

MBA of Puerto Rico / Black Knight Data & Analytics Partnership

McDash Puerto Rico Analysis



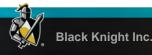
Discussion Points

MBA of Puerto Rico Reporting Updates

History of data collection and recent updates

Mortgage Data & Analytics Trends

- Puerto Rico delinquency overview
- Hurricane impacts and comparisons to other areas
- Portfolio Differences and Benchmarking
- Upcoming activities



MBA of Puerto Rico Reporting – Overview

2016

Increasing need for data-based analytics and transparency

Q1 2017

- Data Collection begins
 - Servicing & origination data similar to Black Knight McDash database

▼ Q2 2017

- Reporting release
 - Launch of dashboard reports

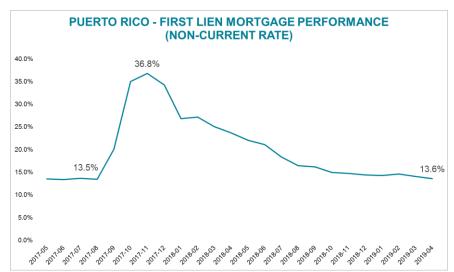
Q3 2017

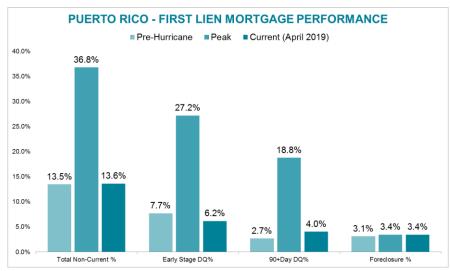
Continued collection through hurricane season

Q2 2019

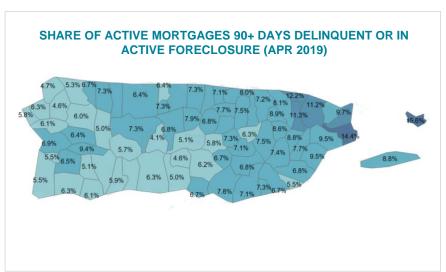
- Two years of history
 - Pre and post hurricane performance

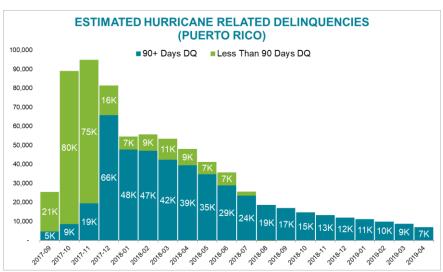
Total Non-Current rate in Puerto Rico is nearly back to pre-hurricane level, but seriously delinquent and foreclosure rates remain elevated



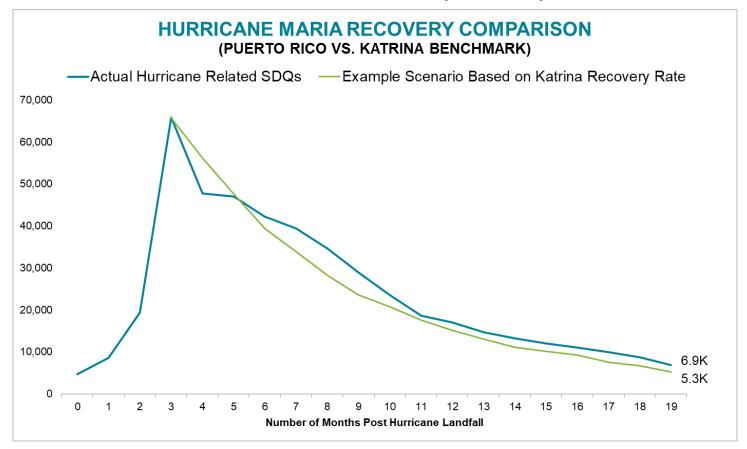


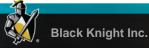
An estimated 6,900 hurricane related seriously delinquent mortgages remain, representing ~2% of all active mortgages on the island



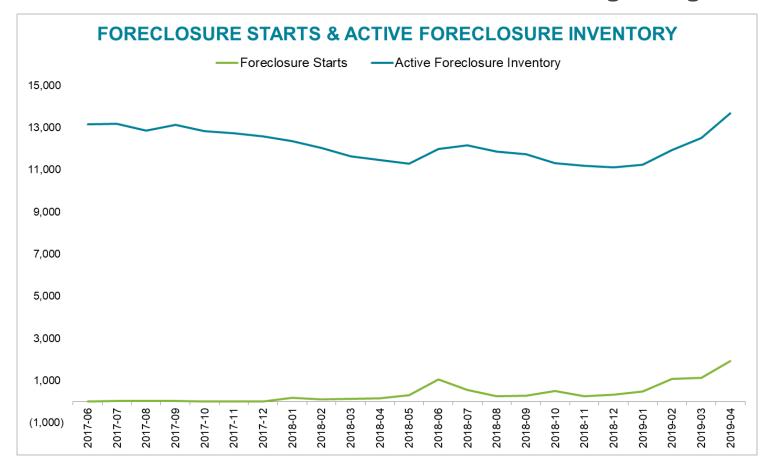


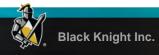
Similar recovery rate continues to be observed between hurricane Maria and hurricane Katrina (in 2005)



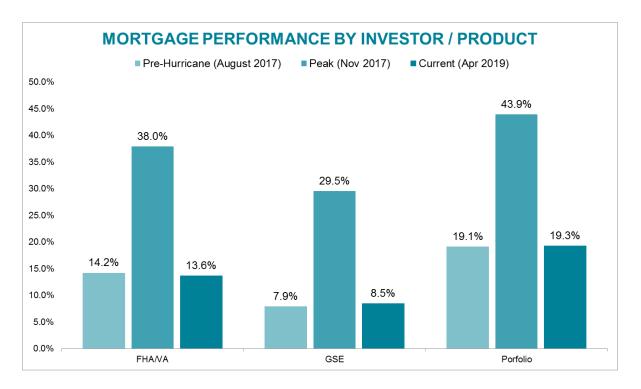


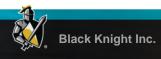
Foreclosure referrals and active inventories are beginning to rise





Mortgage performance continues to vary by product and investor class; FHA/VA non-current% below pre-hurricane while GSE remains elevated





Granular data allows for meaningful comparisons





MONTHLY PRODUCT OVERVIEW REPORT - April 2019

Loan Selection: Reported PR Loans - FHA

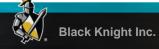
	DELINQUENCY RATES (based on UPB)								
	LoanCnt	1 Month	2 Month	3+ Month	Total Delinq	Factor vs. All Loans	Change vs. Prev Month	Change vs. Year Ago	
BY VINTAGE									
All Loans	93,178	4.34%	1.73%	4.41%	10.47%		(8.83%)	(55.05%)	
2006	1,407	8.20%	3.66%	9.59%	21.44%	205%	(6.52%)	(36.92%)	
2007	1,383	7.22%	2.98%	6.67%	16.88%	161%	(12.87%)	(50.44%)	
2008	2,939	6.45%	2.04%	7.04%	15.53%	148%	(11.36%)	(50.63%)	
2009	5,798	4.13%	1.44%	5.10%	10.67%	102%	(11.44%)	(58.18%)	
2010	5,974	4.20%	1.92%	5.34%	11.45%	109%	(11.15%)	(56.72%)	
2011	6,040	5.02%	2.33%	6.72%	14.06%	134%	(7.07%)	(49.20%)	
2012	9,711	3.92%	1.55%	4.64%	10.10%	96%	(9.86%)	(59.61%)	
2013	8,774	3.60%	1.43%	3.87%	8.90%	85%	(9.99%)	(61.13%)	
2014	5,125	3.67%	1.54%	4.52%	9.73%	93%	(7.63%)	(59.71%)	
2015	6,696	3.58%	1.28%	4.38%	9.24%	88%	(3.80%)	(57.01%)	
2016	5,236	2.58%	1.28%	2.02%	5.88%	56%	(10.26%)	(59.71%)	
2017	3,489	3.43%	0.98%	1.08%	5.49%	52%	2.95%	(35.15%)	
2018	3,477	1.52%	0.18%	0.23%	1.93%	18%	10.26%	489.41%	
2019	868	0.00%	0.00%	0.00%	0.00%	0%			

PREP	AYMENT RA	TES (based or	n UPB)
1 month	Factor vs.	Change vs.	Change vs.
CPR	All Loans	Prev Month	Year Ago
3.37%		43.46%	33.93%
0.87%	26%	70.21%	(66.36%)
4.29%	127%	53.68%	(12.41%)
4.82%	143%	(6.21%)	107.91%
4.43%	131%	80.71%	56.89%
6.05%	179%	135.93%	81.52%
4.61%	137%	83.65%	155.45%
3.03%	90%	163.77%	58.36%
3.75%	111%	85.80%	61.28%
3.09%	92%	(23.06%)	10.82%
1.47%	44%	(40.80%)	(44.37%)
1.68%	50%	(30.07%)	(17.92%)
2.00%	59%	448.72%	73.72%
0.68%	20%	(51.93%)	(36.49%)
0.28%	8%	(76.12%)	

COL	LATERAL CH	ARACTERIS	STICS
Wtd Avg	Avg Orig	Wtd Avg	Wtd Avg
Interest Rt	Loan Amt	Credit Sc	Loan Age
			•
4.50	107,400	696	91
5.55	94,190	655	153
5.53	98,530	663	141
5.30	111,948	689	129
4.81	130,059	700	117
4.64	130,037	700	105
4.44	122,559	693	93
3.85	127,665	701	80
3.89	117,562	699	71
4.20	107,589	696	57
3.97	121,392	701	46
3.72	123,788	705	33
3.96	121,338	710	22
4.43	122,816	715	9
4.40	125,979	724	2

	Del	inq	uency	/ by	٧i	ntage	- T	ime	Serie	es
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McDash MBA reports focus on delinquency & FC related metrics



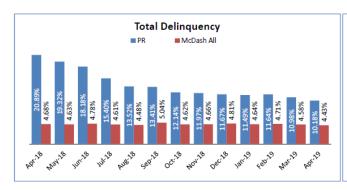


Summary Statistics - PR

		Monthly	YTD	Yearly
	Apr-19	Change	Change	Change
Delinquencies	10.18%	-7.3%		-51.3%
Foreclosure	3.42%	9.6%		22.2%
Foreclosure Starts	1,393	70.5%		1051.2%
Seriously Delinquent (90+)				
or in Foreclosure	7.44%	-3.7%		-50.0%

12 Month History - PR

	Apr-19	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18	Oct-18	Sep-18	Aug-18	Jul-18	Jun-18	May-18	Apr-18
Delinquencies	10.18%	10.98%	11.64%	11.49%	11.67%	11.97%	12.14%	13.41%	13.52%	15.40%	18.18%	19.32%	20.89%
Foreclosure	3.42%	3.12%	2.98%	2.79%	2.76%	2.77%	2.85%	2.84%	2.92%	2.99%	2.94%	2.76%	2.80%
Foreclosure Starts	1,393	817	787	350	246	193	372	217	189	408	787	222	121
Seriously Delinquent	7.44%	7.72%	7.91%	8.03%	8.24%	8.51%	8.88%	9.45%	9.84%	11.15%	12.41%	13.65%	14.89%





Upcoming activities

- Leverage growing dataset
 - Over two years of data for at least 75% of Puerto Rico mortgage market
- Resource for regulatory bodies in data needs
 - Black Knight's data collection history with Federal Reserve Board,
 Fannie Mae and OCC
- New servicers on-boarding
 - Expected increase in coverage later in 2019
- Increase participation from Puerto Rico servicers
 - Goal >90% mortgage market coverage