0.4	1.2
5.0	2011	110-22+	2.59	95	67	4.1	4.9	17.0	16.7	15.4	2.31	90	46	2.9	4.6	19.6	19.3	17.9	-0.28	-5	-21	-1.2	-0.3	2.6	2.6	2.5
5.0	2010	110-18+	2.47	90	60	3.7	4.7	18.2	17.9	16.6	2.13	83	36	2.5	4.4	21.1	20.9	19.6	-0.34	-7	-24	-1.3	-0.3	2.9	3.0	3.0
5.0	2009	110-14+	2.46	89	60	3.6	4.6	18.7	18.3	16.8	2.04	78	32	2.2	4.3	22.7	22.1	20.5	-0.42	-11	-28	-1.4	-0.3	4.0	3.8	3.7
5.0	2008	110-14+	1.47	21	-6	2.0	3.6	29.5	27.4	25.1	1.37	24	-9	1.6	3.6	28.7	27.5	26.0	-0.10	3	-2	-0.4	0.0	-0.8	0.1	0.9
5.0	2005	110-18+	1.90	48	25	2.6	3.9	24.1	22.5	20.4	1.71	42	13	2.2	3.8	24.6	23.7	22.2	-0.20	-6	-12	-0.5	-0.1	0.5	1.2	1.8
5.0	2004	110-24+	2.06	57	36	2.9	4.0	21.9	20.3	18.2	2.02	61	35	2.8	4.1	20.7	19.7	18.5	-0.03	3	-1	0.0	0.0	-1.2	-0.6	0.3
5.0	2003	110-30+	2.15	62	41	2.9	4.1	19.7	18.3	16.4	2.08	64	40	3.0	4.1	18.9	18.0	17.1	-0.07	2	-1	0.1	0.0	-0.8	-0.3	0.7
5.5	TBA	111-29+	1.56	22	5	2.2	3.5	28.7	26.4	24.4	1.09	-3	-23	1.3	3.3	30.6	29.2	27.9	-0.48	-25	-28	-0.9	-0.2	1.9	2.8	3.5
5.5	2008	111-29+	1.64	31	10	2.1	3.6	28.6	26.3	24.0	1.51	29	5	1.6	3.6	28.1	26.6	25.0	-0.12	-2	-5	-0.4	0.0	-0.5	0.3	1.0
5.5	2007	111-29+	1.74	35	17	2.3	3.6	27.7	25.3	23.1	1.38	18	-4	1.5	3.4	29.1	27.4	25.8	-0.37	-18	-21	-0.8	-0.2	1.4	2.1	2.7
5.5	2006	111-29+	1.88	45	27	2.5	3.7	26.2	23.9	21.8	1.63	35	13	1.9	3.6	26.5	25.4	23.8	-0.25	-10	-14	-0.5	-0.1	0.3	1.5	2.0
5.5	2005	112-07+	2.24	71	53	3.1	4.1	21.0	19.7	18.0	1.96	57	35	2.4	3.9	22.2	21.6	20.3	-0.28	-13	-18	-0.6	-0.2	1.2	1.9	2.3
5.5	2004	112-17+	2.23	68	52	3.2	4.1	20.1	18.8	17.1	2.12	65	45	2.9	4.1	20.0	19.2	18.0	-0.11	-3	-7	-0.3	0.0	-0.1	0.4	0.9
5.5	2003	112-17+	2.24	70	54	3.1	4.1	19.3	18.0	16.5	2.18	68	51	3.0	4.1	18.9	17.9	17.0	-0.06	-1	-4	-0.1	0.0	-0.4	-0.1	0.5
6.0	TBA	113-14+	1.58	22	10	2.3	3.4	28.1	26.2	24.4	0.72	-34	-45	1.1	3.0	32.6	31.1	30.0	-0.86	-56	-55	-1.2	-0.4	4.5	4.9	5.6
6.0	2008	113-14+	2.09	62	49	2.8	3.8	24.4	23.0	21.1	1.72	43	25	2.0	3.6	26.3	25.1	23.7	-0.37	-19	-23	-0.8	-0.2	1.9	2.1	2.6
6.0	2007	113-14+	2.05	58	46	2.8	3.7	24.8	23.1	21.2	1.53	29	12	1.9	3.5	27.6	26.2	24.8	-0.52	-30	-34	-1.0	-0.3	2.8	3.1	3.6
6.0	2006	113-14+	2.14	66	53	2.9	3.8	24.0	22.2	20.3	1.76	46	29	2.1	3.6	25.6	24.4	23.0	-0.38	-19	-24	-0.8	-0.2	1.6	2.2	2.7
6.5	TBA	114-06	2.28	79	68	2.8	3.6	24.9	23.2	21.5	1.06	-8	-18	1.3	3.0	31.9	30.3	29.1	-1.21	-87	-86	-1.5	-0.6	7.0	7.1	7.6
6.5	2008	114-06	2.75	115	106	3.5	4.0	20.5	20.0	18.4	2.33	91	76	2.6	3.8	23.5	22.5	21.3	-0.42	-24	-30	-0.9	-0.2	3.0	2.5	2.9
6.5	2007	114-06	2.80	118	109	3.5	4.0	20.2	19.4	18.0	2.19	77	64	2.5	3.6	24.0	23.1	22.1	-0.61	-40	-45	-1.0	-0.4	3.8	3.7	4.1
6.5	2006	114-06	2.79	118	110	3.5	4.0	20.1	19.1	17.7	2.30	87	74	2.6	3.7	22.9	22.1	21.1	-0.49	-32	-36	-0.9	-0.3	2.8	3.0	3.4

Source: Barclays Research

FIGURE 2

IOS, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4									Change								
Security	Coupon	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life		
IFN-33012 IO	3.0	19-16	-1.01	156	-68	-22.0	5.7	10.0	11.6	12.1	3.31	343	128	-13.2	5.5	7.0	7.2	8.3	4.32	187	196	8.8	-0.3	-3.0	-4.4	-3.8		
IFN-33013 IO	3.0	19-21+	-0.49	166	-39	-20.0	5.8	9.1	11.0	11.6	3.43	351	144	-12.6	5.5	6.7	7.1	8.2	3.92	185	183	7.4	-0.3	-2.4	-3.9	-3.4		
IFN-33510 IO	3.5	18-09+	-2.05	69	-49	-28.4	5.1	19.6	18.8	16.5	0.69	420	143	-27.4	4.8	14.1	14.3	13.9	2.73	351	192	0.9	-0.3	-5.5	-4.5	-2.6		
IFN-33512 IO	3.5	20-10	-1.21	77	-22	-21.3	5.5	15.4	15.6	14.2	2.29	387	181	-18.4	5.1	10.3	10.9	11.1	3.49	310	203	3.0	-0.3	-5.1	-4.7	-3.1		
IFN-33513 IO	3.5	19-27+	-0.56	151	62	-21.0	5.4	15.3	15.5	14.2	2.97	461	255	-18.5	5.0	10.2	10.8	11.1	3.53	309	193	2.4	-0.3	-5.1	-4.7	-3.1		
IFN-34009 IO	4.0	17-17+	-0.90	123	76	-28.1	4.5	24.5	21.6	18.6	-1.22	393	173	-34.4	4.3	21.1	19.8	18.8	-0.32	270	98	-6.3	-0.2	-3.4	-1.8	0.2		
IFN-34010 IO	4.0	19-14	0.03	105	86	-20.4	4.8	19.6	18.2	16.0	0.33	347	165	-27.5	4.6	17.9	17.0	15.7	0.30	242	80	-7.1	-0.2	-1.7	-1.2	-0.3		
IFN-34011 IO	4.0	19-28+	0.13	117	106	-19.5	4.9	18.9	17.8	15.7	0.71	366	190	-26.4	4.7	17.2	16.5	15.1	0.58	249	84	-6.9	-0.2	-1.7	-1.3	-0.6		
IFN-34013 IO	4.0	18-08+	0.15	154	197	-22.2	4.8	22.7	20.4	17.7	-0.16	402	257	-32.6	4.7	22.1	20.3	18.0	-0.32	248	61	-10.5	-0.1	-0.6	-0.1	0.3		
IFN-34509 IO	4.5	18-05+	1.04	338	314	-21.0	4.1	22.1	20.9	18.6	-3.27	292	166	-35.0	4.2	25.2	23.7	22.5	-4.31	-46	-148	-14.1	0.1	3.1	2.8	3.9		
IFN-34510 IO	4.5	19-29+	1.38	290	276	-16.4	4.3	18.7	18.4	16.6	-0.75	327	206	-27.2	4.4	20.8	19.9	18.6	-2.13	37	-70	-10.8	0.0	2.1	1.5	2.0		
IFN-34511 IO	4.5	20-27	1.49	269	256	-15.2	4.5	17.8	17.5	15.8	-0.36	321	192	-25.7	4.5	19.6	18.9	17.5	-1.85	52	-64	-10.6	0.0	1.8	1.4	1.7		
IFN-35003 IO	5.0	20-10	0.74	152	140	-12.8	3.8	20.3	18.7	16.8	0.04	181	160	-12.5	3.7	19.6	18.6	17.5	-0.70	30	20	0.4	-0.1	-0.7	-0.1	0.7		
IFN-35005 IO	5.0	19-21+	-1.42	-2	50	-15.4	3.9	24.2	22.6	20.5	-3.70	-100	-27	-20.1	3.9	24.8	24.1	22.5	-2.28	-98	-77	-4.7	0.0	0.6	1.5	2.0		
IFN-35008 IO	5.0	16-17+	-0.87	126	260	-19.5	3.6	29.3	27.0	24.9	-1.67	178	332	-23.5	3.5	28.0	26.8	25.5	-0.80	52	72	-4.0	-0.1	-1.3	-0.2	0.6		
IFN-35009 IO	5.0	19-15+	4.15	503	532	-10.9	3.8	18.8	18.4	16.9	-1.29	286	278	-24.1	4.0	23.7	23.0	21.6	-5.43	-216	-255	-13.2	0.2	4.9	4.6	4.7		
IFN-35010 IO	5.0	20-24+	3.45	416	441	-10.2	4.0	17.8	17.6	16.2	0.23	345	314	-20.3	4.1	20.6	20.2	19.1	-3.21	-72	-127	-10.1	0.1	2.8	2.6	2.9		
IFN-35503 IO	5.5	20-26+	2.79	307	329	-8.1	3.5	19.7	18.4	16.8	2.13	278	312	-8.9	3.5	19.5	18.4	17.4	-0.66	-29	-17	-0.7	0.0	-0.2	0.0	0.6		
IFN-35505 IO	5.5	21-13	1.39	174	222	-9.5	3.8	21.4	20.1	18.3	-1.69	-22	60	-15.2	3.8	23.2	22.5	21.1	-3.07	-197	-163	-5.7	0.0	1.8	2.4	2.8		
IFN-35508 IO	5.5	19-11	-1.22	-3	132	-16.0	3.8	28.2	26.0	23.8	-3.10	-91	94	-21.4	3.8	28.5	27.0	25.4	-1.89	-88	-38	-5.4	0.0	0.3	1.0	1.6		
IFN-36008 IO	6.0	20-28+	1.70	186	295	-8.9	3.6	25.0	23.5	21.6	-1.93	-55	109	-15.9	3.7	27.8	26.3	24.8	-3.63	-241	-186	-7.0	0.1	2.8	2.8	3.2		
IFN-36567 IO	6.5	23-04+	4.13	352	415	-3.7	3.5	21.3	20.3	18.8	-0.95	-53	60	-10.3	3.6	25.4	24.4	23.2	-5.08	-404	-355	-6.6	0.1	4.1	4.1	4.4		
IG2-34010 IO	4.0	18-03+	7.11	742	633	-11.9	4.3	13.7	12.7	10.8	-1.10	138	64	-28.8	4.7	20.9	21.3	18.5	-8.21	-604	-569	-16.9	0.4	7.2	8.6	7.7		
IG2-34510 IO	4.5	18-17	7.96	824	734	-13.6	4.0	15.2	14.2	12.1	-2.30	52	36	-29.5	4.6	26.2	25.5	21.7	-10.26	-771	-697	-15.9	0.6	11.0	11.3	9.6		
IG2-35010 IO	5.0	19-03	8.54	921	859	-14.3	3.8	17.4	16.0	13.2	-0.03	214	230	-22.1	4.2	26.0	24.8	21.1	-8.57	-707	-629	-7.8	0.4	8.6	8.8	7.9		

Source: Barclays Research

FIGURE 3

FN 15y, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4								Change							
Coupon	Vintage	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life
2.5	TBA	102-21	1.79	13	-13	3.6	4.0	12.3	13.0	12.8	1.88	15	-1	4.2	4.4	7.4	8.2	8.9	0.10	2	12	0.6	0.4	-4.9	-4.8	-3.9
2.5	2013	102-21	1.81	14	-8	3.8	4.1	11.3	12.0	11.8	1.88	16	2	4.3	4.4	7.3	8.1	8.9	0.07	2	11	0.4	0.3	-4.0	-3.9	-2.9
2.5	2012	102-25	1.73	11	-12	3.5	3.9	12.7	13.0	12.6	1.81	13	0	4.0	4.2	8.3	8.9	9.5	0.08	3	12	0.4	0.3	-4.4	-4.1	-3.1
3.0	TBA	104-16+	1.72	18	-13	3.5	4.1	15.0	17.8	16.4	1.98	27	3	4.1	4.6	7.9	10.1	10.5	0.26	9	15	0.5	0.6	-7.1	-7.7	-5.9
3.0	2013	104-16+	1.70	15	-9	3.3	3.9	17.3	16.7	15.6	1.92	24	6	3.9	4.3	9.7	10.2	10.5	0.22	9	15	0.6	0.4	-7.6	-6.5	-5.1
3.0	2012	104-16+	1.69	14	-5	3.3	3.7	15.5	15.0	14.2	1.84	21	7	3.7	4.0	9.6	10.0	10.5	0.16	6	12	0.4	0.3	-5.9	-5.0	-3.7
3.0	2011	104-16+	1.53	9	-15	2.7	3.4	19.4	18.2	17.1	1.77	18	3	3.3	3.8	10.9	11.2	11.5	0.24	10	17	0.6	0.3	-8.5	-7.0	-5.6
3.5	TBA	105-27+	1.37	4	-14	2.3	3.0	22.6	20.2	19.3	1.64	19	3	2.6	3.3	15.3	14.7	14.6	0.27	16	17	0.3	0.2	-7.3	-5.5	-4.7
3.5	2013	105-27+	1.92	32	15	3.6	4.0	15.6	14.8	14.0	2.07	41	23	3.7	4.2	11.1	11.1	11.3	0.15	9	8	0.1	0.2	-4.5	-3.7	-2.7
3.5	2012	105-31+	1.88	28	18	3.7	3.8	12.7	12.4	12.1	1.93	32	21	3.6	3.9	10.4	10.7	11.2	0.05	4	4	0.0	0.0	-2.3	-1.7	-0.9
3.5	2011	106-01+	1.61	14	-2	2.9	3.4	17.4	16.3	15.5	1.78	25	11	3.2	3.6	12.1	12.3	12.5	0.17	10	12	0.2	0.2	-5.3	-4.0	-3.0
3.5	2010	105-31+	1.49	9	-7	2.6	3.2	19.0	17.4	16.6	1.67	19	6	2.9	3.4	13.1	13.2	13.3	0.19	11	13	0.3	0.2	-5.9	-4.2	-3.3
4.0	TBA	106-02	-0.20	-99	-100	1.3	1.5	14.6	13.8	14.2	-0.23	-102	-104	1.3	1.5	15.2	14.8	14.9	-0.04	-3	-4	0.0	0.0	0.6	1.0	0.7
4.0	2011	106-20	1.97	47	35	3.0	3.4	15.7	14.9	14.4	2.01	53	39	3.0	3.5	13.5	13.6	13.7	0.05	5	4	-0.1	0.0	-2.2	-1.3	-0.7
4.0	2010	106-18	1.85	41	29	2.8	3.2	16.4	15.5	15.0	1.89	46	33	2.7	3.2	14.3	14.3	14.4	0.04	5	4	0.0	0.0	-2.1	-1.2	-0.6
4.0	2009	106-18	1.66	30	20	2.5	3.0	17.5	16.2	15.9	1.69	34	22	2.4	3.0	15.5	15.5	15.5	0.03	3	3	0.0	0.0	-2.0	-0.7	-0.4
4.5	TBA	105-05	0.77	-2	-4	1.3	1.5	14.6	14.2	14.3	0.73	-6	-7	1.3	1.5	15.4	15.1	15.2	-0.04	-3	-3	0.0	0.0	0.8	0.9	0.9
4.5	2010	106-21	2.33	89	80	2.9	3.2	15.0	14.6	14.3	2.29	89	77	2.7	3.2	14.7	14.8	14.9	-0.04	0	-3	-0.2	-0.1	-0.3	0.2	0.6
4.5	2009	106-21	2.19	80	72	2.7	3.0	15.4	14.9	14.7	2.13	79	68	2.5	3.0	15.5	15.7	15.8	-0.06	-2	-5	-0.2	-0.1	0.1	0.8	1.1

Source: Barclays Research

FIGURE 4

FN 20y, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4								Change							
Coupon	Vintage	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life
3.0	TBA	103-14	2.09	45	2	4.3	4.6	12.9	17.8	17.1	2.27	48	-1	4.5	5.3	6.9	10.0	12.3	0.18	3	-3	0.2	0.6	-6.0	-7.8	-4.8
3.0	2013	103-14	2.20	45	16	4.4	4.7	12.4	13.5	13.2	2.32	48	17	4.8	5.3	6.8	7.7	9.6	0.13	3	1	0.4	0.6	-5.6	-5.8	-3.6
3.0	2012	103-14	2.15	44	13	4.0	4.5	14.0	14.7	14.3	2.27	48	15	4.5	5.0	7.6	8.9	10.9	0.12	4	1	0.4	0.6	-6.4	-5.8	-3.4
3.5	TBA	105-19	2.00	43	9	3.9	4.4	16.7	19.3	17.7	2.11	54	1	3.4	4.7	14.0	16.1	16.0	0.11	11	-8	-0.5	0.3	-2.7	-3.2	-1.7
3.5	2013	105-19	2.09	44	17	3.9	4.4	17.0	16.9	15.5	2.27	56	18	3.9	4.9	11.7	12.2	12.5	0.18	12	1	0.0	0.5	-5.3	-4.7	-3.0
3.5	2012	106-03	1.87	30	2	3.5	4.2	18.6	18.0	16.5	2.07	45	7	3.6	4.7	11.7	13.2	13.3	0.20	15	5	0.1	0.5	-6.9	-4.8	-3.2
3.5	2011	105-19	1.87	35	6	3.1	3.9	21.4	20.0	18.3	2.04	51	10	3.2	4.3	13.3	16.4	15.6	0.16	15	4	0.1	0.4	-8.1	-3.6	-2.7
3.5	2010	105-19	1.88	35	8	3.1	3.9	20.7	19.2	17.6	1.96	44	9	3.0	4.1	15.7	17.8	16.2	0.08	10	1	-0.2	0.2	-5.0	-1.4	-1.4
4.0	TBA	107-21	2.28	58	37	4.5	4.8	11.7	14.1	13.7	2.29	67	25	3.6	4.9	12.4	13.7	13.6	0.01	9	-11	-0.9	0.1	0.7	-0.4	-0.1
4.0	2013	107-21	2.11	45	25	3.9	4.4	17.6	16.8	15.5	2.11	55	15	3.0	4.5	17.5	16.0	15.5	0.00	10	-9	-0.9	0.1	-0.1	-0.8	0.0
4.0	2012	108-05	2.05	37	21	4.1	4.4	15.2	14.8	14.0	2.16	50	22	3.7	4.7	12.5	12.6	12.6	0.11	14	0	-0.3	0.3	-2.7	-2.2	-1.4
4.0	2011	107-29	1.89	30	11	3.4	4.0	19.1	17.7	16.3	1.88	41	5	2.7	4.1	16.9	17.8	16.4	-0.01	11	-6	-0.7	0.1	-2.2	0.1	0.1
4.0	2010	107-21	1.86	31	12	3.2	3.9	20.0	18.2	16.8	1.82	38	3	2.4	3.9	19.2	19.2	17.4	-0.04	7	-9	-0.8	0.0	-0.8	1.0	0.6
4.0	2009	107-21	1.87	31	16	3.3	3.8	17.9	16.6	15.6	1.83	35	8	2.5	3.8	19.2	17.0	16.2	-0.04	4	-9	-0.8	-0.1	1.3	0.4	0.6
4.5	TBA	108-23	2.74	96	81	5.0	5.1	7.6	10.9	11.5	2.79	106	75	4.4	5.3	7.1	9.3	10.8	0.06	10	-6	-0.6	0.2	-0.5	-1.6	-0.7
4.5	2011	109-23	1.95	37	21	3.4	4.0	17.9	16.9	15.8	1.71	42	7	2.2	4.0	18.6	19.5	18.4	-0.25	6	-14	-1.2	-0.1	0.7	2.6	2.6
4.5	2010	108-23	2.14	56	41	3.4	3.9	17.9	16.8	15.8	1.81	52	21	2.2	3.7	21.4	20.7	19.5	-0.32	-4	-20	-1.2	-0.2	3.5	3.9	3.7
4.5	2009	108-23	2.13	55	43	3.4	3.8	16.7	15.7	15.0	1.90	53	27	2.5	3.7	20.0	18.3	17.8	-0.24	-2	-16	-0.9	-0.1	3.3	2.6	2.8
5.0	TBA	110-14+	1.90	42	32	3.0	3.5	18.3	17.5	16.9	1.53	28	10	2.3	3.3	21.3	20.7	20.6	-0.38	-14	-22	-0.7	-0.2	3.0	3.2	3.7
5.0	2003	110-14+	1.25	-6	-11	2.4	2.8	15.2	14.9	14.8	1.01	-17	-25	2.1	2.7	17.4	17.6	17.4	-0.24	-11	-14	-0.4	-0.1	2.2	2.7	2.6
5.5	TBA	112-06	1.94	46	38	3.1	3.5	17.9	17.1	16.6	1.46	20	7	2.2	3.3	21.6	20.9	20.8	-0.49	-26	-31	-0.8	-0.2	3.7	3.8	4.2
5.5	2003	112-06	1.11	-18	-22	2.4	2.8	15.4	15.2	15.0	0.78	-40	-44	2.0	2.7	18.4	18.4	18.2	-0.33	-22	-22	-0.4	-0.1	3.0	3.2	3.2

Source: Barclays Research

FIGURE 5

GN2 30y, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4								Change							
Coupon	Vintage	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life
3.0	TBA	103-09+	2.48	45	8	5.8	6.4	9.0	9.3	8.9	2.34	45	-2	4.9	5.4	12.7	13.8	13.1	-0.15	0	-10	-0.9	-1.0	3.7	4.5	4.2
3.0	2013	103-10+	2.48	45	8	5.7	6.4	8.9	9.3	8.9	2.33	44	-3	4.8	5.4	12.7	13.9	13.2	-0.15	0	-10	-0.9	-1.0	3.8	4.6	4.3
3.0	2012	103-12+	2.46	44	7	5.7	6.3	9.3	9.8	9.1	2.28	42	-5	4.6	5.2	14.8	15.6	14.1	-0.18	-1	-13	-1.0	-1.1	5.5	5.8	5.0
3.5	TBA	105-15+	2.25	58	-7	3.5	5.2	15.0	18.3	16.1	1.77	37	-25	2.4	4.2	27.1	27.0	23.3	-0.48	-21	-18	-1.1	-1.0	12.1	8.7	7.2
3.5	2014	105-15+	2.40	59	-2	3.7	5.4	13.0	14.8	13.5	1.94	42	-20	2.4	4.4	25.7	23.8	20.7	-0.45	-18	-18	-1.3	-1.0	12.7	9.0	7.2
3.5	2013	105-16+	2.54	61	16	4.8	5.9	11.8	11.9	10.7	2.17	49	-5	3.6	4.8	18.4	18.8	16.9	-0.37	-11	-21	-1.2	-1.1	6.6	6.9	6.2
3.5	2012	105-19+	2.52	59	16	4.8	5.9	11.6	11.9	10.6	2.10	45	-8	3.4	4.7	19.7	20.0	17.4	-0.42	-14	-25	-1.4	-1.2	8.1	8.1	6.8
3.5	2011	105-19+	2.48	57	12	4.5	5.6	12.9	12.9	11.3	2.05	41	-10	3.3	4.5	21.9	21.4	18.1	-0.42	-16	-22	-1.2	-1.1	9.0	8.5	6.8
4.0	TBA	106-28	2.09	66	9	3.1	4.6	22.3	23.9	20.2	1.68	42	-10	2.6	3.9	24.1	27.6	25.3	-0.41	-24	-20	-0.5	-0.7	1.8	3.7	5.1
4.0	2014	106-28	2.26	71	16	3.1	4.8	22.1	21.7	18.0	1.78	45	-8	2.4	4.0	27.2	26.8	24.0	-0.48	-26	-24	-0.7	-0.8	5.1	5.1	6.0
4.0	2013	106-28+	2.14	65	9	2.8	4.6	24.9	23.6	19.4	1.59	32	-21	1.9	3.7	32.1	29.4	26.0	-0.54	-33	-30	-0.9	-0.9	7.2	5.8	6.6
4.0	2012	106-28	2.74	84	48	4.8	5.7	13.8	13.5	11.3	2.31	67	22	3.5	4.7	20.3	20.2	17.1	-0.43	-17	-26	-1.3	-1.0	6.5	6.7	5.8
4.0	2011	107-00	2.58	77	34	3.9	5.3	16.7	16.1	13.1	2.01	50	4	2.7	4.2	25.3	24.2	20.4	-0.57	-27	-30	-1.1	-1.1	8.6	8.1	7.3
4.0	2010	107-08	2.66	79	42	4.5	5.6	14.1	13.1	11.2	2.06	54	4	2.6	4.4	21.6	21.9	18.9	-0.60	-25	-38	-1.9	-1.3	7.5	8.8	7.7
4.5	TBA	108-27+	2.53	86	46	3.4	5.0	19.6	18.3	14.8	1.79	43	1	2.2	4.0	27.4	26.0	22.4	-0.75	-43	-44	-1.2	-1.1	7.8	7.7	7.6
4.5	2014	108-27+	2.31	74	33	3.4	4.8	23.1	21.3	17.6	1.85	48	7	2.6	4.1	24.7	25.1	22.4	-0.46	-25	-26	-0.8	-0.7	1.6	3.8	4.8
4.5	2013	108-27+	2.12	63	21	2.9	4.5	26.1	23.5	19.5	1.47	22	-18	1.9	3.7	30.7	28.7	25.9	-0.65	-41	-39	-1.0	-0.8	4.6	5.2	6.4
4.5	2011	109-01	2.56	85	46	3.6	5.1	18.8	17.5	14.2	1.85	46	4	2.4	4.1	26.3	25.0	21.4	-0.70	-39	-42	-1.2	-1.0	7.5	7.5	7.2
4.5	2010	109-13+	2.68	87	49	3.9	5.4	15.1	14.2	12.0	1.73	39	-6	1.8	4.1	25.7	25.2	21.5	-0.96	-48	-55	-2.1	-1.3	10.6	11.0	9.5
4.5	2009	109-04+	2.68	88	52	3.8	5.2	15.2	14.6	12.4	1.81	45	1	1.9	4.0	25.5	25.1	21.3	-0.87	-43	-51	-1.9	-1.2	10.3	10.5	8.9
5.0	TBA	109-10+	2.50	89	68	3.6	4.2	23.5	21.7	18.5	2.65	98	78	3.7	4.3	21.5	19.9	17.1	0.15	10	10	0.1	0.1	-2.0	-1.8	-1.4
5.0	2010	111-04+	2.73	99	66	3.6	5.2	17.1	15.8	13.0	1.88	50	13	2.2	4.2	24.9	23.7	20.3	-0.85	-49	-53	-1.5	-1.0	7.8	7.9	7.3
5.0	2009	110-07+	2.79	108	76	3.5	5.0	18.0	16.8	13.9	2.05	66	30	2.2	4.0	25.4	24.2	20.7	-0.74	-43	-46	-1.3	-0.9	7.4	7.4	6.8
5.0	2005	110-14+	2.45	79	64	3.9	4.4	19.2	17.8	15.5	2.32	73	51	3.2	4.2	20.7	19.2	16.8	-0.14	-6	-12	-0.7	-0.2	1.5	1.4	1.3
5.0	2004	110-26+	2.47	79	65	4.0	4.5	17.0	15.9	14.1	2.54	83	69	4.0	4.6	16.1	15.1	13.4	0.07	5	4	0.0	0.0	-0.9	-0.8	-0.7
5.0	2003	111-02+	2.46	77	64	4.0	4.6	15.8	14.7	13.1	2.52	80	67	4.0	4.6	15.2	14.1	12.6	0.06	3	3	0.0	0.0	-0.6	-0.6	-0.5
5.5	TBA	111-03	2.37	79	64	3.2	3.9	23.9	22.7	19.8	2.08	65	45	2.6	3.7	27.0	25.0	22.2	-0.29	-14	-19	-0.7	-0.2	3.1	2.3	2.4
5.5	2008	111-03	2.36	79	63	3.2	3.9	24.1	22.8	19.9	2.08	65	44	2.5	3.7	27.2	25.1	22.3	-0.29	-14	-19	-0.7	-0.2	3.1	2.3	2.4
5.5	2005	112-01	2.77	103	93	4.2	4.6	16.9	15.8	13.8	2.45	85	67	3.3	4.2	20.4	18.9	16.5	-0.32	-18	-26	-1.0	-0.4	3.5	3.1	2.7
5.5	2004	112-21	2.68	94	85	4.3	4.6	15.7	14.7	13.0	2.64	93	81	4.0	4.6	16.1	15.0	13.3	-0.04	-1	-4	-0.3	-0.1	0.4	0.3	0.3
5.5	2003	112-31	2.64	89	82	4.3	4.6	14.7	13.8	12.4	2.59	88	77	4.0	4.6	15.2	14.2	12.7	-0.04	-2	-5	-0.3	-0.1	0.5	0.4	0.3
6.0	TBA	113-11	2.58	92	81	3.6	4.1	21.1	20.2	17.7	2.12	61	46	2.8	3.8	25.2	23.5	21.0	-0.47	-31	-34	-0.8	-0.4	4.1	3.3	3.3
6.0	2008	113-11	2.54	88	77	3.6	4.1	21.6	20.6	18.0	2.12	61	47	2.8	3.8	25.3	23.5	21.0	-0.42	-27	-31	-0.7	-0.3	3.7	2.9	3.0
6.0	2007	113-17	2.53	87	77	3.6	4.1	20.6	19.9	17.6	2.02	53	39	2.8	3.7	25.0	23.7	21.1	-0.51	-34	-37	-0.8	-0.4	4.4	3.8	3.5
6.0	2006	113-29	2.56	89	79	3.7	4.2	19.3	18.6	16.4	2.17	63	50	3.0	3.9	22.9	21.7	19.2	-0.39	-25	-29	-0.7	-0.3	3.6	3.1	2.8
6.0	2004	114-21	2.85	107	101	4.5	4.7	14.7	13.7	12.3	2.70	98	90	4.0	4.5	15.9	15.0	13.4	-0.15	-8	-12	-0.5	-0.2	1.2	1.3	1.1
6.0	2003	115-03	2.80	101	97	4.5	4.7	13.5	12.9	11.6	2.66	93	86	4.1	4.6	14.8	14.1	12.7	-0.14	-8	-11	-0.4	-0.1	1.3	1.2	1.1
6.5	TBA	114-17	2.98	127	117	3.8	4.3	19.7	18.6	16.3	2.51	92	80	3.1	3.9	23.9	21.8	19.5	-0.47	-35	-37	-0.7	-0.4	4.2	3.2	3.2
6.5	2008	114-25	2.80	111	102	3.7	4.1	20.6	19.6	17.1	2.33	76	66	3.0	3.8	24.9	22.7	20.2	-0.47	-34	-36	-0.7	-0.4	4.3	3.1	3.1

Source: Barclays Research

FIGURE 6

GN 30y, Market Rates: NY 3PM Close of Friday, January 9, 2015

Prod V1.23											Pre Beta V1.36.4								Change							
Coupon	Vintage	Price	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life	Yield	ZV	OAS	OAD	OASD	1-Yr	3-Yr	Life
3.0	TBA	103-10+	2.46	45	8	5.7	6.3	9.8	10.4	9.7	2.31	44	1	5.0	5.3	14.2	15.2	13.9	-0.15	-1	-7	-0.6	-0.9	4.4	4.8	4.2
3.0	2013	103-11	2.46	45	9	5.8	6.3	9.8	10.4	9.5	2.32	44	2	5.1	5.4	14.4	15.0	13.6	-0.15	-1	-7	-0.7	-1.0	4.6	4.6	4.1
3.0	2012	103-13	2.45	44	10	5.8	6.3	9.8	10.3	9.3	2.32	43	3	5.2	5.5	14.1	14.5	12.9	-0.13	-1	-7	-0.6	-0.9	4.3	4.2	3.6
3.5	TBA	105-16	2.48	59	16	4.6	5.6	13.4	13.6	11.8	2.17	46	0	3.9	4.6	19.3	19.3	16.9	-0.31	-13	-16	-0.8	-1.0	5.9	5.7	5.1
3.5	2014	105-16	2.55	63	20	5.3	6.2	10.4	12.3	10.9	2.41	58	15	4.8	5.5	12.4	14.6	13.4	-0.14	-4	-5	-0.5	-0.6	2.0	2.3	2.5
3.5	2013	105-16	2.59	62	29	5.6	6.2	11.1	11.4	9.9	2.41	55	16	4.7	5.4	14.5	14.8	13.1	-0.18	-7	-12	-0.8	-0.9	3.4	3.4	3.2
3.5	2012	105-19	2.52	58	21	5.0	5.8	12.6	12.7	10.8	2.28	49	7	4.2	5.0	17.6	17.4	14.9	-0.24	-10	-14	-0.8	-0.9	5.0	4.7	4.1
3.5	2011	105-19	2.45	57	16	4.7	5.6	13.8	13.8	11.8	2.18	45	-2	3.7	4.7	19.7	19.3	16.4	-0.28	-12	-18	-1.0	-0.9	5.9	5.5	4.6
4.0	TBA	107-08+	2.39	68	25	3.8	5.0	19.1	18.0	14.9	1.87	41	-7	2.6	4.1	26.1	24.9	21.4	-0.53	-27	-32	-1.2	-1.0	7.0	6.9	6.5
4.0	2014	107-08+	2.64	78	42	5.0	5.8	15.1	15.3	12.2	2.49	74	34	4.4	5.4	15.1	16.6	14.2	-0.15	-5	-8	-0.6	-0.5	0.0	1.3	2.0
4.0	2013	107-08+	2.66	78	45	5.1	5.8	14.7	14.5	11.7	2.46	72	34	4.3	5.2	16.7	16.9	14.4	-0.20	-7	-11	-0.8	-0.6	2.0	2.4	2.7
4.0	2012	107-09+	2.67	77	47	5.1	5.7	14.6	14.1	11.4	2.44	68	34	4.3	5.1	18.0	17.0	14.4	-0.23	-9	-13	-0.8	-0.6	3.4	2.9	3.0
4.0	2011	107-12+	2.51	70	34	4.3	5.3	17.1	16.1	13.1	2.08	50	5	3.0	4.4	23.6	22.3	18.5	-0.43	-20	-28	-1.3	-0.9	6.5	6.2	5.4
4.0	2010	107-22+	2.61	73	38	4.6	5.7	13.6	12.6	11.0	2.09	47	0	3.0	4.5	20.5	20.2	17.5	-0.53	-26	-38	-1.7	-1.2	6.9	7.6	6.5
4.5	TBA	109-01	2.01	49	17	2.8	4.1	24.6	22.9	19.6	2.05	49	21	3.1	4.1	23.4	22.3	19.3	0.04	0	4	0.3	0.0	-1.2	-0.6	-0.3
4.5	2014	109-01	2.91	101	76	5.6	6.0	13.6	13.6	11.0	2.70	92	65	4.8	5.5	14.2	15.3	13.4	-0.21	-9	-11	-0.8	-0.6	0.6	1.7	2.4
4.5	2013	109-01	2.86	97	73	5.4	5.8	14.7	14.3	11.4	2.62	86	59	4.5	5.3	17.1	16.6	14.0	-0.24	-12	-14	-0.8	-0.6	2.4	2.3	2.6
4.5	2011	109-06	2.69	88	58	4.5	5.4	17.1	15.6	12.6	2.17	63	23	3.0	4.5	23.4	21.5	18.0	-0.53	-25	-34	-1.4	-0.9	6.3	5.9	5.4
4.5	2010	109-21	2.63	82	48	4.0	5.4	15.4	14.4	12.2	1.92	46	0	2.1	4.3	23.9	22.9	19.2	-0.71	-36	-47	-1.9	-1.1	8.5	8.5	7.0
4.5	2009	109-11	2.62	84	50	3.9	5.2	15.6	14.9	12.8	1.84	43	-3	1.8	4.0	25.2	24.3	20.6	-0.78	-40	-53	-2.1	-1.1	9.6	9.4	7.8
5.0	TBA	110-04+	2.18	63	41	3.1	4.0	25.1	23.0	19.8	2.22	66	44	3.2	4.0	24.2	22.5	19.5	0.04	3	3	0.1	0.0	-0.9	-0.5	-0.3
5.0	2010	111-22+	2.78	95	72	4.6	5.5	16.2	14.4	11.8	2.21	67	34	3.0	4.7	21.4	19.8	16.6	-0.57	-28	-38	-1.5	-0.8	5.2	5.4	4.8
5.0	2009	110-29+	2.71	95	70	4.0	5.0	17.6	16.3	13.6	1.95	57	21	2.2	4.1	25.0	23.4	20.1	-0.76	-38	-49	-1.8	-0.9	7.4	7.1	6.5
5.0	2005	111-04+	2.34	68	51	3.7	4.4	19.0	17.6	15.2	2.34	70	50	3.5	4.4	18.9	17.4	15.2	0.00	2	-1	-0.2	0.0	-0.1	-0.2	0.0
5.0	2004	111-12+	2.43	73	58	3.9	4.6	16.3	15.2	13.3	2.53	79	66	4.1	4.7	14.9	14.0	12.4	0.09	6	8	0.2	0.1	-1.4	-1.2	-0.9
5.0	2003	111-20+	2.42	70	58	4.0	4.6	15.0	14.0	12.4	2.49	75	63	4.2	4.7	14.2	13.2	11.8	0.07	4	6	0.2	0.1	-0.8	-0.8	-0.6
5.5	TBA	111-24+	1.83	39	21	2.5	3.6	27.4	26.0	22.8	1.70	36	16	2.3	3.5	28.2	26.6	23.8	-0.13	-2	-5	-0.2	0.0	0.8	0.6	1.0
5.5	2008	111-24+	2.13	61	43	2.9	3.8	24.8	23.6	20.5	2.01	58	38	2.7	3.8	25.8	24.1	21.5	-0.12	-2	-5	-0.3	0.0	1.0	0.5	1.0
5.5	2005	112-12+	2.72	98	88	4.2	4.6	16.8	15.8	13.7	2.54	88	74	3.6	4.4	18.9	17.3	15.2	-0.18	-9	-14	-0.6	-0.2	2.1	1.5	1.5
5.5	2004	113-12+	2.60	85	76	4.3	4.7	15.2	14.2	12.5	2.61	87	77	4.2	4.7	14.9	14.0	12.5	0.01	2	1	-0.1	0.0	-0.3	-0.2	0.0
5.5	2003	113-15+	2.55	81	73	4.2	4.6	14.5	13.6	12.2	2.56	83	74	4.1	4.6	14.2	13.3	12.1	0.02	2	1	-0.1	0.0	-0.3	-0.3	-0.1
6.0	TBA	112-31	2.15	62	49	2.8	3.6	25.7	24.6	21.5	1.92	48	35	2.5	3.5	27.3	25.6	23.1	-0.23	-14	-14	-0.2	-0.1	1.6	1.0	1.6
6.0	2008	112-31	2.52	91	77	3.3	4.0	22.7	21.7	18.8	2.33	79	65	3.0	3.8	24.3	22.6	20.2	-0.19	-12	-12	-0.2	-0.1	1.6	0.9	1.4
6.0	2007	112-31	2.65	100	89	3.5	4.0	20.9	20.1	17.7	2.26	75	61	2.9	3.8	24.4	22.9	20.5	-0.39	-25	-28	-0.6	-0.3	3.5	2.8	2.8
6.0	2006	113-07	2.66	101	89	3.5	4.1	20.0	19.2	16.9	2.38	83	70	3.1	3.9	22.7	21.3	19.0	-0.29	-17	-20	-0.5	-0.2	2.7	2.1	2.1
6.0	2004	114-11	2.92	114	108	4.4	4.7	14.5	13.6	12.2	2.86	111	105	4.3	4.6	14.8	14.1	12.7	-0.06	-3	-4	-0.2	-0.1	0.3	0.5	0.5
6.0	2003	114-27	2.83	105	101	4.4	4.7	13.4	12.8	11.6	2.77	102	97	4.3	4.6	14.0	13.3	12.1	-0.06	-3	-4	-0.2	-0.1	0.6	0.5	0.5
6.5	TBA	113-31	2.74	110	100	3.4	3.9	22.9	21.8	18.8	2.50	91	82	3.1	3.7	25.2	23.0	20.5	-0.24	-18	-18	-0.2	-0.2	2.3	1.2	1.7
6.5	2008	113-31	3.05	134	125	3.7	4.2	20.5	19.4	16.7	2.89	122	113	3.6	4.0	22.4	20.2	17.8	-0.16	-12	-12	-0.2	-0.1	1.9	0.8	1.1

Source: Barclays Research

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