

QuantumRisk CMBS Property Risk Analytics

City Reports

Jan-11

CA Pasadena

QuantumRisk CMBS Property Risk Analytics

City Risk Analytics

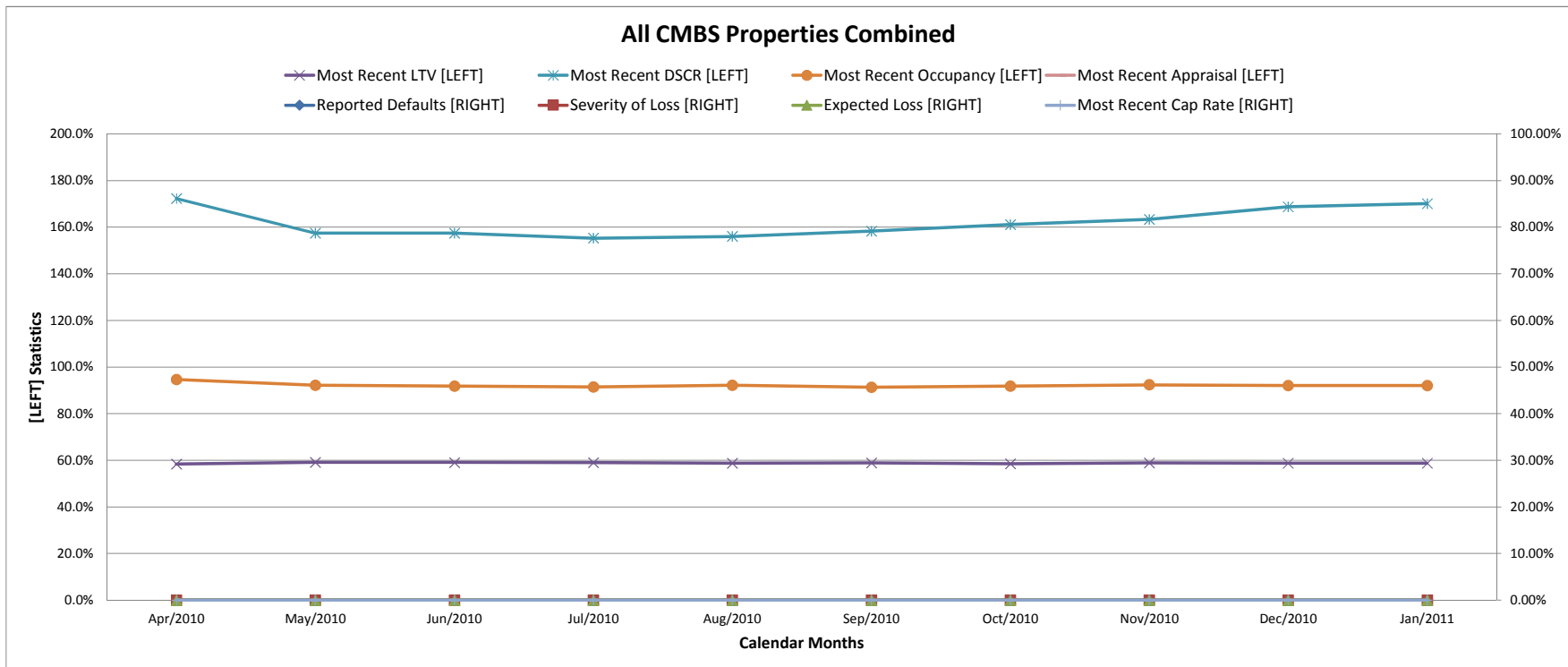
City: Pasadena

State: CA

Property Type:

AL

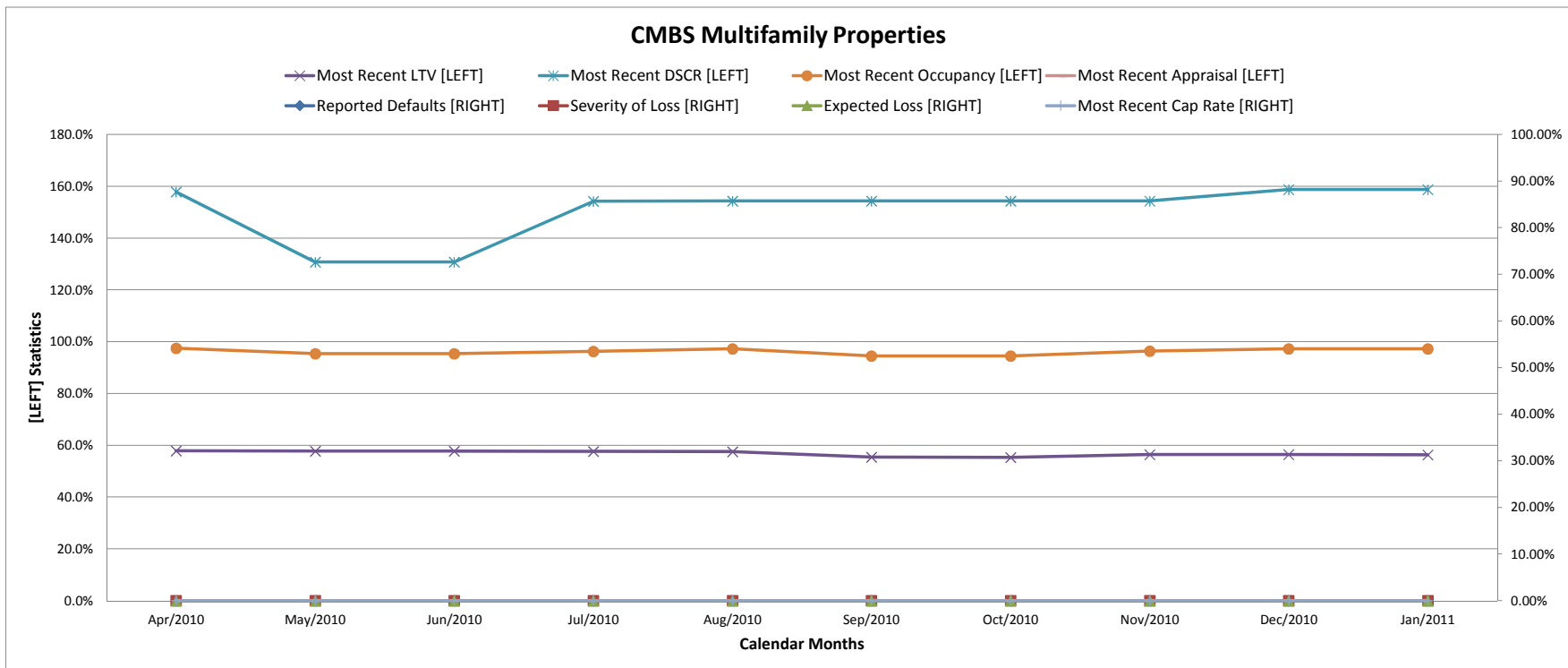
Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	73	0.00%	0.00%	0.00%	0.58	1.72	94.62%		
4	May/2010	72	0.00%	0.00%	0.00%	0.59	1.57	92.20%		
5	Jun/2010	72	0.00%	0.00%	0.00%	0.59	1.57	91.85%		
6	Jul/2010	73	0.00%	0.00%	0.00%	0.59	1.55	91.46%		
7	Aug/2010	74	0.00%	0.00%	0.00%	0.59	1.56	92.21%		
8	Sep/2010	74	0.00%	0.00%	0.00%	0.59	1.58	91.28%		
9	Oct/2010	73	0.00%	0.00%	0.00%	0.59	1.61	91.86%		
10	Nov/2010	73	0.00%	0.00%	0.00%	0.59	1.63	92.38%		
11	Dec/2010	73	0.00%	0.00%	0.00%	0.59	1.69	92.03%		
12	Jan/2011	72	0.00%	0.00%	0.00%	0.59	1.70	92.06%		



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City Risk Analytics

City: **Pasadena** State: **CA** Property Type: **MF**

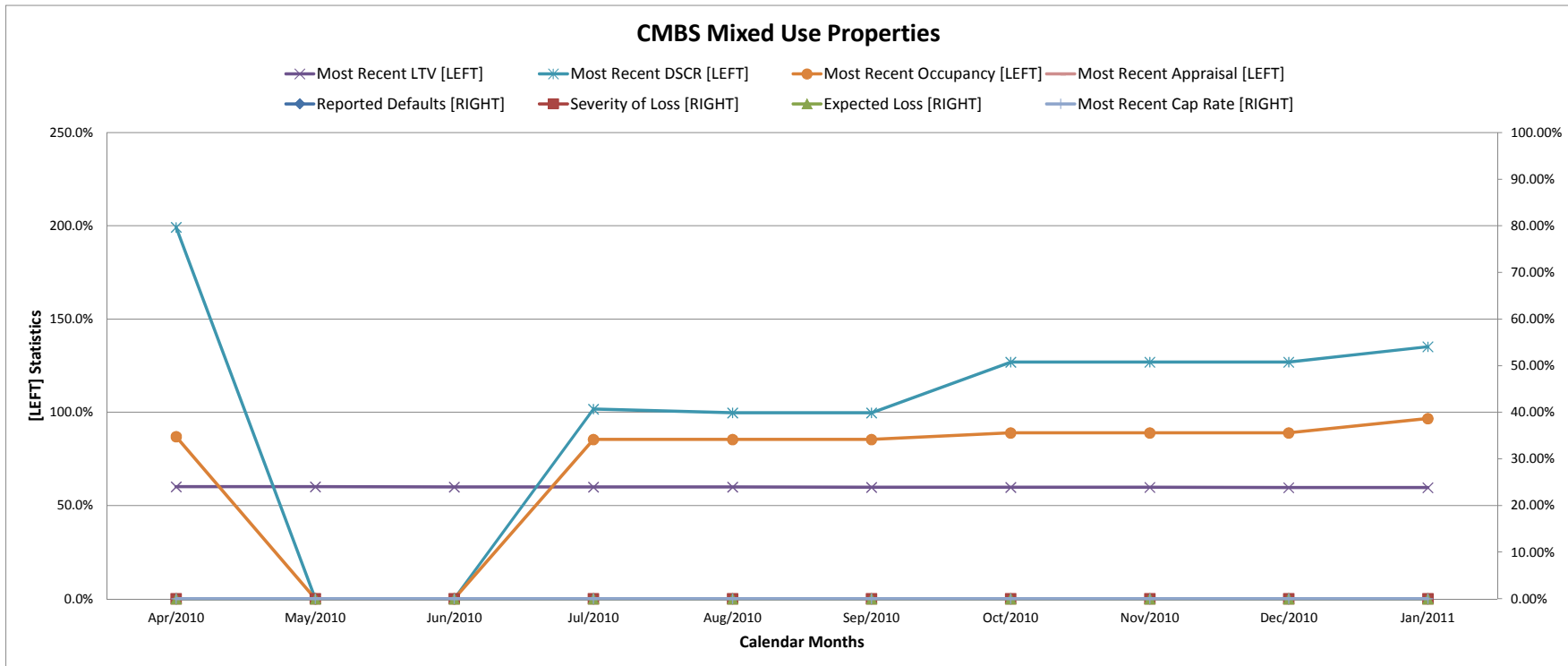
Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	12	0.00%	0.00%	0.00%	0.58	1.58	97.50%		
4	May/2010	12	0.00%	0.00%	0.00%	0.58	1.31	95.40%		
5	Jun/2010	12	0.00%	0.00%	0.00%	0.58	1.31	95.40%		
6	Jul/2010	12	0.00%	0.00%	0.00%	0.58	1.54	96.25%		
7	Aug/2010	12	0.00%	0.00%	0.00%	0.58	1.54	97.25%		
8	Sep/2010	12	0.00%	0.00%	0.00%	0.55	1.54	94.50%		
9	Oct/2010	12	0.00%	0.00%	0.00%	0.55	1.54	94.50%		
10	Nov/2010	12	0.00%	0.00%	0.00%	0.56	1.54	96.33%		
11	Dec/2010	12	0.00%	0.00%	0.00%	0.56	1.59	97.25%		
12	Jan/2011	12	0.00%	0.00%	0.00%	0.56	1.59	97.25%		



QuantumRisk CMBS Property Risk Analytics
City Risk Analytics

City: **Pasadena** State: **CA** Property Type: **MU**

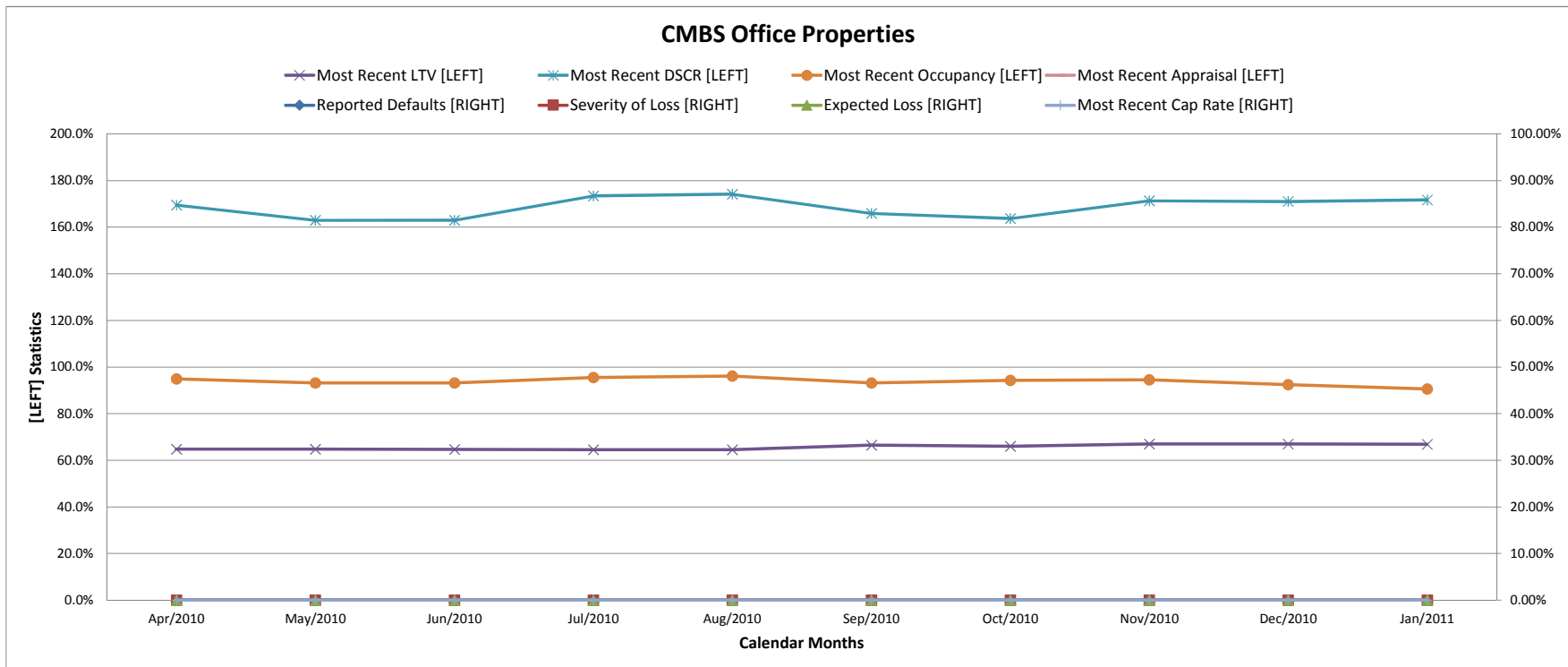
Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	5	0.00%	0.00%	0.00%	0.60	1.99	87.00%		
4	May/2010	5	0.00%	0.00%	0.00%	0.60				
5	Jun/2010	5	0.00%	0.00%	0.00%	0.60				
6	Jul/2010	5	0.00%	0.00%	0.00%	0.60	1.02	85.50%		
7	Aug/2010	5	0.00%	0.00%	0.00%	0.60	1.00	85.50%		
8	Sep/2010	5	0.00%	0.00%	0.00%	0.60	1.00	85.50%		
9	Oct/2010	5	0.00%	0.00%	0.00%	0.60	1.27	89.00%		
10	Nov/2010	5	0.00%	0.00%	0.00%	0.60	1.27	89.00%		
11	Dec/2010	5	0.00%	0.00%	0.00%	0.60	1.27	89.00%		
12	Jan/2011	5	0.00%	0.00%	0.00%	0.60	1.35	96.67%		



QuantumRisk CMBS Property Risk Analytics
City Risk Analytics

City: **Pasadena** State: **CA** Property Type: **OF**

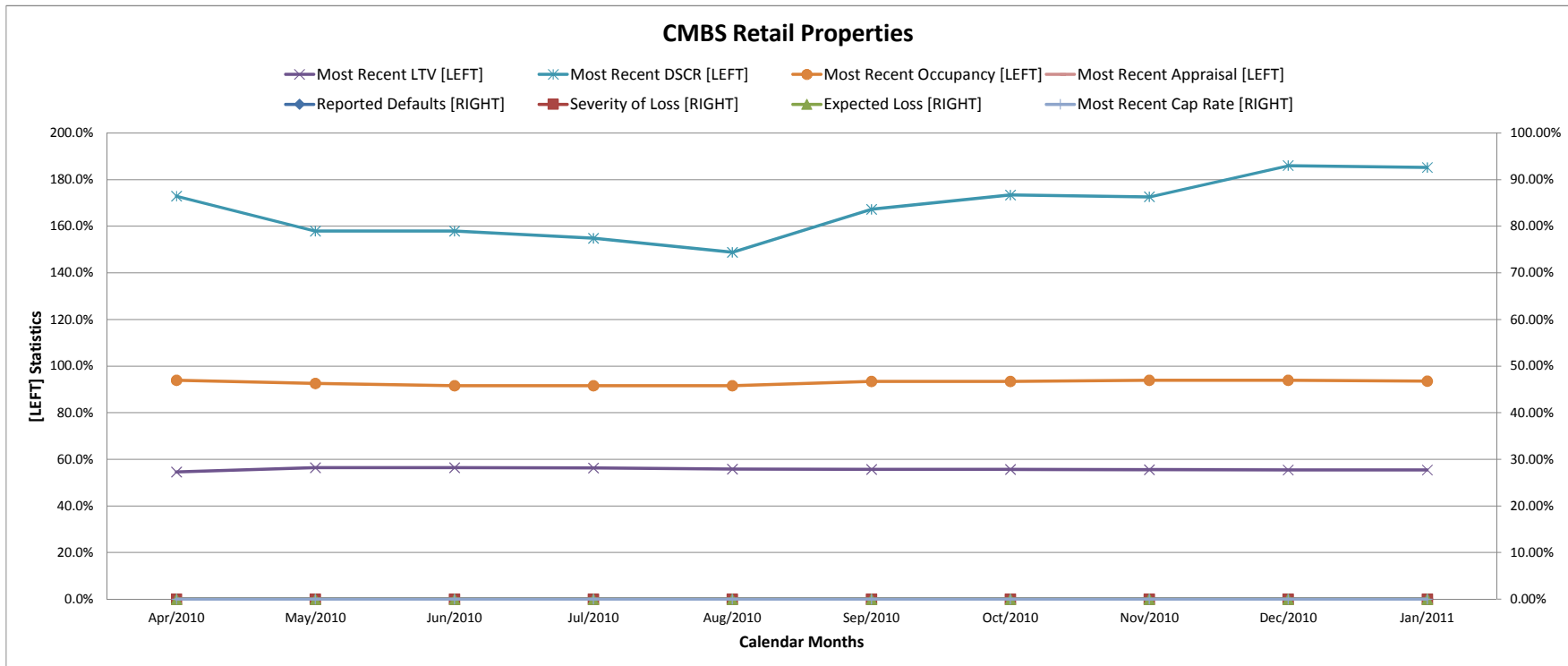
Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	21	0.00%	0.00%	0.00%	0.65	1.70	94.89%		
4	May/2010	21	0.00%	0.00%	0.00%	0.65	1.63	93.14%		
5	Jun/2010	21	0.00%	0.00%	0.00%	0.65	1.63	93.14%		
6	Jul/2010	23	0.00%	0.00%	0.00%	0.65	1.73	95.50%		
7	Aug/2010	23	0.00%	0.00%	0.00%	0.64	1.74	96.10%		
8	Sep/2010	23	0.00%	0.00%	0.00%	0.66	1.66	93.22%		
9	Oct/2010	22	0.00%	0.00%	0.00%	0.66	1.64	94.30%		
10	Nov/2010	22	0.00%	0.00%	0.00%	0.67	1.71	94.56%		
11	Dec/2010	22	0.00%	0.00%	0.00%	0.67	1.71	92.44%		
12	Jan/2011	22	0.00%	0.00%	0.00%	0.67	1.72	90.56%		



QuantumRisk CMBS Property Risk Analytics
City Risk Analytics

City: **Pasadena** State: **CA** Property Type: **RT**

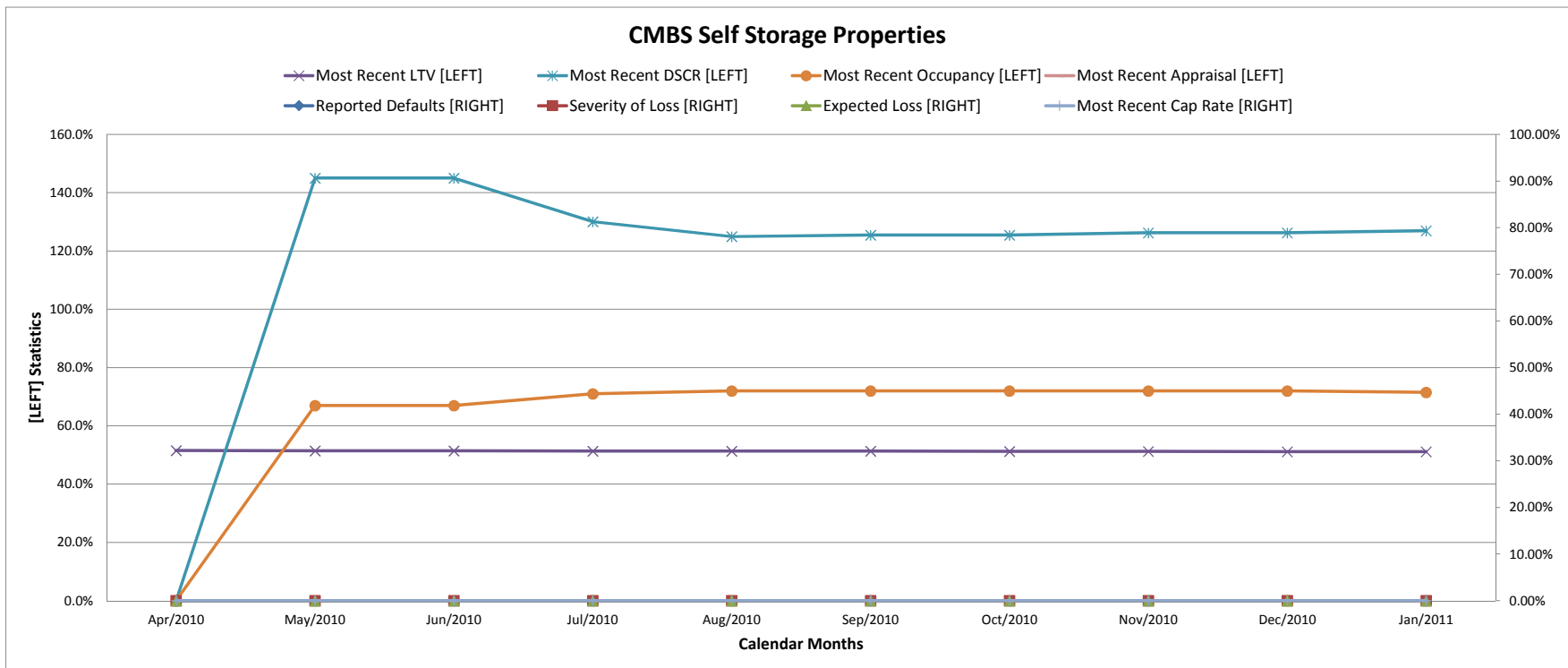
Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	26	0.00%	0.00%	0.00%	0.55	1.73	93.89%		
4	May/2010	26	0.00%	0.00%	0.00%	0.56	1.58	92.51%		
5	Jun/2010	25	0.00%	0.00%	0.00%	0.56	1.58	91.57%		
6	Jul/2010	24	0.00%	0.00%	0.00%	0.56	1.55	91.57%		
7	Aug/2010	25	0.00%	0.00%	0.00%	0.56	1.49	91.57%		
8	Sep/2010	25	0.00%	0.00%	0.00%	0.56	1.67	93.41%		
9	Oct/2010	25	0.00%	0.00%	0.00%	0.56	1.73	93.41%		
10	Nov/2010	25	0.00%	0.00%	0.00%	0.56	1.73	93.91%		
11	Dec/2010	25	0.00%	0.00%	0.00%	0.55	1.86	93.91%		
12	Jan/2011	24	0.00%	0.00%	0.00%	0.55	1.85	93.50%		



QuantumRisk CMBS Property Risk Analytics
City Risk Analytics

City: **Pasadena** State: **CA** Property Type: **SS**

Index	Date	Number of Properties	Reported Defaults [RIGHT]	Severity of Loss [RIGHT]	Expected Loss [RIGHT]	Most Recent LTV [LEFT]	Most Recent DSCR [LEFT]	Most Recent Occupancy [LEFT]	Most Recent Cap Rate [RIGHT]	Most Recent Appraisal [LEFT]
1	Feb/2010									
2	Mar/2010									
3	Apr/2010	5	0.00%	0.00%	0.00%	0.51				
4	May/2010	5	0.00%	0.00%	0.00%	0.51	1.45	67.00%		
5	Jun/2010	5	0.00%	0.00%	0.00%	0.51	1.45	67.00%		
6	Jul/2010	5	0.00%	0.00%	0.00%	0.51	1.30	71.00%		
7	Aug/2010	5	0.00%	0.00%	0.00%	0.51	1.25	72.00%		
8	Sep/2010	5	0.00%	0.00%	0.00%	0.51	1.25	72.00%		
9	Oct/2010	5	0.00%	0.00%	0.00%	0.51	1.25	72.00%		
10	Nov/2010	5	0.00%	0.00%	0.00%	0.51	1.26	72.00%		
11	Dec/2010	5	0.00%	0.00%	0.00%	0.51	1.26	72.00%		
12	Jan/2011	5	0.00%	0.00%	0.00%	0.51	1.27	71.50%		



About

Title: QuantumRisk CMBS Property Risk Analytics (CPRA) City Report for Pasadena, CA

Purpose: To facilitate an investor's timely decision making, today by,
1. Providing comprehensive CMBS default & loss, LTV & DSCR, Occupancy & Appraisal Change statistics on a timely basis.
2. Facilitating investors' estimation of CMBS portfolio's potential losses, and thereby assist avoiding sub-optimal decisions.
3. To provide an insight into the economic segment of local commercial real estate industry using reported CMBS raw data.

Analytics Provider: QuantumRisk LLC
Registered Investment Advisor, Colorado as of June 2010 & Management Consultant since 2004.
P.O. Box 8532, Denver, CO 80201-8532
website: <http://www.QuantumRisk.com/>
email: benjamin.t.solomon@QuantumRisk.com
phone: 303-618-2800

Summary: QuantumRisk LLC is a boutique investment advisory & management consulting firm specializing in structured finance support, loss risk modeling, value uncertainty, business strategy & business process reengineering for sophisticated investors, investment bankers, underwriters, fund managers and corporate clients. QuantumRisk does not accept retail clients.

Scope of Data:
+ These CMBS reports are derived from at least 680 CMBS deal information provided by InvesCap Advisors.
+ Covers more than 100,000 properties, more than 66,000 mortgages, across more than 8,000 cities in the US.
+ These reports exclude any activity more than 15 months old.

Data Processing:
+ Original data is used where ever possible.
+ Proprietary data algorithms were developed to process the data where the original data is missing or appears to be incorrect.
+ QuantumRisk LLC strives to provide timely information, by 1st week of each month, on key CMBS property/loan parameters.
+ With an average historical disposition time of 21 months it is not possible to factor recovery rates.
+ It is suggested that the investor use their own recovery rate, and this may vary by property type.
+ If a loan has multiple properties its property type is not allocated to its largest property type as this introduces noise into the statistical analyses.

Disclaimer:
+ Note that some extreme data has been removed from this analysis as they are indicative of incorrect data entry at data origination.
+ Though QuantumRisk and its commercial surveillance data providers take every effort to ensure correctness of the data, neither QuantumRisk nor its surveillance data providers guarantee that the CMBS data used for this analysis is 100% correct.

Trade Marks: *QuantumRisk* and *Property Risk Analytics* are the registered trademarks of QuantumRisk LLC

Data Definitions

Defaults:

- + Default is defined when delinquent payments exceeds 90 days.
- + At 30+ & 60+ days the mortgage is considered delinquent.
- + A default (aka asset default) is the proportion of loans in default in A specific population of loans.
- + $\text{Default} = \frac{\text{\# of loans 90+ days}}{\text{Total \# of loans in the population}}$
- + Only Non-Zero Loss Given Defaults are considered defaults.
- Average defaults are averaged by number of loans.
- + Weighted defaults are averaged by Original or Current Principal Balance

Severity of Loss:

- + Severity of Loss (aka dollar default) is defined as the actual outstanding loan balance before recovery.
- + This definition of severity of loss does not include actual recovery which takes about 21 months to realize
- + $\text{Severity of Loss} = \frac{\text{Actual Outstanding Balance}}{\text{Original Principal Balance}}$
- + Only Non-Zero Loss Given Defaults are considered
- + Since this definition is before recovery it is sometimes known as Severity of Loss at Risk
- + Loan severities are averaged by number of loans
- + Weighted severities are averaged by Original or Current Principal Balance

LTV:

- + Loan to Value Ratio
- + $\text{Current LTV} = \frac{\text{Current Outstanding Balance}}{\text{Current Appraisal Value}}$

DSCR:

- + Debt Service Coverage Ratio
- + $\text{Most Recent NOI DSCR} = \frac{\text{Most Recent NOI}}{\text{Most Recent Debt Service Amount}}$
- + $\text{Most Recent NCF DSCR} = \frac{\text{Most Recent NCF}}{\text{Most Recent Debt Service Amount}}$
- + $\text{Current DSCR} = \text{Most Recent NCF DSCR}$, if data is missing then is Most Recent NOI DSCR
- + Extreme data are excluded.

Occupancy:

- + Reported occupancy of CMBS properties.
- + Does not include properties with 0% occupancy rates.

Cap Rates:

- + Capitalization Rates
- + $\text{Cap Rate} = \frac{\text{Annual Debt Service}}{\text{Appraisal Value}}$
- + $\text{Current Cap Rate} = \frac{\text{Current Annual Debt Service}}{\text{Current Appraisal Value}}$
- + Extreme data are excluded.

Property Type:

- AL: All Property Types
- CH: Cooperative Housing
- HC: Healthcare
- IN: Industrial
- LO: Lodgings/Hotels
- MF: Multifamily
- MH: Mobile Homes
- MU: Mixed Use
- OF: Office
- OT: Other
- RT: Retail
- SE: Defeased
- SS: Self Storage
- WH: Warehouse

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