

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 22, 2016, Beta (V1.37) will become the production agency fixed rate prepayment model for the Barclays Live MBS calculators, POINT and Index, replacing the current production model, Prod (V1.36.4). Calculator users who wish to use V1.36.4 after the update will be able to do so by setting "FR Model Version" to Old Prod (V1.36.4) in the Preferences tab of the mortgage calculator. Other agency fixed rate model versions will no longer be available following the change.

Calculator users should migrate away from other model versions in anticipation of the update. For a detailed description of V1.37 please see [Agency fixed rate prepayment model update: Beta V1.37](#). The latest OAS impact reports can be found in the attached document.

Please contact us with any questions.

Steven Bergantino
+1 212 412 2164
steven.bergantino@barclays.com
BCI, US

Nicholas Strand
+1 212 412 2057
nicholas.strand@barclays.com
BCI, US

William Sarrett
+1 212 412 1327
William.Sarrett@barcap.com
BCI, US

Zhengao Huang
+1 212 412 7949
zhengao.huang@barclays.com
BCI, US

www.barclays.com

Appendix: OAS Effect of Model Changes, Prod V1.36.4 vs. Beta V1.37

FIGURE 1

FN 30y, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4											Beta V1.37							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	100-00	2.99	72	36	6.8	7.3	3.4	5.1	6.9	2.99	74	32	6.1	6.8	3.7	5.6	7.7	0.00	1	-4	-0.7	-0.5	0.3	0.5	0.8
3.0	2013	100-03	2.98	75	47	6.7	6.9	6.5	6.6	7.2	2.97	76	45	6.2	6.5	7.2	7.3	8.0	0.00	1	-2	-0.6	-0.4	0.7	0.7	0.8
3.0	2012	100-05	2.97	75	47	6.6	6.8	6.5	6.6	7.1	2.97	76	45	6.1	6.4	7.2	7.3	8.0	0.00	1	-2	-0.6	-0.4	0.7	0.7	0.9
3.5	TBA	103-06	2.99	84	37	5.4	6.6	6.9	7.9	9.5	2.93	85	28	4.7	6.1	6.8	9.4	11.1	-0.06	1	-9	-0.7	-0.5	-0.1	1.5	1.6
3.5	2014	103-06	2.93	83	33	5.0	6.1	10.3	10.3	11.0	2.87	83	27	4.4	5.6	12.3	12.4	12.6	-0.06	0	-6	-0.6	-0.4	2.0	2.1	1.6
3.5	2013	103-06	2.99	84	50	5.8	6.4	8.0	8.2	8.6	2.96	84	45	5.2	6.0	9.0	9.3	9.7	-0.04	0	-5	-0.7	-0.4	1.0	1.1	1.1
3.5	2012	103-09	2.97	83	50	5.7	6.3	8.4	8.3	8.6	2.93	83	45	5.1	5.9	9.4	9.4	9.7	-0.04	0	-5	-0.6	-0.4	1.0	1.1	1.1
3.5	2011	103-09	2.94	83	45	5.3	6.1	9.1	9.0	9.4	2.90	83	40	4.7	5.7	10.2	10.2	10.6	-0.04	0	-5	-0.5	-0.4	1.1	1.2	1.2
3.5	2010	103-10	2.89	82	43	4.9	5.8	10.2	10.0	10.5	2.85	82	37	4.3	5.4	11.4	11.3	11.7	-0.04	0	-6	-0.5	-0.4	1.2	1.3	1.2
4.0	TBA	105-26+	2.82	90	38	4.1	5.6	14.3	13.8	13.4	2.67	86	24	3.1	5.1	18.4	17.3	15.8	-0.16	-4	-14	-1.0	-0.5	4.1	3.5	2.4
4.0	2014	105-26+	2.89	92	43	4.3	5.7	12.8	12.4	12.2	2.81	90	34	3.6	5.3	14.8	14.2	13.5	-0.08	-2	-9	-0.6	-0.4	2.0	1.8	1.3
4.0	2013	105-26+	2.90	91	44	4.2	5.7	12.8	12.3	11.8	2.85	90	38	3.8	5.4	14.1	13.4	12.8	-0.06	-2	-6	-0.4	-0.3	1.3	1.1	1.0
4.0	2012	106-03+	2.95	87	60	5.4	6.0	10.1	10.0	9.8	2.90	86	52	4.7	5.6	11.0	10.9	10.7	-0.05	-2	-8	-0.7	-0.3	0.9	0.9	0.9
4.0	2011	106-03+	2.89	87	46	4.3	5.7	11.4	11.0	10.7	2.85	86	39	3.9	5.4	12.2	11.8	11.4	-0.04	-1	-6	-0.5	-0.3	0.8	0.8	0.7
4.0	2010	106-03+	2.84	86	43	4.1	5.5	12.1	11.5	11.3	2.79	84	36	3.6	5.2	12.9	12.4	12.1	-0.05	-1	-7	-0.5	-0.3	0.8	0.9	0.8
4.0	2009	105-26+	2.63	84	30	2.9	4.8	16.6	15.3	15.2	2.58	83	24	2.6	4.6	17.2	16.1	16.0	-0.05	-1	-6	-0.3	-0.2	0.6	0.8	0.8
4.5	TBA	108-00	2.59	89	36	3.1	5.0	18.9	17.9	16.9	2.59	88	35	3.0	4.9	18.7	17.7	16.9	0.00	-1	-1	0.0	-0.1	-0.2	-0.2	0.0
4.5	2014	108-00	2.99	105	63	4.0	5.6	12.9	12.5	12.2	2.85	99	54	3.5	5.2	14.3	14.1	13.8	-0.13	-5	-9	-0.5	-0.4	1.4	1.6	1.6
4.5	2013	108-00	2.91	102	58	3.7	5.4	14.5	13.6	13.0	2.82	97	53	3.5	5.1	15.1	14.5	14.1	-0.09	-4	-5	-0.2	-0.3	0.6	0.9	1.1
4.5	2012	108-08	2.99	96	73	5.0	5.6	11.5	11.4	11.1	2.91	92	63	4.3	5.3	12.4	12.3	12.1	-0.08	-3	-10	-0.7	-0.3	0.9	0.9	1.0
4.5	2011	108-08	2.84	95	51	3.4	5.3	14.7	13.7	12.7	2.76	93	43	2.9	5.0	15.2	14.5	13.7	-0.08	-2	-8	-0.5	-0.2	0.5	0.8	1.0
4.5	2010	108-06	2.73	92	44	3.0	5.0	15.7	14.7	13.9	2.67	91	37	2.6	4.8	16.1	15.4	14.7	-0.07	-2	-8	-0.5	-0.2	0.4	0.7	0.8
4.5	2009	108-00	2.69	92	43	2.8	4.8	16.3	15.2	14.6	2.63	91	35	2.3	4.6	16.6	15.8	15.3	-0.06	-1	-8	-0.4	-0.2	0.3	0.6	0.7
5.0	TBA	110-02	1.78	41	6	1.8	3.9	25.5	24.4	23.4	1.88	49	10	1.9	3.9	24.2	23.5	22.6	0.10	8	3	0.0	0.0	-1.3	-0.9	-0.8
5.0	2011	110-06	2.75	99	62	3.3	5.0	16.5	15.7	14.7	2.57	93	47	2.6	4.7	18.2	17.5	16.4	-0.18	-6	-15	-0.8	-0.3	1.7	1.8	1.7
5.0	2010	110-06	2.59	93	52	2.8	4.8	18.0	17.1	16.0	2.42	87	38	2.2	4.5	19.6	18.8	17.7	-0.18	-5	-14	-0.7	-0.3	1.6	1.7	1.7
5.0	2009	110-02	2.55	91	51	2.7	4.7	18.8	17.5	16.5	2.40	87	39	2.2	4.4	20.0	18.9	18.0	-0.15	-4	-12	-0.5	-0.2	1.2	1.4	1.5
5.0	2008	110-02	1.93	50	16	2.0	4.0	24.4	23.2	22.0	2.01	56	19	2.0	4.0	23.3	22.3	21.2	0.08	6	3	0.0	0.0	-1.1	-0.9	-0.8
5.0	2005	110-06	2.11	55	28	2.5	4.0	21.3	20.4	19.2	2.22	63	34	2.7	4.1	19.7	19.0	18.1	0.12	7	6	0.2	0.0	-1.6	-1.4	-1.1
5.0	2004	110-12	2.33	67	44	3.1	4.3	17.9	16.8	16.0	2.39	70	47	3.2	4.3	16.9	16.1	15.5	0.05	3	3	0.2	0.0	-1.0	-0.7	-0.5
5.0	2003	110-18	2.37	67	46	3.2	4.3	16.0	15.3	14.7	2.40	68	48	3.3	4.3	15.4	14.8	14.4	0.03	1	2	0.1	0.0	-0.6	-0.5	-0.3
5.5	TBA	111-16+	1.62	19	-1	1.6	3.5	26.7	25.9	24.8	1.83	36	11	1.8	3.6	24.8	24.2	23.2	0.21	18	12	0.2	0.1	-1.9	-1.7	-1.6
5.5	2008	111-16+	2.09	55	32	2.2	3.9	23.6	22.4	21.2	2.26	68	41	2.4	4.0	21.8	20.9	19.9	0.17	13	9	0.2	0.1	-1.8	-1.5	-1.3
5.5	2007	111-16+	1.96	43	22	2.1	3.8	24.2	23.4	22.1	2.10	55	30	2.2	3.8	22.7	22.1	21.0	0.14	12	8	0.1	0.1	-1.5	-1.3	-1.1
5.5	2006	111-16+	2.12	54	34	2.4	3.9	22.6	21.8	20.5	2.25	64	41	2.5	3.9	21.2	20.6	19.5	0.12	10	7	0.1	0.1	-1.4	-1.2	-1.0
5.5	2005	111-26+	2.29	66	46	2.8	4.1	19.7	19.0	18.0	2.42	75	53	2.9	4.2	18.2	17.8	17.0	0.12	8	7	0.2	0.1	-1.5	-1.2	-1.0
5.5	2004	112-04+	2.39	70	52	3.1	4.2	17.7	16.9	16.2	2.48	76	58	3.3	4.3	16.6	16.0	15.4	0.09	5	5	0.2	0.0	-1.1	-0.9	-0.8
5.5	2003	112-04+	2.41	71	56	3.2	4.2	16.5	15.9	15.3	2.49	76	60	3.4	4.2	15.5	15.1	14.6	0.08	5	5	0.2	0.0	-1.0	-0.8	-0.7
6.0	TBA	113-01+	1.27	-8	-21	1.2	3.3	29.3	28.4	27.2	1.64	22	4	1.6	3.5	26.3	25.7	24.7	0.37	30	24	0.4	0.2	-3.0	-2.7	-2.5
6.0	2008	113-01+	2.24	65	47	2.3	3.9	22.7	21.8	20.6	2.34	74	54	2.5	4.0	21.6	20.9	19.9	0.10	9	7	0.1	0.0	-1.1	-0.9	-0.7
6.0	2007	113-01+	2.09	52	36	2.1	3.8	23.6	22.7	21.5	2.25	67	47	2.4	3.9	21.9	21.3	20.3	0.16	14	12	0.3	0.1	-1.7	-1.4	-1.2
6.0	2006	113-01+	2.25	64	47	2.4	3.9	21.8	21.2	20.0	2.39	76	58	2.6	3.9	20.3	19.9	19.0	0.15	12	10	0.2	0.1	-1.5	-1.3	-1.0
6.5	TBA	114-13+	1.18	-22	-30	1.3	3.1	29.5	28.8	27.9	1.76	27	12	1.8	3.4	25.4	25.1	24.3	0.59	49	42	0.5	0.3	-4.1	-3.7	-3.6
6.5	2008	114-13+	2.54	88	75	2.7	4.0	21.0	20.4	19.3	2.55	90	74	2.7	4.0	20.5	20.1	19.3	0.01	2	0	0.0	0.0	-0.5	-0.3	0.0
6.5	2007	114-13+	2.36	71	60	2.6	3.8	21.9	21.2	20.4	2.54	86	73	2.8	3.9	19.9	19.7	19.2	0.18	15	13	0.2	0.1	-2.0	-1.5	-1.2
6.5	2006	114-13+	2.45	79	68	2.7	3.8	20.8	20.2	19.4	2.61	92	79	2.9	3.9	19.0	18.9	18.3	0.16	13	11	0.2	0.1	-1.8	-1.3	-1.1

Source: Barclays Research

FIGURE 2

IOS, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4												Beta V1.37								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	20-14+	3.17	245	113	-9.0	5.6	6.6	6.6	7.3		2.19	193	-4	-14.8	5.7	7.2	7.4	8.1	-0.98	-52	-117	-5.8	0.1	0.6	0.8	0.8
IFN-33013 IO	3.0	20-27	3.07	233	105	-8.8	5.7	6.5	6.6	7.2		2.12	181	-9	-14.5	5.8	7.1	7.4	8.1	-0.95	-51	-114	-5.8	0.1	0.6	0.8	0.9
IFN-33510 IO	3.5	20-15+	1.51	276	70	-19.0	5.0	10.7	10.3	10.7		0.02	204	-75	-25.5	5.2	12.0	11.7	12.0	-1.49	-72	-144	-6.5	0.1	1.3	1.4	1.3
IFN-33512 IO	3.5	21-28	2.72	271	133	-12.7	5.3	8.6	8.6	9.1		1.32	207	3	-18.6	5.4	9.8	9.9	10.3	-1.40	-64	-130	-5.9	0.1	1.2	1.3	1.2
IFN-33513 IO	3.5	22-02	2.93	287	149	-12.9	5.4	8.4	8.6	9.1		1.49	215	16	-18.9	5.5	9.6	9.9	10.3	-1.45	-72	-133	-6.0	0.1	1.2	1.3	1.2
IFN-33514 IO	3.5	21-03+	1.06	354	84	-26.8	5.4	11.1	11.1	11.7		-0.82	285	-64	-36.1	5.6	13.3	13.3	13.3	-1.88	-69	-148	-9.3	0.2	2.2	2.2	1.6
IFN-34009 IO	4.0	20-26+	0.19	238	26	-24.1	4.7	14.8	13.8	13.6		-0.70	187	-89	-27.9	4.8	15.4	14.5	14.3	-0.88	-52	-115	-3.9	0.1	0.6	0.7	0.7
IFN-34010 IO	4.0	21-21+	1.64	276	118	-19.3	4.8	13.1	12.4	12.0		0.79	217	5	-23.2	4.9	13.9	13.2	12.7	-0.85	-59	-113	-3.9	0.1	0.8	0.8	0.7
IFN-34011 IO	4.0	22-05+	1.83	285	134	-18.6	5.0	12.9	12.2	11.7		1.08	231	32	-21.9	5.0	13.4	12.9	12.4	-0.75	-54	-102	-3.3	0.1	0.5	0.7	0.7
IFN-34013 IO	4.0	21-19+	1.23	316	150	-23.3	5.1	15.0	14.1	13.2		0.24	243	41	-26.6	5.2	16.0	15.0	14.0	-0.99	-73	-109	-3.3	0.1	1.0	0.9	0.8
IFN-34014 IO	4.0	21-30	1.28	344	163	-23.9	5.1	14.0	13.6	13.1		-0.26	251	18	-30.6	5.3	16.2	15.4	14.4	-1.54	-92	-146	-6.7	0.2	2.2	1.8	1.3
IFN-34509 IO	4.5	21-03	-0.65	238	74	-26.4	4.5	18.6	17.1	16.5		-0.71	253	23	-27.7	4.5	17.9	17.0	16.5	-0.06	15	-50	-1.3	0.0	-0.7	-0.1	0.0
IFN-34510 IO	4.5	21-31+	1.35	294	172	-20.3	4.5	16.0	15.0	14.2		0.54	259	73	-24.1	4.6	16.3	15.5	14.9	-0.82	-35	-99	-3.7	0.1	0.3	0.5	0.7
IFN-34511 IO	4.5	23-01+	1.53	269	148	-19.1	4.7	15.1	14.2	13.4		0.65	225	46	-22.9	4.8	15.5	14.9	14.2	-0.87	-44	-102	-3.8	0.1	0.4	0.7	0.8
IFN-35003 IO	5.0	22-16	-0.76	17	-46	-10.6	3.9	16.6	15.6	14.9		-0.40	32	-49	-9.1	3.9	15.8	15.2	14.6	0.36	15	-3	1.5	0.0	-0.8	-0.4	-0.3
IFN-35005 IO	5.0	21-30+	-3.83	-163	-174	-17.6	4.2	21.7	20.7	19.4		-2.68	-77	-135	-15.8	4.1	20.1	19.4	18.4	1.15	86	39	1.8	-0.1	-1.6	-1.3	-1.0
IFN-35008 IO	5.0	22-11+	-5.83	-259	-233	-23.3	4.5	23.9	22.9	21.9		-5.33	-207	-244	-23.1	4.5	23.0	22.3	21.4	0.50	52	-11	0.3	0.0	-0.9	-0.6	-0.5
IFN-35009 IO	5.0	22-02+	-0.57	227	142	-21.3	4.3	19.8	18.7	17.8		-1.56	196	52	-23.8	4.3	20.3	19.4	18.6	-0.99	-31	-90	-2.5	0.0	0.5	0.7	0.8
IFN-35010 IO	5.0	22-28+	0.94	285	209	-17.7	4.3	17.5	16.7	16.0		-0.85	204	67	-22.3	4.4	19.0	18.3	17.5	-1.80	-81	-142	-4.6	0.1	1.5	1.6	1.5
IFN-35503 IO	5.5	23-17	-0.14	19	15	-7.6	3.8	17.0	16.3	15.6		0.59	66	40	-6.2	3.7	16.0	15.5	15.0	0.73	47	24	1.5	0.0	-1.0	-0.8	-0.6
IFN-35505 IO	5.5	24-14	-3.21	-213	-188	-13.4	4.2	20.6	19.8	18.7		-2.02	-120	-137	-11.6	4.1	19.0	18.5	17.7	1.19	93	51	1.8	-0.1	-1.6	-1.3	-1.0
IFN-35508 IO	5.5	22-04+	-3.51	-171	-67	-19.2	4.1	24.4	23.2	22.1		-2.10	-39	-7	-17.8	4.0	22.7	21.8	20.8	1.40	132	60	1.5	-0.1	-1.7	-1.4	-1.3
IFN-36008 IO	6.0	23-09+	-2.14	-141	-26	-15.2	4.0	24.3	23.1	21.8		-1.06	-25	35	-13.9	3.9	22.8	22.0	20.9	1.07	116	62	1.3	-0.1	-1.5	-1.1	-0.9
IFN-36567 IO	6.5	26-23+	-3.20	-325	-240	-10.2	4.1	23.0	22.2	21.2		-1.64	-178	-131	-8.5	3.9	20.9	20.5	19.8	1.56	147	108	1.7	-0.1	-2.1	-1.7	-1.4
IG2-34010 IO	4.0	20-07	0.57	59	17	-19.4	5.0	17.3	16.8	14.2		-0.79	153	20	-23.6	5.0	18.0	17.3	15.5	-1.37	94	3	-4.2	0.0	0.7	0.5	1.3
IG2-34510 IO	4.5	20-19+	-0.07	78	33	-21.7	4.8	21.9	20.2	16.7		-0.12	83	83	-20.0	4.7	20.8	19.0	16.7	-0.05	5	50	1.7	-0.1	-1.1	-1.2	0.0
IG2-35010 IO	5.0	22-07+	0.78	146	110	-17.2	4.6	21.7	19.9	16.5		1.32	128	156	-15.8	4.5	19.2	18.1	16.1	0.54	-19	46	1.5	-0.1	-2.5	-1.8	-0.4

Source: Barclays Research

FIGURE 3

FN 15y, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4											Beta V1.37								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	100-25+	2.33	35	23	4.9	5.1	4.1	5.9	7.2	2.33	35	19	4.7	5.1	3.9	5.8	7.0	0.00	-1	-4	-0.1	0.0	-0.2	-0.1	-0.2
2.5	2014	100-27+	2.29	37	25	4.4	4.6	6.9	7.7	8.5	2.29	37	22	4.3	4.6	7.0	7.7	8.4	0.00	-1	-3	-0.1	0.0	0.1	0.0	-0.1
2.5	2013	101-07+	2.18	33	27	4.2	4.2	7.7	8.2	8.9	2.18	33	26	4.1	4.3	7.3	7.7	8.6	0.00	0	-1	0.0	0.0	-0.4	-0.5	-0.3
2.5	2012	101-09+	2.14	33	28	3.9	4.0	8.1	8.7	9.3	2.15	33	26	3.9	4.0	7.7	8.1	8.9	0.01	0	-2	0.0	0.0	-0.4	-0.6	-0.4
3.0	TBA	103-00+	2.28	40	22	3.8	4.4	9.6	9.6	10.0	2.26	40	18	3.6	4.3	10.6	10.5	10.6	-0.02	0	-4	-0.3	-0.1	1.0	0.9	0.6
3.0	2014	103-00+	2.29	41	28	4.1	4.4	8.4	8.9	9.5	2.29	41	26	3.9	4.4	8.7	8.9	9.5	0.00	0	-3	-0.2	0.0	0.3	0.0	0.0
3.0	2013	103-03+	2.22	38	29	4.0	4.2	8.8	9.1	9.7	2.23	39	28	3.9	4.2	8.5	8.8	9.6	0.00	1	-1	-0.1	0.0	-0.3	-0.3	-0.1
3.0	2012	103-08+	2.10	33	27	3.6	3.8	9.3	9.8	10.3	2.10	33	26	3.6	3.8	8.9	9.6	10.2	0.00	0	-1	-0.1	0.0	-0.4	-0.2	-0.1
3.0	2011	103-08+	2.05	31	25	3.4	3.6	9.9	10.4	10.8	2.06	32	23	3.3	3.6	9.4	9.9	10.5	0.01	1	-1	-0.1	0.0	-0.5	-0.5	-0.3
3.5	TBA	104-23	2.00	34	25	2.9	3.3	12.9	12.7	12.8	2.01	35	24	2.8	3.3	12.2	12.1	12.4	0.02	2	-1	-0.1	0.0	-0.7	-0.6	-0.4
3.5	2014	104-26	2.34	49	39	4.0	4.3	9.4	9.7	10.2	2.34	49	38	3.9	4.3	9.1	9.6	10.2	0.00	0	-1	-0.1	0.0	-0.3	-0.1	0.0
3.5	2013	104-26	2.29	47	37	3.8	4.1	9.9	10.1	10.5	2.29	47	38	3.8	4.1	9.4	9.8	10.4	0.00	1	0	0.0	0.0	-0.5	-0.3	-0.1
3.5	2012	104-27	2.15	39	34	3.6	3.7	10.0	10.4	10.8	2.15	39	34	3.5	3.7	9.8	10.4	11.0	0.00	0	0	0.0	0.0	-0.2	0.0	0.2
3.5	2011	104-29	2.03	33	26	3.2	3.5	11.1	11.4	11.7	2.03	33	25	3.1	3.5	10.8	11.3	11.7	0.00	1	-1	-0.1	0.0	-0.3	-0.1	0.0
3.5	2010	104-27	1.95	29	23	3.0	3.3	11.9	12.2	12.4	1.95	29	21	2.8	3.2	11.5	12.0	12.3	0.00	1	-2	-0.1	0.0	-0.4	-0.2	-0.1
4.0	TBA	104-13	0.26	-79	-80	1.2	1.3	14.0		13.9	0.23	-82	-83	1.1	1.3	15.1		14.9	-0.04	-3	-3	-0.1	0.0	1.1		1.0
4.0	2011	104-31	2.44	75	69	3.0	3.3	12.0	12.2	12.5	2.43	75	67	2.9	3.3	11.9	12.3	12.6	-0.01	0	-2	-0.1	0.0	-0.1	0.1	0.1
4.0	2010	104-29	2.34	70	65	2.8	3.1	12.8	12.9	13.1	2.33	70	63	2.7	3.1	12.7	13.0	13.2	-0.01	0	-2	-0.1	0.0	-0.1	0.1	0.1
4.0	2009	104-29	2.17	60	55	2.5	2.8	13.8	13.9	14.0	2.16	60	52	2.4	2.8	14.0	14.3	14.3	-0.01	0	-3	-0.1	0.0	0.2	0.4	0.3
4.5	TBA	103-28	1.14	5	5	1.2	1.3	14.2		14.0	1.10	2	1	1.1	1.3	15.4		15.2	-0.04	-3	-4	0.0	0.0	1.2		1.2
4.5	2010	105-12	2.63	101	95	2.7	3.0	13.3	13.6	13.7	2.61	100	93	2.6	3.0	13.3	13.9	14.0	-0.02	-1	-2	-0.1	0.0	0.0	0.3	0.3
4.5	2009	105-12	2.48	92	86	2.5	2.8	14.1	14.4	14.4	2.46	91	84	2.4	2.8	14.3	14.8	14.8	-0.02	-1	-3	-0.1	0.0	0.2	0.4	0.4

Source: Barclays Research

FIGURE 4

FN 20y, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4											Beta V1.37								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	101-25+	2.66	60	27	5.0	5.7	5.0	6.3	9.0	2.65	60	22	4.8	5.6	4.9	7.1	9.4	-0.01	0	-5	-0.2	-0.1	-0.1	0.8	0.4
3.0	2014	101-25+	2.61	61	27	4.6	5.2	8.3	8.8	11.0	2.60	60	23	4.4	5.1	9.7	10.0	11.5	-0.01	-1	-5	-0.3	-0.1	1.4	1.2	0.5
3.0	2013	101-25+	2.64	63	44	5.0	5.3	6.5	7.1	8.4	2.64	63	43	4.9	5.3	6.3	7.1	8.4	0.00	0	-1	0.0	0.0	-0.2	0.0	0.0
3.0	2012	101-25+	2.62	64	43	4.6	5.0	6.7	8.2	9.1	2.62	64	40	4.6	5.0	6.5	8.3	9.2	0.00	0	-3	-0.1	0.0	-0.2	0.1	0.1
3.5	TBA	104-06	2.70	71	39	4.7	5.5	6.7	8.2	9.7	2.68	72	34	4.4	5.4	6.7	9.2	10.2	-0.02	0	-4	-0.3	-0.1	0.0	1.0	0.5
3.5	2014	104-06	2.53	66	29	3.9	4.8	12.8	12.6	13.2	2.53	66	26	3.6	4.7	14.0	13.4	13.3	0.00	-1	-3	-0.3	-0.1	1.2	0.8	0.1
3.5	2013	104-06	2.63	68	44	4.5	5.0	9.0	9.4	10.3	2.63	69	44	4.4	5.0	9.3	9.5	10.1	0.01	0	0	-0.1	0.0	0.3	0.1	-0.2
3.5	2012	104-22	2.45	57	33	4.0	4.7	9.4	11.2	11.2	2.45	58	31	3.9	4.7	9.5	11.0	11.0	0.01	1	-1	-0.1	0.0	0.1	-0.2	-0.2
3.5	2011	104-06	2.46	64	38	3.6	4.4	11.8	13.7	13.0	2.49	65	37	3.6	4.4	11.7	12.9	12.4	0.03	1	-1	0.0	0.0	-0.1	-0.8	-0.6
3.5	2010	104-06	2.41	61	39	3.4	4.2	14.9	14.1	13.4	2.44	62	39	3.4	4.2	13.7	13.0	12.5	0.04	2	0	0.0	0.1	-1.2	-1.1	-0.9
4.0	TBA	106-22	2.57	69	38	3.9	5.0	12.0	11.6	12.0	2.59	70	39	3.8	5.0	12.0	11.6	11.6	0.02	1	0	-0.1	0.0	0.0	0.0	-0.4
4.0	2014	106-22	2.56	68	39	4.0	4.9	11.8	11.5	11.9	2.58	69	40	3.9	4.9	11.9	11.4	11.6	0.02	1	1	-0.1	0.0	0.1	-0.1	-0.3
4.0	2013	106-22	2.52	66	38	3.8	4.8	12.6	12.1	12.3	2.56	68	41	3.9	4.8	11.8	11.3	11.5	0.04	2	3	0.1	0.1	-0.8	-0.8	-0.8
4.0	2012	107-06	2.42	55	35	4.0	4.7	10.3	10.9	11.0	2.44	57	36	4.1	4.7	9.7	10.3	10.6	0.03	2	1	0.0	0.0	-0.6	-0.6	-0.4
4.0	2011	106-30	2.28	51	26	3.2	4.3	14.2	14.2	13.5	2.34	55	28	3.3	4.4	12.9	13.0	12.6	0.06	4	2	0.0	0.1	-1.3	-1.2	-0.9
4.0	2010	106-22	2.25	50	28	3.1	4.1	16.0	14.6	14.0	2.31	55	31	3.1	4.1	14.4	13.4	13.0	0.06	5	2	0.0	0.1	-1.6	-1.2	-1.0
4.0	2009	106-22	2.21	47	31	3.2	3.9	13.9	13.0	13.2	2.25	50	32	3.2	3.9	12.8	12.2	12.5	0.04	3	1	0.0	0.0	-1.1	-0.8	-0.7
4.5	TBA	108-04	2.78	91	67	4.2	4.9	10.4	11.0	12.2	2.85	95	74	4.6	5.1	8.4	9.9	11.2	0.07	4	7	0.4	0.2	-2.0	-1.1	-1.0
4.5	2011	109-04	2.14	46	20	2.8	4.1	15.6	15.2	14.5	2.21	52	25	2.9	4.2	14.2	14.1	13.7	0.07	5	4	0.1	0.1	-1.4	-1.1	-0.8
4.5	2010	108-04	2.28	60	37	2.7	3.9	17.3	15.4	15.0	2.34	65	42	2.8	4.0	15.6	14.3	14.2	0.06	6	4	0.1	0.1	-1.7	-1.1	-0.8
4.5	2009	108-04	2.29	59	40	2.9	3.8	15.0	13.9	13.9	2.33	63	43	2.9	3.9	13.8	13.2	13.4	0.04	4	3	0.0	0.0	-1.2	-0.7	-0.5
5.0	TBA	110-02	1.78	30	13	2.3	3.4	18.9	18.6	18.6	1.90	38	20	2.5	3.5	17.1	17.1	17.4	0.12	8	8	0.2	0.1	-1.8	-1.5	-1.2
5.0	2003	110-02	0.96	-44	-49	2.0	2.6	16.2	16.2	16.1	0.93	-46	-53	2.0	2.6	16.2	16.5	16.3	-0.02	-3	-4	0.0	0.0	0.0	0.3	0.2
5.5	TBA	111-16+	1.76	29	16	2.3	3.4	19.7	19.2	19.2	1.91	40	26	2.5	3.4	17.8	17.6	17.9	0.15	11	10	0.2	0.1	-1.9	-1.6	-1.3
5.5	2003	111-16+	0.78	-61	-64	1.9	2.5	17.2	17.1	17.0	0.80	-59	-63	2.0	2.5	16.7	16.8	16.7	0.03	2	1	0.1	0.0	-0.5	-0.3	-0.3

Source: Barclays Research

FIGURE 5

GN2 30y, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4											Beta V1.37								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	101-11	2.77	61	25	5.6	6.2	6.3	8.8	10.3	2.78	59	20	5.4	6.3	4.8	7.5	9.6	0.01	-2	-5	-0.2	0.1	-1.5	-1.3	-0.7
3.0	2013	101-20	2.69	57	25	5.5	5.7	12.6	12.6	11.4	2.69	56	21	5.6	5.9	11.1	12.0	11.4	0.00	-1	-4	0.1	0.2	-1.5	-0.6	0.0
3.0	2012	101-25	2.65	55	22	5.3	5.6	13.8	13.5	11.9	2.65	54	18	5.4	5.7	13.2	13.0	12.0	0.00	-1	-3	0.1	0.1	-0.6	-0.5	0.1
3.5	TBA	104-09	2.63	66	18	4.3	5.5	11.0	13.3	13.7	2.66	68	13	3.7	5.6	9.1	11.2	13.2	0.03	3	-5	-0.5	0.1	-1.9	-2.1	-0.5
3.5	2014	104-11	2.54	58	14	4.0	5.1	17.5	16.9	14.9	2.57	61	11	3.6	5.2	16.8	15.1	14.3	0.04	3	-3	-0.4	0.1	-0.7	-1.8	-0.6
3.5	2013	104-14	2.60	58	20	4.5	5.3	15.0	14.8	13.1	2.57	61	17	4.6	5.5	13.0	14.6	13.7	-0.03	3	-2	0.2	0.2	-2.0	-0.2	0.6
3.5	2012	104-20	2.52	53	15	4.2	5.1	16.4	15.8	13.6	2.49	55	14	4.4	5.3	16.4	15.8	14.3	-0.03	2	-1	0.1	0.1	0.0	0.0	0.7
3.5	2011	104-22	2.46	49	13	4.1	5.0	18.4	17.3	14.5	2.47	52	13	4.3	5.1	17.0	15.9	14.4	0.01	3	0	0.2	0.1	-1.4	-1.4	-0.1
4.0	TBA	106-07	2.39	61	16	3.1	4.6	23.2	20.7	18.4	2.48	66	15	2.7	4.7	22.7	19.1	17.2	0.09	5	-1	-0.4	0.1	-0.5	-1.6	-1.2
4.0	2014	106-07	2.51	65	23	3.5	4.8	21.6	19.3	16.5	2.58	70	23	3.3	4.9	19.5	17.3	15.7	0.07	5	0	-0.2	0.1	-2.1	-2.0	-0.8
4.0	2013	106-09	2.40	59	17	3.2	4.6	23.1	21.2	17.7	2.52	66	20	3.3	4.8	19.1	18.0	16.2	0.12	7	3	0.2	0.2	-4.0	-3.2	-1.5
4.0	2012	106-13+	2.67	70	36	4.2	5.2	17.1	16.0	13.2	2.64	69	35	4.4	5.2	16.5	15.6	13.8	-0.04	-1	-2	0.2	0.0	-0.6	-0.4	0.6
4.0	2011	106-24	2.44	54	19	3.5	4.8	20.7	19.0	15.4	2.48	57	20	3.8	4.9	17.8	16.7	15.1	0.04	3	1	0.3	0.1	-2.9	-2.3	-0.3
4.0	2010	107-01	2.46	53	17	3.5	4.9	17.6	16.9	14.2	2.36	56	14	3.4	4.9	18.3	17.5	15.6	-0.10	3	-4	-0.1	0.0	0.7	0.6	1.4
4.5	TBA	107-14+	2.41	70	33	2.8	4.2	25.5	23.0	20.0	2.52	78	37	2.9	4.4	23.3	20.9	18.8	0.11	7	4	0.0	0.2	-2.2	-2.1	-1.2
4.5	2014	107-14+	2.50	76	38	2.9	4.3	24.5	22.0	19.0	2.58	81	41	2.9	4.5	23.1	20.5	18.2	0.08	5	3	-0.1	0.1	-1.4	-1.5	-0.8
4.5	2013	107-15+	2.53	76	41	3.1	4.4	24.2	21.6	18.5	2.61	82	43	3.2	4.5	21.4	19.8	17.7	0.08	5	3	0.1	0.1	-2.8	-1.8	-0.8
4.5	2011	108-10+	2.48	67	33	3.2	4.6	21.8	19.9	16.4	2.58	71	37	3.5	4.7	18.2	17.4	15.5	0.10	3	4	0.4	0.1	-3.6	-2.5	-0.9
4.5	2010	108-26+	2.38	58	23	2.8	4.6	21.1	19.5	16.1	2.35	57	22	3.1	4.7	20.5	18.8	16.6	-0.04	-1	-1	0.3	0.0	-0.6	-0.7	0.5
4.5	2009	108-14+	2.44	63	29	2.8	4.5	21.4	19.7	16.2	2.36	60	25	2.9	4.5	21.3	19.4	17.2	-0.08	-3	-4	0.1	0.0	-0.1	-0.3	1.0
5.0	TBA	108-07	2.98	115	86	3.2	4.5	21.0	19.1	16.1	2.91	110	80	3.1	4.3	19.9	18.9	16.9	-0.06	-6	-7	-0.1	-0.1	-1.1	-0.2	0.8
5.0	2010	110-13	2.54	75	45	3.0	4.7	20.6	18.9	15.8	2.55	71	42	3.1	4.6	18.9	17.8	15.9	0.00	-4	-2	0.1	0.0	-1.7	-1.1	0.1
5.0	2009	109-21	2.64	85	55	3.0	4.5	21.4	19.5	16.3	2.58	79	48	2.9	4.4	20.0	18.9	17.0	-0.06	-6	-7	-0.1	-0.1	-1.4	-0.6	0.7
5.0	2005	110-07	2.59	75	57	3.5	4.5	17.6	16.4	14.3	2.58	75	56	3.6	4.5	16.8	15.9	14.4	0.00	-1	-1	0.1	0.0	-0.8	-0.5	0.1
5.0	2004	110-19	2.70	79	68	4.2	4.7	13.9	13.1	11.7	2.68	77	66	4.2	4.7	13.7	13.0	12.0	-0.02	-2	-2	0.1	0.0	-0.2	-0.1	0.3
5.0	2003	110-31	2.64	73	63	4.2	4.7	12.9	12.1	11.0	2.62	71	61	4.2	4.7	12.7	12.1	11.2	-0.02	-2	-2	0.1	0.0	-0.2	0.0	0.2
5.5	TBA	111-05+	2.45	73	53	2.8	4.1	23.2	21.5	18.9	2.46	73	53	3.0	4.0	21.5	20.7	18.9	0.00	1	0	0.2	0.0	-1.7	-0.8	0.0
5.5	2008	111-05+	2.47	73	54	2.9	4.1	23.0	21.3	18.7	2.47	73	54	3.0	4.0	21.3	20.5	18.8	0.00	0	0	0.1	0.0	-1.7	-0.8	0.1
5.5	2005	112-23+	2.54	70	56	3.5	4.5	17.4	16.2	14.2	2.55	72	56	3.6	4.5	16.4	15.6	14.1	0.02	1	1	0.1	0.0	-1.0	-0.6	-0.1
5.5	2004	113-17+	2.58	68	59	4.1	4.7	13.9	13.1	11.8	2.58	68	59	4.2	4.7	13.5	12.9	11.8	0.00	0	0	0.1	0.0	-0.4	-0.2	0.0
5.5	2003	113-29+	2.49	60	52	4.1	4.7	13.3	12.5	11.4	2.50	60	52	4.2	4.7	12.8	12.2	11.3	0.01	1	1	0.1	0.0	-0.5	-0.3	-0.1
6.0	TBA	113-01+	2.51	76	62	3.1	4.1	22.5	21.0	18.5	2.48	74	60	3.2	4.0	21.0	20.4	18.9	-0.03	-2	-2	0.1	-0.1	-1.5	-0.6	0.4
6.0	2008	113-01+	2.52	76	63	3.1	4.1	22.3	20.8	18.4	2.49	75	61	3.2	4.0	20.9	20.3	18.7	-0.03	-2	-2	0.1	-0.1	-1.4	-0.5	0.3
6.0	2007	113-15+	2.35	61	48	3.0	4.0	22.7	21.2	18.6	2.39	64	51	3.1	4.0	21.1	20.2	18.4	0.04	4	3	0.2	0.0	-1.6	-1.0	-0.2
6.0	2006	113-29+	2.44	66	54	3.2	4.2	20.7	19.3	16.9	2.48	69	56	3.4	4.2	19.4	18.4	16.7	0.04	3	3	0.2	0.0	-1.3	-0.9	-0.2
6.0	2004	114-31+	2.74	84	77	4.1	4.7	14.1	13.4	12.0	2.75	84	77	4.2	4.7	13.7	13.1	12.0	0.01	1	0	0.1	0.0	-0.4	-0.3	0.0
6.0	2003	115-17+	2.64	73	67	4.1	4.7	13.4	12.8	11.6	2.63	73	67	4.2	4.7	13.1	12.6	11.6	0.00	0	-1	0.1	0.0	-0.3	-0.2	0.0
6.5	TBA	114-21+	2.78	96	85	3.4	4.2	21.0	19.5	17.3	2.81	99	88	3.5	4.2	19.3	18.7	17.2	0.03	3	3	0.1	0.0	-1.7	-0.8	-0.1
6.5	2008	114-29+	2.62	81	72	3.3	4.1	21.9	20.2	17.9	2.57	78	68	3.3	4.0	20.3	19.8	18.3	-0.05	-3	-3	0.0	-0.1	-1.6	-0.4	0.4

Source: Barclays Research

FIGURE 6

GN 30y, as of 3 pm NY market close, December 31, 2015

Prod V1.36.4											Beta V1.37								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	101-09	2.75	65	33	5.6	5.6	13.0	13.4	12.1	2.75	63	26	5.5	5.7	11.5	12.8	12.4	0.00	-2	-7	-0.1	0.1	-1.5	-0.6	0.3
3.0	2013	101-17	2.71	60	29	5.6	5.6	13.6	13.4	11.8	2.70	58	22	5.5	5.6	13.2	13.4	12.4	-0.01	-2	-7	-0.1	0.0	-0.4	0.0	0.6
3.0	2012	101-23	2.68	56	28	5.7	5.8	13.1	12.9	11.2	2.67	55	21	5.5	5.7	13.0	12.9	11.9	-0.01	-1	-7	-0.2	0.0	-0.1	0.0	0.7
3.5	TBA	104-03	2.60	62	27	4.5	5.0	17.2	16.7	14.5	2.59	63	22	4.4	5.1	17.1	16.2	14.8	-0.01	2	-5	-0.1	0.1	-0.1	-0.5	0.3
3.5	2014	104-03	2.73	66	33	5.1	5.6	13.4	13.6	12.1	2.69	67	24	4.4	5.5	14.4	13.7	12.9	-0.03	0	-9	-0.7	-0.2	1.0	0.1	0.8
3.5	2013	104-07	2.74	64	37	5.4	5.8	13.3	12.7	11.0	2.68	65	29	5.1	5.6	13.3	13.7	12.4	-0.06	1	-8	-0.3	-0.1	0.0	1.0	1.4
3.5	2012	104-11	2.64	60	30	4.9	5.4	15.4	14.7	12.4	2.59	60	23	4.7	5.3	16.3	15.2	13.6	-0.05	0	-6	-0.2	-0.1	0.9	0.5	1.2
3.5	2011	104-17	2.55	54	21	4.5	5.1	17.0	16.1	13.4	2.53	56	18	4.5	5.2	16.7	15.5	14.0	-0.02	1	-3	0.0	0.0	-0.3	-0.6	0.6
4.0	TBA	106-04	2.49	62	24	3.3	4.5	21.9	20.3	16.9	2.59	69	29	3.7	4.8	18.1	17.2	15.6	0.10	7	5	0.4	0.3	-3.8	-3.1	-1.3
4.0	2014	106-04	2.85	81	51	4.9	5.6	14.8	14.1	11.9	2.79	80	43	4.4	5.4	15.5	14.6	12.9	-0.06	-2	-8	-0.5	-0.2	0.7	0.5	1.0
4.0	2013	106-08	2.86	80	52	5.0	5.7	14.3	13.3	11.2	2.83	80	49	5.0	5.6	13.2	13.3	11.8	-0.03	0	-3	-0.1	0.0	-1.1	0.0	0.6
4.0	2012	106-10	2.80	76	50	4.8	5.5	15.4	14.0	11.7	2.78	75	48	5.0	5.5	15.0	13.8	12.1	-0.02	-1	-1	0.2	0.0	-0.4	-0.2	0.4
4.0	2011	106-14	2.62	66	32	3.9	5.0	18.9	17.1	13.9	2.61	67	33	4.2	5.0	16.7	15.7	14.1	-0.01	1	0	0.3	0.0	-2.2	-1.4	0.2
4.0	2010	106-26	2.52	57	25	3.8	4.9	17.7	16.9	14.2	2.46	60	22	3.7	5.0	18.0	17.0	15.1	-0.06	3	-3	-0.1	0.0	0.3	0.1	0.9
4.5	TBA	107-26+	2.32	62	24	2.6	4.2	25.4	23.6	19.7	2.56	75	35	3.0	4.4	20.6	19.2	17.2	0.24	13	11	0.4	0.3	-4.8	-4.4	-2.5
4.5	2011	108-14+	2.69	79	47	3.7	5.1	19.0	17.2	14.0	2.73	79	48	4.1	5.1	16.8	15.5	13.6	0.04	-1	2	0.3	0.0	-2.2	-1.7	-0.4
4.5	2010	108-26+	2.55	65	32	3.2	4.8	19.1	17.7	14.5	2.49	63	33	3.6	4.9	18.8	17.2	15.3	-0.06	-2	1	0.3	0.0	-0.3	-0.5	0.8
4.5	2009	108-12+	2.51	66	33	2.9	4.5	20.6	18.9	15.7	2.45	64	33	3.2	4.5	20.2	18.5	16.5	-0.06	-2	0	0.3	0.0	-0.4	-0.4	0.8
5.0	TBA	109-17	2.50	78	44	2.4	4.2	23.9	21.5	18.0	2.54	75	46	2.8	4.2	20.5	19.6	17.8	0.04	-3	2	0.4	0.0	-3.4	-1.9	-0.2
5.0	2010	110-29	2.74	84	56	3.6	5.1	17.8	16.2	13.2	2.73	79	56	4.0	5.0	16.1	15.1	13.4	-0.01	-5	-1	0.3	0.0	-1.7	-1.1	0.2
5.0	2009	110-13	2.54	75	44	2.9	4.6	20.7	19.0	15.8	2.52	68	42	3.2	4.5	18.6	17.8	16.1	-0.02	-7	-2	0.3	-0.1	-2.1	-1.2	0.3
5.0	2005	111-05	2.53	66	50	3.8	4.7	15.9	14.8	12.9	2.50	62	48	3.9	4.6	15.4	14.6	13.2	-0.03	-3	-2	0.1	0.0	-0.5	-0.2	0.3
5.0	2004	111-15	2.61	67	58	4.3	4.8	12.9	12.2	10.9	2.56	63	54	4.4	4.8	12.9	12.3	11.4	-0.05	-4	-4	0.1	-0.1	0.0	0.1	0.5
5.0	2003	111-19	2.58	65	56	4.3	4.8	12.1	11.4	10.4	2.53	61	53	4.4	4.7	12.1	11.5	10.9	-0.04	-4	-3	0.1	-0.1	0.0	0.1	0.5
5.5	TBA	111-26+	2.12	47	26	2.5	3.9	25.2	23.2	20.4	2.25	55	36	2.9	4.0	22.1	21.2	19.4	0.13	8	9	0.4	0.1	-3.1	-2.0	-1.0
5.5	2008	111-26+	2.40	67	47	2.9	4.2	22.3	20.6	18.1	2.48	70	53	3.3	4.2	19.8	19.1	17.5	0.08	4	6	0.4	0.0	-2.5	-1.5	-0.6
5.5	2005	112-22+	2.67	80	67	3.9	4.6	16.0	14.8	13.1	2.70	81	69	4.0	4.6	15.1	14.2	13.0	0.03	1	2	0.2	0.0	-0.9	-0.6	-0.1
5.5	2004	113-18+	2.65	73	65	4.3	4.8	13.2	12.5	11.3	2.66	73	65	4.4	4.8	12.8	12.2	11.2	0.01	0	1	0.1	0.0	-0.4	-0.3	-0.1
5.5	2003	113-24+	2.57	66	59	4.2	4.7	12.5	11.9	10.9	2.56	65	59	4.3	4.7	12.3	11.8	11.0	-0.01	-1	-1	0.1	0.0	-0.2	-0.1	0.1
6.0	TBA	112-20+	2.34	65	52	2.8	3.8	24.6	23.0	20.6	2.43	71	58	3.1	3.8	22.0	21.6	20.1	0.09	6	7	0.3	0.0	-2.6	-1.4	-0.5
6.0	2008	112-20+	2.70	93	79	3.3	4.1	21.5	20.1	17.8	2.80	99	87	3.6	4.2	19.0	18.6	17.2	0.09	6	7	0.3	0.0	-2.5	-1.5	-0.6
6.0	2007	112-20+	2.63	88	74	3.1	4.0	22.0	20.6	18.1	2.81	101	88	3.5	4.2	18.9	18.4	16.8	0.18	13	14	0.5	0.1	-3.1	-2.2	-1.3
6.0	2006	112-28+	2.71	93	80	3.2	4.2	20.5	19.0	16.7	2.88	104	93	3.7	4.3	17.8	16.9	15.5	0.17	11	13	0.5	0.1	-2.7	-2.1	-1.2
6.0	2004	114-00+	2.98	105	99	4.3	4.7	13.5	12.9	11.7	3.00	106	101	4.4	4.7	13.1	12.5	11.5	0.02	1	2	0.1	0.0	-0.4	-0.4	-0.2
6.0	2003	114-16+	2.87	95	91	4.3	4.6	12.7	12.2	11.1	2.88	95	91	4.4	4.6	12.5	11.9	11.1	0.00	0	0	0.1	0.0	-0.2	-0.3	0.0
6.5	TBA	114-16+	2.73	90	82	3.4	4.1	22.1	20.3	17.9	2.74	91	83	3.6	4.0	19.8	19.3	18.0	0.01	1	2	0.2	0.0	-2.3	-1.0	0.1
6.5	2008	114-16+	3.01	113	105	3.8	4.3	19.6	17.9	15.9	3.04	115	108	3.9	4.3	17.6	17.1	15.9	0.03	2	3	0.2	0.0	-2.0	-0.8	0.0

Source: Barclays Research

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