

HPA scenario update and extended foreclosure timelines

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At the close of business on Friday, October 24, 2014, we will be updating the non-agency RMBS calculator. The update includes changes to Barclays home price scenarios, to the loan transition model that extend projected foreclosure timelines and lower projected short sale rates, and in the default treatment of securities for which we are unable to project collateral group-level performance vectors. Securities lacking projections at the collateral group level will no longer run in the calculator unless the preference "Run Unsupported Collateral" is set to "Yes." As for the scenario update, please refer to *US Housing Monitor: Q3 14 Regional Housing Update* for more detailed information. After these changes go into effect, users will still be able to access the current version of the loan transition model and home price scenarios by setting "Non-Agency Model Version" to "Old Production" in the Preferences screen.

Updated home price scenarios

Figure 1 displays online versus updated home price projections across scenarios for the US and key states. The new projections incorporate actual home prices through June 2014. Our base case projection for 2014 US home price appreciation is unchanged at 7.0%. Our base case projections for 2014 home price appreciation in Arizona, California, Florida, Nevada, and New York are 5.0%, 8.7%, 7.7%, 8.0%, and 9.2%, respectively, compared with 8.2%, 9.4%, 8.3%, 11.0% and 5.2% previously.

Updated foreclosure timelines and short sale projections

The new model incorporates several changes that extend foreclosure timelines for mortgages backing heritage non-agency securities. Specifically, we are removing the normalization ramp for 60+-to-foreclosure transitions (Figure 2), extending the ramp for foreclosure-to-REO transitions by four years and assuming a lower terminal roll rate (Figure 3), and lowering projected short sales out of the 60+ and foreclosure delinquency buckets to bring model projections more closely in line with observed liquidation rates (Figures 4 and 5).

The ramps for 60+-to-foreclosure and foreclosure-to-REO transitions displayed in Figures 2 and 3 for the online model reflect our previous assumption that within a few years of the February 2012 national mortgage servicing settlement, servicers would put in place systems to more quickly screen delinquent borrowers for modification and that this would imply a shorter delinquency pipeline for delinquent borrowers who were not modified or that re-defaulted after receiving a loan modification. However, ongoing delinquency transition data on mortgages backing heritage non-agency deals suggest that delinquency transition rates are unlikely to return to pre-crisis levels any time in the near future.

The new model reflects the following assumptions regarding delinquency processing timelines for mortgages backing heritage non-agency securities. First, we assume that no dual tracking of foreclosures while screening for modification will leave 60+-to-foreclosure roll rates permanently low. This is seen in Figure 2 as the removal of the normalization ramp for 60+-to-foreclosure roll rates. Second, we assume that any normalization of foreclosure processing timelines will be incomplete and much slower than previously anticipated. Specifically, we have extended the normalization ramp for foreclosure-to-REO roll rates by four years, from December 2015 to December 2019 and have lowered long term roll rates by 25% (Figure 3).

The data also suggest that the increased focus on modifications and extended processing timelines may also be affecting short sale rates. Observed liquidations out of the 60+ and foreclosure delinquency buckets have been noticeably lower than model projections. We are therefore reducing projected 60+-to-liquidation and foreclosure-to-liquidation roll rates by 25-45% across non-agency collateral sectors (Figures 4 and 5).

The net effect of these changes is lower projected default rates (Figure 6), longer liquidation timelines (Figure 8) and higher liquidation costs and loss severities (Figure 7).

Projected losses

Figures 9 and 10 illustrate the net effect on projected defaults and losses of the home price scenario update and changes to the loan transition model. Projected base case defaults are noticeably lower due to lower delinquency transition rates and lower short sale liquidation rates. The effect on projected losses is much lower, however, due to higher loss severities associated with the longer liquidation timelines.

Change to default treatment of securities

Currently, when users load securities into the non-agency calculator for which we are unable to produce projection vectors at the collateral group level, the default behavior is to produce a warning message and run the securities using deal or cohort level vectors. Going forward, however, securities lacking projections at the collateral group level will no longer run in the calculator unless the preference “Run Unsupported Collateral” is set to “Yes.”

FIGURE 1

Changes to HPA scenarios for US and key states

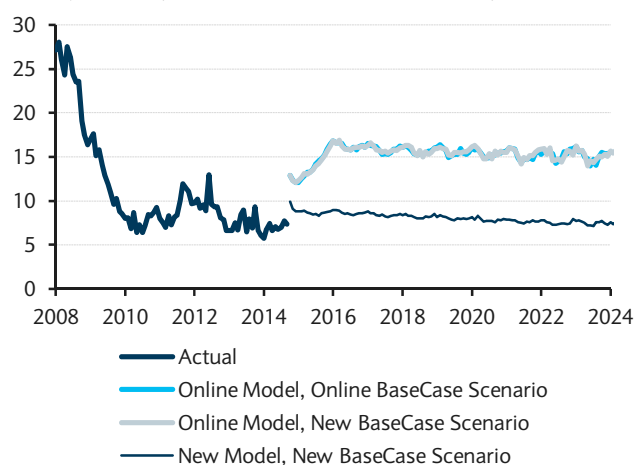
State	HPA Projections (% / year)											
	New						Online					
	2014	2015	2016	2017	2018	2019-2023	2014	2015	2016	2017	2018	2019-2023
Base + 20%												
US	9.4	8.8	8.4	8.4	6.0	3.6	11.9	8.9	8.5	8.4	3.6	3.6
AZ	8.3	8.5	8.4	9.1	6.4	3.5	15.0	9.3	8.5	8.9	2.8	3.5
CA	12.9	10.9	10.0	10.4	6.7	3.5	17.8	10.9	9.8	10.2	2.7	3.6
FL	11.2	10.5	9.9	10.7	7.9	4.1	15.4	10.3	10.0	11.0	4.6	4.1
NV	11.2	8.3	7.1	7.1	5.0	3.5	17.6	9.4	7.2	6.9	1.7	3.5
NY	11.7	9.4	8.8	8.9	6.2	3.8	10.2	8.0	8.7	9.1	4.1	4.0
Base + 10%												
US	8.6	7.3	6.9	5.2	3.6	3.6	10.4	7.4	7.0	3.6	3.6	3.6
AZ	7.2	6.4	6.2	4.5	3.0	3.5	12.9	7.3	6.4	2.2	2.7	3.6
CA	11.5	8.4	7.5	5.1	2.8	3.5	15.2	8.5	7.4	2.4	2.6	3.6
FL	10.0	8.3	7.7	6.0	4.4	4.2	13.2	8.2	7.8	4.0	4.6	4.1
NV	10.1	6.4	5.2	3.0	1.9	3.5	15.6	7.5	5.3	0.9	1.7	3.5
NY	10.9	7.8	7.3	5.6	3.8	3.8	8.7	6.5	7.2	4.2	4.1	4.0
Base												
US	7.0	4.0	3.6	3.6	3.6	3.6	7.0	4.1	3.6	3.6	3.6	3.6
AZ	5.0	1.9	1.3	1.7	2.5	3.6	8.2	2.9	1.5	1.8	2.6	3.6
CA	8.7	2.8	1.7	1.9	2.3	3.5	9.4	3.2	1.7	2.0	2.5	3.6
FL	7.7	3.5	2.5	3.2	4.0	4.2	8.3	3.5	2.8	3.7	4.5	4.1
NV	8.0	2.2	0.9	0.8	1.7	3.5	11.0	3.3	1.0	0.8	1.7	3.6
NY	9.2	4.4	3.9	4.0	3.8	3.8	5.2	3.1	3.8	4.2	4.1	4.0
Base - 10%												
US	5.0	0.5	0.1	1.8	3.6	3.6	3.4	0.6	0.1	3.6	3.6	3.6
AZ	2.5	-2.4	-3.4	-0.9	2.6	3.5	3.7	-1.1	-3.1	1.5	2.5	3.6
CA	5.5	-2.3	-3.9	-1.3	2.4	3.5	3.8	-1.7	-3.6	1.8	2.5	3.6
FL	4.9	-1.1	-2.5	0.4	4.1	4.2	3.5	-0.8	-2.1	3.5	4.4	4.1
NV	5.5	-2.1	-3.6	-1.6	1.8	3.5	6.4	-0.9	-3.4	0.8	1.7	3.6
NY	7.2	0.7	0.2	2.0	3.8	3.8	1.6	-0.5	0.1	4.1	4.1	4.0
Base - 20%												
US	4.0	-1.6	-2.0	-2.0	0.8	3.6	1.3	-1.5	-2.0	-2.0	3.6	3.6
AZ	1.1	-5.1	-6.1	-5.9	-1.3	3.5	0.9	-3.6	-5.5	-5.2	2.5	3.6
CA	3.9	-5.5	-7.2	-7.4	-2.3	3.5	0.4	-4.7	-6.7	-6.5	2.7	3.6
FL	3.5	-3.9	-5.3	-4.9	-0.1	4.2	0.6	-3.5	-4.7	-3.8	4.4	4.1
NV	4.2	-4.7	-6.2	-6.4	-1.8	3.5	3.6	-3.4	-5.9	-6.1	1.8	3.6
NY	6.2	-1.5	-2.1	-2.1	0.7	3.8	-0.6	-2.7	-2.1	-1.9	4.1	4.0
Down 20%												
US	-2.5	-7.8	-5.6	1.2	3.6	3.6	-9.7	-5.4	-5.6	3.6	3.6	3.6
AZ	-7.4	-13.1	-10.8	-1.9	2.4	3.5	-13.8	-8.0	-9.7	2.0	2.4	3.6
CA	-6.6	-15.2	-13.5	-2.8	2.3	3.5	-17.1	-10.4	-12.6	2.5	2.9	3.6
FL	-5.6	-12.3	-10.5	-0.8	3.8	4.2	-14.6	-8.2	-9.4	3.8	4.4	4.1
NV	-4.2	-12.5	-11.1	-2.5	1.9	3.5	-10.8	-8.3	-10.6	1.0	1.8	3.6
NY	-0.7	-8.1	-6.0	1.1	3.7	3.8	-11.8	-6.8	-6.1	4.0	4.1	4.1
Down 30%												
US	-2.5	-12.9	-10.1	-3.8	-3.4	3.3	-9.7	-15.6	-3.8	-3.8	-2.9	3.6
AZ	-7.4	-19.8	-17.1	-9.3	-8.5	3.0	-13.8	-21.4	-7.1	-7.7	-6.5	3.6
CA	-6.6	-23.3	-21.8	-13.2	-13.1	2.7	-17.1	-26.9	-10.0	-10.9	-9.5	3.7
FL	-5.6	-19.4	-17.2	-9.0	-8.3	3.5	-14.6	-22.2	-6.9	-6.9	-5.6	4.2
NV	-4.2	-19.0	-17.2	-9.5	-8.3	3.0	-10.8	-21.4	-8.5	-8.9	-7.1	3.6
NY	-0.7	-13.4	-10.9	-4.4	-4.0	3.5	-11.8	-17.4	-4.3	-4.0	-3.0	4.1

Note: Base + 20% is up 20% relative to Base over 4 years, Base + 10% is up 10% relative to Base over 3 years, Base - 10% is down 10% relative to Base over 3 years, Base - 20% is down 20% relative to Base over 4 years, Down 20% is down 20% over 3 years, Down 30% is down 30% over 5 years.

Source: CoreLogic, Barclays Research

FIGURE 2

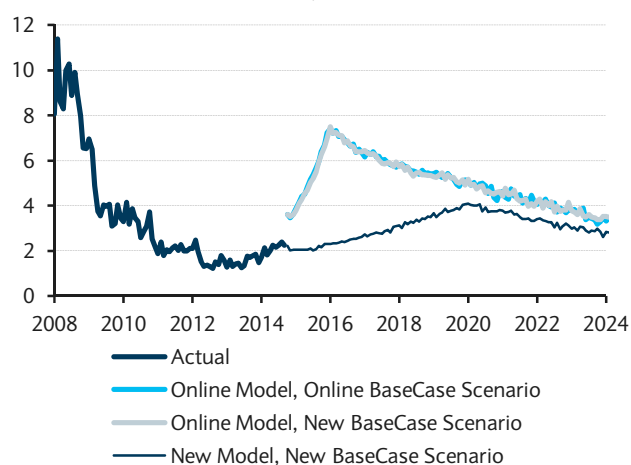
60+ Days Delinquent to Foreclosure, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 3

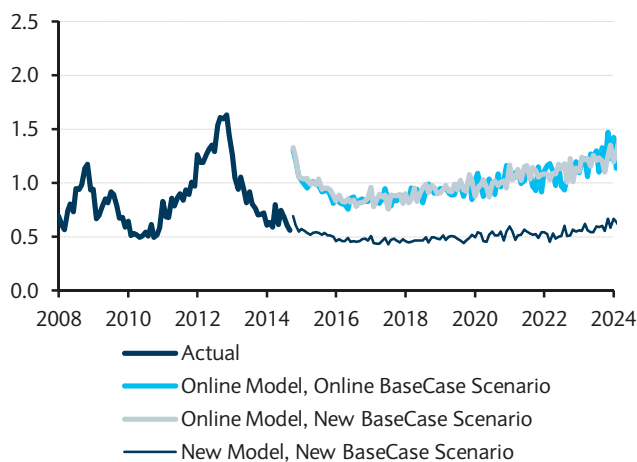
Foreclosure to REO, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 4

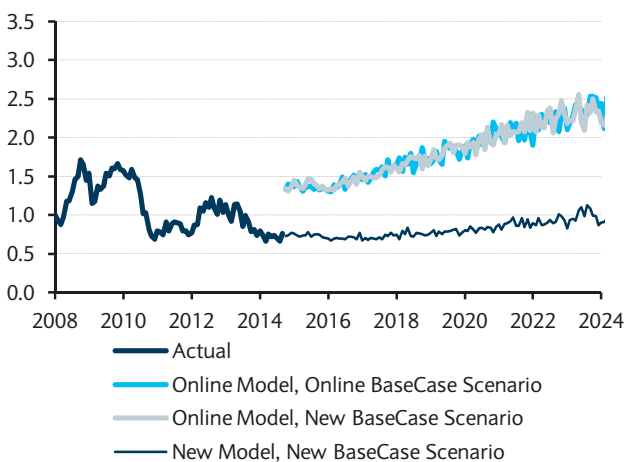
60+ Days Delinquent to Liquidation, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 5

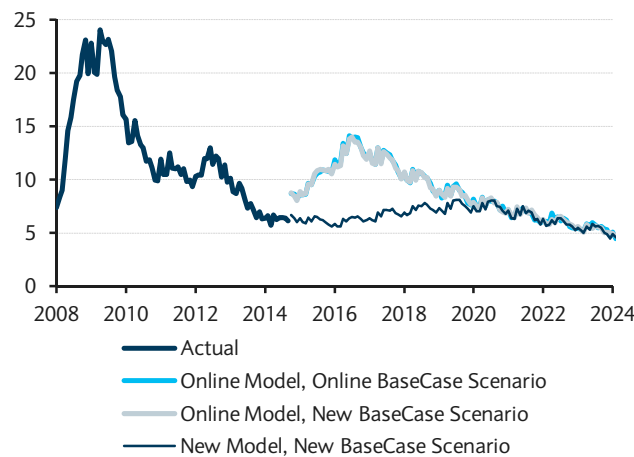
Foreclosure to Liquidation, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 6

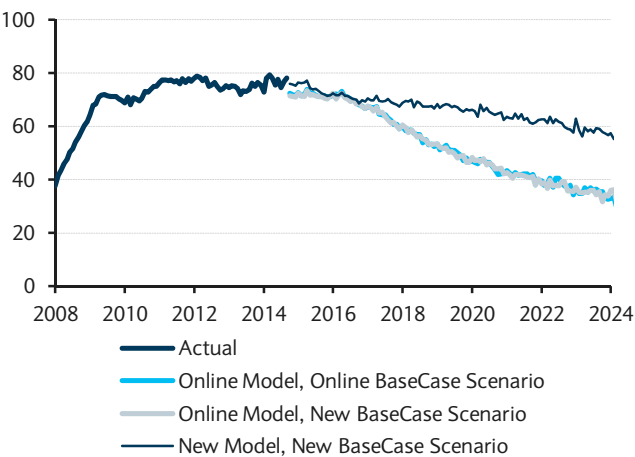
CDR, 2006 Subprime



Source: CoreLogic, Barclays Research

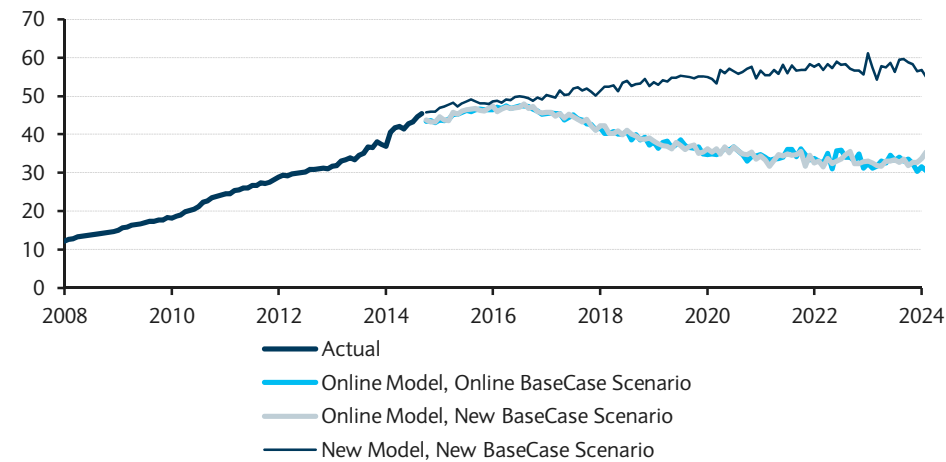
FIGURE 7

Severity, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 8
Months Delinquent at Liquidation, 2006 Subprime



Source: CoreLogic, Barclays Research

FIGURE 9

Projected cumulative defaults and losses, new model and new HPA scenarios

Barclays Scenarios												
			Down 30%		Down 20%		Base - 20%		Base Case		Base + 20%	
Sector	Issue Yr	UCLTV	Default	Loss	Default	Loss	Default	Loss	Default	Loss	Default	Loss
Jumbo Fixed 30Y	2004	53	14.9	9.0	11.8	6.0	9.7	4.4	8.4	3.2	8.0	2.7
	2005	73	30.1	19.9	23.7	13.2	17.7	8.9	13.4	5.7	12.1	4.3
	2006	83	41.3	28.7	33.8	20.2	26.1	14.3	19.6	9.3	17.2	7.2
	2007	85	44.6	30.5	37.0	21.8	28.9	15.7	22.0	10.4	19.4	8.1
Jumbo Hybrid	2004	56	14.4	8.1	11.1	5.2	9.1	3.8	7.7	2.7	7.2	2.2
	2005	72	27.1	17.4	20.3	10.8	15.3	7.2	11.5	4.5	10.2	3.4
	2006	81	39.9	26.5	31.0	17.2	23.3	11.5	17.0	6.9	14.6	5.0
	2007	82	49.8	33.9	39.4	22.5	30.5	15.7	22.7	9.9	19.8	7.4
AltA Fixed	2004	59	27.5	20.1	22.1	14.2	18.3	10.8	15.2	8.0	13.9	6.7
	2005	77	41.5	31.9	34.1	23.2	28.1	17.7	22.5	12.5	20.0	10.0
	2006	87	56.6	46.3	49.1	36.2	42.3	29.2	35.1	21.8	31.5	17.8
	2007	86	59.1	46.8	50.9	36.2	43.9	29.1	36.5	21.6	32.8	17.6
AltA Hybrid	2004	68	34.4	22.0	26.9	14.3	21.7	10.1	17.5	6.6	15.6	5.2
	2005	85	50.5	36.4	41.9	25.9	34.5	19.2	26.7	12.5	23.0	9.3
	2006	95	64.4	49.9	55.7	38.2	48.2	30.3	39.1	21.5	34.1	16.7
	2007	93	69.4	52.8	60.1	40.3	52.1	32.0	42.2	22.7	36.8	17.8
AltA NegAm	2004	66	39.5	25.0	31.8	16.5	26.9	11.9	22.8	8.0	21.0	6.2
	2005	80	55.2	41.5	45.9	30.0	39.3	23.1	33.0	16.5	29.9	13.0
	2006	92	67.6	52.4	58.7	40.0	51.7	32.0	43.6	23.2	39.2	18.2
	2007	92	68.6	51.7	59.5	39.3	52.1	31.1	43.4	22.3	38.9	17.4
Subprime 1st	2004	68	43.7	34.3	36.5	25.9	31.5	20.8	26.7	15.8	24.6	13.5
	2005	83	60.1	50.3	51.8	39.4	45.4	32.2	38.3	24.4	34.6	20.1
	2006	94	70.9	61.9	62.3	50.0	55.5	41.7	47.0	31.9	42.2	26.3
	2007	91	71.0	61.3	61.6	48.8	54.6	40.6	46.0	31.0	41.3	25.5
Second Lien	2004	69	21.4	20.5	17.7	16.7	14.1	13.0	11.6	10.4	10.7	9.2
	2005	85	38.4	37.2	33.1	31.7	27.2	25.8	21.5	19.9	18.7	16.8
	2006	91	40.3	39.0	34.9	33.5	29.1	27.6	22.8	21.2	19.4	17.5
	2007	94	45.9	44.3	39.9	38.2	33.7	31.9	26.6	24.6	22.7	20.4

Notes: Projections are as of September 2014 remittance reports for a sample of loans taken from each sector and issue year. Includes balance forgiven. Base + 20% is up 20% relative to Base over 4 years, Base - 20% is down 20% relative to Base over 4 years, Down 20% is down 20% over 3 years, Down 30% is down 30% over 5 years. Source: CoreLogic, Barclays Research

FIGURE 10

Projected cumulative defaults and losses, online model and online HPA scenarios

Barclays Scenarios												
Sector	Issue Yr	UCLTV	Down 30%		Down 20%		Base - 20%		Base Case		Base + 20%	
			Default	Loss	Default	Loss	Default	Loss	Default	Loss	Default	Loss
Jumbo Fixed 30Y	2004	53	18.1	9.4	14.3	6.5	11.0	4.4	9.2	3.3	8.7	2.7
	2005	72	35.5	20.5	28.5	14.2	20.1	8.8	14.7	5.6	12.8	4.3
	2006	83	47.1	29.1	39.4	21.3	29.3	14.1	21.3	9.1	18.3	7.1
	2007	85	50.5	30.7	42.9	22.9	32.2	15.4	23.5	10.1	20.3	7.9
Jumbo Hybrid	2004	55	16.3	7.9	12.9	5.3	10.2	3.6	8.7	2.6	8.1	2.1
	2005	72	30.4	17.0	23.6	11.2	17.2	6.9	12.8	4.3	11.2	3.2
	2006	81	44.1	25.7	35.4	17.4	25.9	10.8	18.6	6.4	15.8	4.7
	2007	81	55.4	32.8	45.4	22.9	34.1	14.8	25.1	9.2	21.6	6.9
AltA Fixed	2004	60	32.2	21.0	26.5	15.3	21.1	11.0	17.5	8.1	16.0	6.7
	2005	77	46.8	32.2	39.6	24.3	31.8	17.5	25.2	12.2	22.4	9.8
	2006	87	62.4	46.1	55.4	37.2	46.9	28.7	38.8	21.3	34.8	17.4
	2007	86	64.9	46.3	57.4	37.0	48.7	28.5	40.3	21.0	36.2	17.1
AltA Hybrid	2004	68	38.2	21.6	30.8	14.7	24.4	9.6	19.6	6.3	17.4	4.8
	2005	85	54.7	35.3	46.6	26.1	37.8	18.3	29.4	11.9	25.1	8.9
	2006	95	68.7	48.4	61.0	38.4	52.3	29.2	42.8	20.8	37.2	16.2
	2007	92	73.6	50.6	65.4	39.9	56.1	30.4	45.6	21.7	39.8	17.1
AltA NegAm	2004	65	43.0	24.8	35.6	17.4	29.6	12.0	25.0	8.1	22.9	6.2
	2005	80	58.5	40.3	50.1	30.5	42.3	22.6	35.5	16.3	32.2	12.9
	2006	92	70.7	50.8	63.0	40.4	55.0	31.2	46.4	22.9	41.6	18.1
	2007	91	72.2	50.6	64.2	40.0	55.7	30.6	46.6	22.1	41.4	17.3
Subprime 1st	2004	68	52.4	36.9	45.4	29.0	39.0	22.3	33.4	16.9	31.0	14.3
	2005	84	67.9	51.6	60.6	42.0	53.1	33.2	45.7	25.2	41.8	20.8
	2006	94	77.7	62.2	70.8	52.1	63.2	42.3	54.7	32.6	49.7	26.9
	2007	91	78.0	61.3	70.5	50.9	62.6	41.1	54.0	31.5	49.1	26.1
Second Lien	2004	69	27.5	26.5	22.7	21.6	17.4	16.2	14.0	12.6	12.6	10.9
	2005	85	44.4	42.9	38.5	37.0	30.9	29.3	23.8	22.1	20.2	18.2
	2006	91	47.5	46.0	41.4	39.8	33.6	32.0	25.9	24.0	21.5	19.4
	2007	94	52.9	51.1	46.3	44.4	38.3	36.4	29.8	27.6	25.0	22.5

Notes: Projections are as of September 2014 remittance reports for a sample of loans taken from each sector and issue year. Includes balance forgiven. Base + 20% is up 20% relative to Base over 4 years, Base - 20% is down 20% relative to Base over 4 years, Down 20% is down 20% over 3 years, Down 30% is down 30% over 5 years. Source: CoreLogic, Barclays Research

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