



Rate Cap/ Hedge Monitoring



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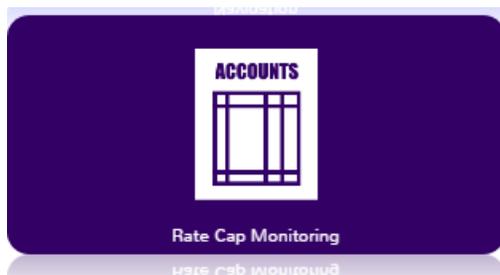
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Rate Cap Monitoring Overview

Under certain loan agreements the borrower is required to purchase a hedge product or the loan agreement requires a hedge agreement if certain conditions exist. If a pay rate reaches a predefined threshold the hedge or cap agreement needs action. In addition, loan documents may require that a hedge or cap agreement be in place at all times, or the term of the rate cap agreement does not meet the contractual requirement. In these cases, the term of the rate cap or hedge product must be monitored for renewal.

Strategy checks the Borrower's interest rate against the Strike/Threshold rate, the status or expiration of the Hedge agreement, and Hedge Revaluing Date. The rules engine recognizes that these conditions exist, and, when applicable, sets off an alert or other defined action.

To accomplish this McCracken has updated the Rate Cap Monitoring widget with additional data points, added new rules, and enhanced the Bank Vendor to include financial ratings for Moody's, S&P, and Fitch.



Rate Cap Monitoring Widget

The Rate Cap Monitoring widget will open to the Loan Search screen to select a loan record. Entering search text in the Super Search field will populate the Loan Search Results grid.



Welcome, Kim Cooper
Rate Cap Monitoring

Search Results

Loan Number	Associated Name	Monthly Payment	Current Principal Balance	Loan Name	Active Status	Name ID	MCA #	Credit Facility #	Customer Short Name
150000099	PXR A75 LLC	0.00	34,826,665.60		Y	564	0	0	PXR A75 LLC
150001003	Barrington LLC	146,777.00	2,687,561.99		Y	562	0	0	Barrington LL
150001942	Bartlett Trust	99,046.32	12,095,252.58	demo crossed loan	Y	579	0	0	Bartlett Trus
150001979	Boynton Group LP	14,633.53	1,900,878.90	demo crossing	Y	582	0	0	Boynton Grp
150002116	Champion Industrial Properties, LLC, A Missouri LLC	58,671.14	10,831,784.74	demo multi prop	Y	590	0	0	Champion Ind
150002283	Winston Holdings LLC	72,184.45	12,820,723.09	demo loan llc l/o 2	Y	576	0	0	Winston Hold
150002311	RYT Holdings LLC	0.00	11,250,000.00	demo loan llc l/o 1	Y	573	0	0	RYT Holdings
150015001	Weller & Associates	722,468.00	112,807,220.59	Demo arm	Y	60	0	0	Weller & Asso
150029663	Graham Holding LLC	0.00	15,000,000.00	demo	Y	587	0	0	Graham Holdin
150075110	Winston Landing	4,750.00	25,000,000.00	demo	Y	141	0	0	Winston Landi

RWD | R2ODOC | 20 | SD: 08/05/2019 | 05/27/2021

1- PORTAL SUPER SEARCH AND SEARCH RESULTS - TO ACCESS RATE CAP MONITORING, FIRST SEARCH FOR A LOAN NUMBER.

The grid, enlarged below lists all loans that match the string entered.

The grid displays data fields to assist with identifying the correct loan: Loan Number, Associated Name, Monthly Payment, Current Principal Balance, Loan Name, Active Status, Name ID, MCA#, Credit Facility#, and Customer Short Name.

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Search Results

Loan Search Results

Loan Number	Associated Name	Monthly Payment	Current Principal Balance	Loan Name
15000099	PXR A75 LLC	0.00	34,826,665.60	
150001003	Barrington LLC	146,777.00	2,687,561.99	
150001942	Bartlett Trust	99,046.32	12,095,252.58	demo crossed loan
150001979	Boynton Group LP	14,633.53	1,900,878.90	demo crossing
150002116	Champion Industrial Properties, LLC, A Missouri LLC	58,671.14	10,831,784.74	demo multi prop
150002283	Winston Holdings LLC	72,184.45	12,820,723.09	demo loan llc i/o 2
150002311	RYT Holdings LLC	0.00	11,250,000.00	demo loan llc i/o 1
150015001	Weller & Associates	722,468.00	112,807,220.59	Demo arm
150029663	Graham Holding LLC	0.00	15,000,000.00	demo
150075110	Winston Landing	4,750.00	25,000,000.00	demo

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Welcome, Kim Cooper
Rate Cap Monitoring

Results

Loan Name	Active Status	Name ID	MCA #	Credit Facility #	Customer Short Name
	Y	564	0	0	PXR A75 LLC
	Y	562	0	0	Barrington LL
demo crossed loan	Y	579	0	0	Bartlett Trus
demo crossing	Y	582	0	0	Boynton Grp
demo multi prop	Y	590	0	0	Champion Ind
demo loan llc i/o 2	Y	576	0	0	Winston Hold
demo loan llc i/o 1	Y	573	0	0	RYT Holdings
Demo arm	Y	60	0	0	Weller & Asso
demo	Y	587	0	0	Graham Holdin
demo	Y	141	0	0	Winston Landi

SD: 08/05/2019 05/27/2021

2- LOAN SEARCH RESULTS, SPLIT SCREEN FOR EASIER VIEWING.

Rate Cap Listing

Clicking a loan record in the Search Result grid displays the Rate Cap Listing page.

3- RATE CAP LISTING - DISPLAYS ALL RATE CAP AGREEMENTS FOR THE SELECTED LOAN

The page displays the rate cap information for the selected loan. The grid displays the Loan Number, the Hedge Identifier, the Loan Short Name, the Servicer Loan Number, Strike/Threshold Rate, Notification Duration, Days or Months, Date Threshold Reached and Active Status.

The New button above the grid allows users with appropriate security to enter a new Rate Cap Monitoring record. If the user does not have authority to add records for Rate Cap Monitoring, the button will be greyed out.

The Cancel button will return the user to the Search page.

Clicking the New button or clicking a record in the Rate Cap Listing displays the Rate Cap Edit page. This page carries the Loan Information header and the detail for the record selected from the Rate Cap Listing.

Rate Cap Edit

The Rate Cap Edit window allows users with proper authority to add/update/view Rate Cap/Hedge information

The top portion of the screen displays the standard Loan Information header.

As in other Portal applications, loan specific information such as the Customer Short Name, Servicer, Investor, Loan Date and Property Name, Address and Descriptions show.

4- RATE CAP EDIT WINDOW DISPLAYS THE STANDARD LOAN HEADER

Loan Information

Loan Number	150015001	Investor	Bank of St. Louis (800)	Investor Loan
Customer Short Name	Weller & Asso			
Servicer	RYLOWICZ, SUSAN [SR]	Processor Code		Loan Type
Product Line		Product Line Detail 1		Product Line Detail 2
Collateral ID	Consl. <input type="button" value="v"/>	Property Name	The Hollow at White Point (1)	Property Address
<input type="button" value="View Detail"/>		<input type="button" value="Property Maintenance"/>		

Rate Cap Edit

Investor Loan	15001800	Fiscal Year End	00/00	Related Loans
Loan Type	CONVENTIONAL (PURCHASED) [P]	Original Loan Date	03/01/2014	Loan Added Date 04/02/2014
Product Line Detail 2		Source Code		Hold Code
Property Address	13394 Pin Oak Drive AUSTIN, TX, TX 78645	Property Desc 1	OFFICE MULTI TENANT [06]	Property Desc 2
		Asset Manager		CMBS Property Type

5- WHEN THE RATE CAP EDIT PAGE OPENS, THE STANDARD LOAN HEADER IS DISPLAYED. ENLARGED HERE FOR DETAIL.

View Detail

The View Detail button opens the Loan Detail window.

Loan Detail
✕

Square Footage:	0	Borrower:	Weller & Associates
Rental Square Footage:	0		1211 March Street
# of Units:			Saint Louis, MO 63111
# of Buildings:		Borrower Phone:	
Date Built:	01/01/0001	Borrower Email:	
Date Renovated:	01/01/0001	Guarantor:	
Property MSA:		DSCR NOI Note A/B/C:	
Payoff Date:		DSCR Date:	
Current Principal Balance:	112,807,220.59	Triple Net Lease?	
Original Principal Amount:	127,000,000.00	Single Tenant Lease?	
Active Status:	Yes	Credit Tenant Lease	
Maturity Date:	04/30/2044	Hold Code 1:	
Note Type:		Hold Code 2:	
FHA Number:		Hold Code 3:	
Watch List - Internal:	No	Prospectus Loan ID:	
Watch List - External:	No	LSAT Loan:	No
Reserve Balance:	0.00	Origination Unit:	
Interest Rate:	4.8654000000000	Assessor Code:	
Current LTV:	0.0000	Correspondent Name:	
Original LTV:			
Interest Code:	365 DAYS/ACTUAL DAY MOS (2/28)		
Payment Type:	REGULAR AMORTIZING		

Investor Loans

Investor Loan Number	Participation Percentage	Investor Number	Investor Name
15001800	100.00000000000000	800	Bank of St. Louis

MCA Loans

No loans found.

Most Recent Inspection Information

No inspections records found

Latest Tenants

Top Five Tenants by Square Feet
 Top Five Tenants by Annual Rent

Tenant Name	Square Feet Leased	Date of Lease Expiration

6- STANDARD LOAN HEADER PROVIDES FOR ADDITIONAL DETAIL WITH THE VIEW DETAILS BUTTON.

Property Maintenance

Property Maintenance

Loan #	Property Name and	Prop #	Collateral	Allocation %	Total Gross	Commercial	Residential	Total Units	Measured In	Property Status
150015001	The Hollow at White Point (1) 13394 Pin Oak Drive AUSTIN, TX, TX 78645	1	506	100.00000	0	0	0	0	[M] UNITS AND [6]	[6] UNCHANGED
Totals				100.00000	0	0	0	0		

7 - STANDARD LOAN HEADER PROVIDES FOR PROPERTY MAINTENANCE DETAIL USING THE PROPERTY MAINTENANCE BUTTON.

The Property Maintenance button opens the Property Maintenance window.

The Property Maintenance window allows users with security to quickly view/update Property Allocation, and information about Rentable area for collateral tied to the loan.

The bottom half of the Rate Cap Edit page displays the parameters outlining the terms of the Rate Cap/Hedge agreement.

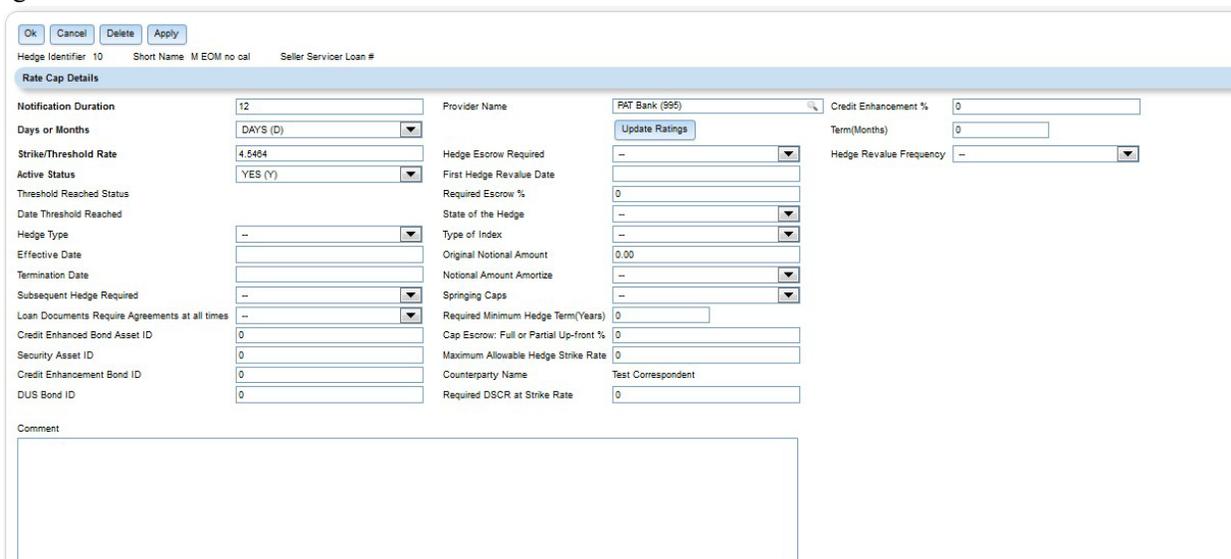
Rate Cap Agreement Detail

The bottom portion of the screen is the Rate Cap Edit detail. Four buttons appear:

- OK – Saves and closes the Rate Cap Edit page and returns you to the Rate Cap Listing.
- Cancel – Closes the Rate Cap Edit page without saving any changes.
- Delete – With appropriate security will delete the selected record.
- Apply – Saves any changes made to the record, remaining on the Rate Cap Edit page.

To save any changes the Apply or OK button must be pressed.

Several fields have been added to the Rate Cap Monitoring widget to support management of Rate Cap or Hedge agreements.



The screenshot shows the 'Rate Cap Details' window with the following fields:

- Notification Duration:** 12
- Days or Months:** DAYS (D)
- Strike/Threshold Rate:** 4.5484
- Active Status:** YES (Y)
- Threshold Reached Status:** YES (Y)
- Date Threshold Reached:** --
- Hedge Type:** --
- Effective Date:** --
- Termination Date:** --
- Subsequent Hedge Required:** --
- Loan Documents Require Agreements at all times:** --
- Credit Enhanced Bond Asset ID:** 0
- Security Asset ID:** 0
- Credit Enhancement Bond ID:** 0
- DUS Bond ID:** 0
- Provider Name:** PAT Bank (95)
- Hedge Escrow Required:** --
- First Hedge Revalue Date:** --
- Required Escrow %:** 0
- State of the Hedge:** --
- Type of Index:** --
- Original Notional Amount:** 0.00
- Notional Amount Amortize:** --
- Springing Caps:** --
- Required Minimum Hedge Term (Years):** 0
- Cap Escrow: Full or Partial Up-front %:** 0
- Maximum Allowable Hedge Strike Rate:** 0
- Counterparty Name:** Test Correspondent
- Required DSCR at Strike Rate:** 0
- Credit Enhancement %:** 0
- Term (Months):** 0
- Hedge Revalue Frequency:** --

Buttons: Ok, Cancel, Delete, Apply

Header: Hedge Identifier 10 Short Name M EOM no cal Seller Servicer Loan #

Section: Rate Cap Details

Comment field is present at the bottom.

8 - RATE CAP EDIT DETAIL - BOTTOM PORTION OF THE RATE CAP EDIT WINDOW DISPLAYS INFORMATION NEEDED TO SUPPORT THE DUE DILIGENCE NEEDED FOR RATE CAP/HEDGE AGREEMENTS.

L - Indicates Left Column, M – Center Column, R – Right Column, T- Comment and Notes field. The associated number indicates the order top to bottom the field appears.

The following pages outline the purpose of the fields shown on the Rate Cap Edit Detail above. Completing this page and saving creates a record in the Rate Cap Monitoring file (PRACAMO). For ease of viewing the screen has been split into two graphics and enlarged.

PRACAMO – Rate Cap/Hedge Monitoring File

Ok
Cancel
Delete
Apply

Hedge Identifier 10 Short Name M EOM no cal Seller Servicer Loan #

Rate Cap Details

Notification Duration	<input type="text" value="12"/>	Provider Name	<input type="text" value="FAT Bank (995)"/>
Days or Months	<input type="text" value="DAYS (D)"/> ▼	Hedge Escrow Required	<input type="text" value="--"/> ▼
Strike/Threshold Rate	<input type="text" value="4.5484"/>	First Hedge Revalue Date	<input type="text"/>
Active Status	<input type="text" value="YES (Y)"/> ▼	Required Escrow %	<input type="text" value="0"/>
Threshold Reached Status		State of the Hedge	<input type="text" value="--"/> ▼
Date Threshold Reached		Type of Index	<input type="text" value="--"/> ▼
Hedge Type	<input type="text" value="--"/> ▼	Original Notional Amount	<input type="text" value="0.00"/>
Effective Date	<input type="text"/>	Notional Amount Amortize	<input type="text" value="--"/> ▼
Termination Date	<input type="text"/>	Springing Caps	<input type="text" value="--"/> ▼
Subsequent Hedge Required	<input type="text" value="--"/> ▼	Required Minimum Hedge Term(Years)	<input type="text" value="0"/>
Loan Documents Require Agreements at all times	<input type="text" value="--"/> ▼	Cap Escrow: Full or Partial Up-front %	<input type="text" value="0"/>
Credit Enhanced Bond Asset ID	<input type="text" value="0"/>	Maximum Allowable Hedge Strike Rate	<input type="text" value="0"/>
Security Asset ID	<input type="text" value="0"/>	Counterparty Name	<input type="text" value="Test Correspondent"/>
Credit Enhancement Bond ID	<input type="text" value="0"/>	Required DSCR at Strike Rate	<input type="text" value="0"/>
DUS Bond ID	<input type="text" value="0"/>		

Comment

9 - LEFT AND MIDDLE COLUMNS - RATE CAP EDIT DETAIL

Location on Page	New/Existing	Field/Description	Required / Comments
L1	Existing Field	Notification Duration – existing field previously labeled Duration - # of days or months after the “Date Threshold Reached” you want to be notified.	Required field Generally this value is set to ‘1’.
L2	Existing Field	Days or Months –Enter Days or Months to indicate the unit of duration.	Required field System Information Table ID DU This field defaults to the value Days.
L3	Existing Field	Strike/Threshold Rate – existing field previously labeled Threshold Rate – The interest rate that will trigger a payment obligation by the Hedge Provider.	Required If the Rate Cap agreement is a Springing Cap (Springing Cap =‘Y’)

Location on Page	New/Existing	Field/Description	Required / Comments
			the Strike/Threshold Rate will be compared to the associated index
L4	Existing SWACTV	Active Status – Yes/No field to indicate whether or not the Hedge is Active, Yes is Active, or No is not Active. The default value is ‘Y’. - Required Field (Left Column, 4 th from top).	Required. Default Value is ‘Y’ Must be ‘Y’ for Rules 250 - 256
L5	Existing Field SWSTAT	Threshold Reached Status - This field indicates that the Current Rate (Current Interest Rate + DIAL Rate) is equal to or greater than the Strike/Threshold Rate.	Field value is system generated. Rule 138 – Value is not Null
L6	Existing Field SWDTR	Date Threshold Reached –This field indicates the date that the Current Rate has met or exceeded the Strike/Threshold Date.	Field value is system generated. Rule 138 Value is Y
L7	New Field SWHDTYP	Hedge Type –used to indicate the type of instrument used to hedge interest rate risk. Selections are available from a drop down: Cap, Swap, N/A, Structured Cap, Hedged Under, Waive, Subordinated Swap.	System Information Table ID 6S
L8	New Field SWEFFDT	Effective Date –This is the date that the Hedge agreement takes effect.	
L9	New Field SWTRMDT	Termination Date –This is the date that the Hedge terminates.	Rule 251
L10	New Field SWSHR	Subsequent Hedge Required - This indicated identifies whether a subsequent hedge agreement is required after the termination of the initial hedge agreement. Valid entries available from the drop down are Identical Terms, No, and Other.	System Information Table ID 6U
L11	New Field SWLDOC	Loan Documents Require Agreements at all times - Yes/No field to indicate whether a hedge agreement must be in place at all times according to the loan agreements.	
L12	New Field SWCEBA	Credit Enhanced Bond Asset ID – number to identify Credit Enhanced Bond Asset.	

Location on Page	New/Existing	Field/Description	Required / Comments
L13	New Field SWSAID	Security Asset ID –number to identify Security Asset.	
L14	New Field SWCEBI	Credit Enhancement Bond ID – number to identify Credit Enhanced Bond.	
L15	New Field SWDBI	DUS Bond ID –number to identify DUS Bond.	
T1	Existing Field SWCOMNT	Comment –modified in this release to varchar field definition - Provided for comments. May be used to clarify terms outlined above.	Comment can be up to 4000 characters.
M1	New Field SWPRNAM	Provider Name - Name of financial institution issuing the Hedge agreement. Magnifying Glass in field allows users to select the Provider Name from Bank Vendors in the Strategy system.	System Information Table ID V2
M2	New Field SWHER	Hedge Escrow Required –Yes/No indicator to identify whether there is an impound/reserve requirement for the purchase of a subsequent Hedge agreement.	
M3	New Field SWHERVF	First Hedge Revalue Date –This is the date that the Hedge needs to be revalued on.	Rule 252 will work with this date to alert the appropriate parties of the revaluation process needed. This rule can kick off a process that will recur based on the Hedge Escrow Revalue Frequency.
M4	New Field SWRQES	Required Escrow % - Informational Only. Hedge escrow payments are included in the debt service and expressed as a percentage. The value indicates the percentage of the current estimated cost of the subsequent Hedge agreement required. Percentage can be more than 100%, field will display 0 to 999.999999999.	
M5	New Field SWSOH	State of the Hedge - indicates the current status of the Hedge: Values are Created, Released, Terminated or Submitted.	System Information Table ID 6V



Location on Page	New/Existing	Field/Description	Required / Comments
M6	New Field SWTOI	Type of Index –Used in conjunction with the Springing Caps = “Y”, this field indicates the type of index that the Strike/Threshold rate is tied to.	Rule 253 - Values are pulled from the System Information Table for Index Rates (I2).
M7	New Field SWONA	Original Notional Amount –the original notional dollar amount of the hedge.	
M8	New Field SWNAMZ	Notional Amount Amortize – new field – Yes/No field to indicate whether the Original Notional Amount of the Hedge will amortize.	
M9	New Field SWSCAPS	Springing Caps –in some cases a borrower may not be required to purchase a Cap agreement (type of Hedge) until an event occurs. If this is Yes, this is used in conjunction with the Type of Index filed. When the event occurs, the borrower must go and purchase the Cap agreement. This Yes/No field indicates whether Springing Caps are applicable.	Rule 253
M10	New Field SWRMHT	Required Minimum Hedge Term (Years) –indicate the number of years (0-99) for the minimum Hedge term.	
M11	New Field SWCEFP	Cap Escrow: Full or Partial Up-front % - This field is a percentage field that indicates the amount of payment due up front for the payment of subsequent Hedge agreements.	Full payment would appear as 1.000000000000%
M12	New Field SWMAHS	Maximum Allowable Hedge Strike Rate –This field indicates the maximum Hedge Strike Rate allowed.	
M13		Counterparty Name –This field displays the correspondent name as derived from the Master file and Servicer files. Use PMASTR.CMXRB for the loan to display PSSRV.SUNAME	Derived for display
M14	New Field SWRDSCR	Required DSCR at Strike Rate - new field – This field is the DSCR required if the Strike Rate is reached. The field will accept up to 9999999.9999999999	

Right Column of Rate Cap Edit Detail

The final five fields on the Rate Cap Detail window appear on the far right of the Detail section.

Credit Enhancement %	<input type="text" value="0"/>
Term(Months)	<input type="text" value="24"/>
Hedge Revalue Frequency	<input type="text" value="ANNUALLY (AN)"/>
FNMA Hedge Identifier	<input type="text" value="0"/>
Source Application Name	<input type="text"/>

10- RIGHT COLUMN OF RATE CAP EDIT DETAIL

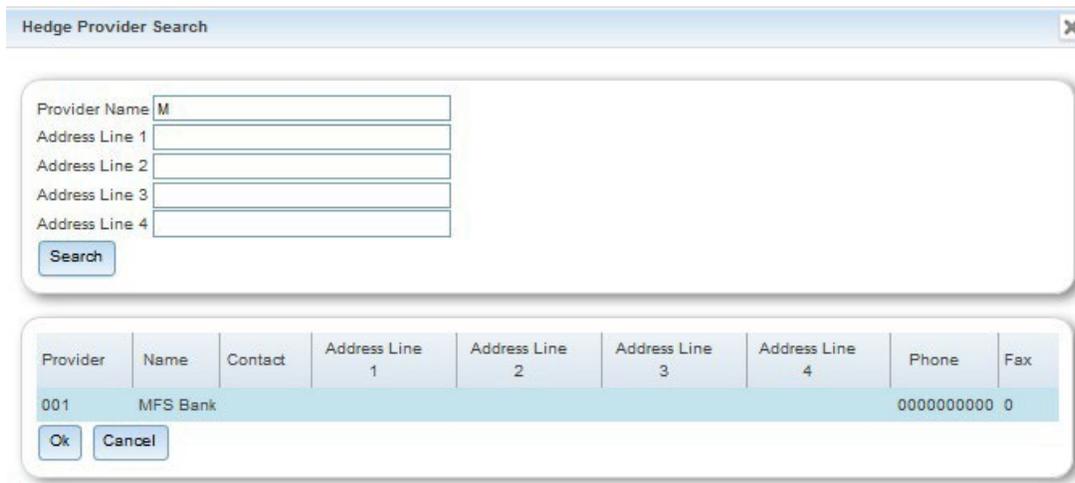
Location on Page	New/Existing	Field/Description	Required / Comments
R1	New Field SWCEP	Credit Enhancement % - The field displays at 100.00%	
R2	New Field SWTERM	Term (Months) – The length of time the Hedge is active measured in months. Max value: 999	
R3	New Field SWHERVF	Hedge Revalue Frequency – This is the frequency with which the Hedge should be revalued. The frequency is entered from a drop down and valid entries are Annually, Semi-annually, Quarterly, Monthly and Other.	System Information Table ID 6T
R4	New Field SWFMHDID	FNMA Hedge Identifier -	
R5	New Field SWSAPN	Source Application Name -	

Hedge Providers

Due Diligence around Hedge and Rate Cap agreements includes tracking the Hedge Providers and their Ratings.

Hedge Provider Search

Activated when you click in the Provider Name field, the Hedge Provider Search window allows users to search for a particular Provider within the Bank Vendors.



Provider	Name	Contact	Address Line 1	Address Line 2	Address Line 3	Address Line 4	Phone	Fax
001	MFS Bank						0000000000	0

Entering text strings in the filter fields Provider Name, or Address Line 1-4 and clicking Search populates the results grid at the bottom of the screen. Selecting the row with the Provider you want, and clicking Ok, populates the Provider Name field with the selected Name.

NOTE: If more than one value is populated in the filter fields, the result set will only display bank vendors where all items are true. Leaving all fields blank and clicking Search returns all Banks.

Bank Ratings

Under the Hedge Provider Name field is an Update Ratings button. This button is active if the Hedge Provider name is not blank. The button accesses the new Update Bank Rating window capturing ratings assigned to the Provider by Fitch, Moody's and S&P. Much like the ratings applied to the Insurance Agents and Company vendors, the ratings can be viewed as Current Rating Information, or All Rating Information by using the radio buttons provided.

When the Update Ratings button is clicked the window opens with a default view of the Current Rating Information for the Provider named on the previous page. Users can select a specific Rating Agency from the drop down and use the radio buttons to see current information or all rating information.

Click **New** to add a new record. Rating Agency, Financial Strength, and Rating Effective Date are required. You can store historical Ratings for the same Bank, from the same or multiple Agency(ies), however, you cannot have more than one record for the same Bank, Agency and Effective Date.

Update Bank Ratings

Rating Agency: -- Current Rating Information All Rating Information

Search

Rating Agency	Rating Agency's Company ID	Financial Strength Rating	Long Term Rating	Short Term Rating	Financial Size Category	Rating Effective Date
A.M. BEST (AM)		SUPERIOR A++ (01)				03/13/2019

Rating Agency: --
 Rating Agency's Company ID:
 Financial Strength Rating: --
 Long Term Rating: --
 Short Term Rating: --
 Financial Size Category: --
 Rating Effective Date:

New Ok Apply Delete Cancel

11- UPDATE BANK RATINGS ALLOWS USERS WITH APPROPRIATE SECURITY TO ADD AND/OR UPDATE BANK RATINGS.

NOTE: Selecting the Rating Agency from the Rating Agency drop down populates the available values for the Financial Strength, Long Term Rating, Short Term Rating and Financial Size Category fields based on the Rating Agency selected. Rating Agencies are stored in PINFO Table RA, which is also used to populate Rating Agencies for Insurance Companies, therefore A.M. Best is included in the drop down for Rating Agencies. A.M. Best does not rate banks, and if selected for a Bank Rating, subsequent dropdowns for Long Term Rating, Short Term Rating, and Financial Size Category will be blank.

When a record is selected in the Ratings grid in the center of the page. The detail section at the bottom prefills with the information for the selected record and all button options are available for users with appropriate authority.

Update Bank Ratings

Rating Agency: -- Current Rating Information All Rating Information

Search

Rating Agency	Rating Agency's Company ID	Financial Strength Rating	Long Term Rating	Short Term Rating	Financial Size Category	Rating Effective Date
A.M. BEST (AM)		SUPERIOR A++ (01)				03/13/2019
FITCH (FI)		EXCELLENT A (06)				03/25/2019
FITCH (FI)		EXCELLENT A- (07)	A- (07)	C (06)	2,000,000 TO 5,000,000 (03)	03/10/2020

Rating Agency: FITCH (FI)
 Rating Agency's Company ID:
 Financial Strength Rating: EXCELLENT A- (07)
 Long Term Rating: A- (07)
 Short Term Rating: C (06)
 Financial Size Category: 2,000,000 TO 5,000,000 (03)
 Rating Effective Date: 03/10/2020

New Ok Apply Delete Cancel

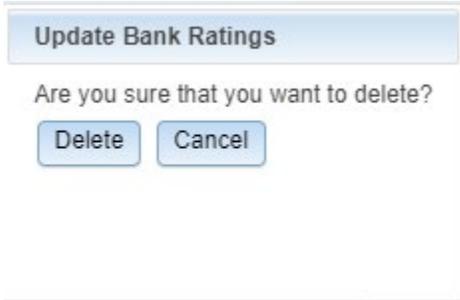
1- Users with appropriate authority can Update or Delete existing Bank Ratings.

Ok saves any changes made and closes the Update Bank Ratings window.

Apply saves any changes made. The Update Bank Ratings window remains open for additional changes.

Cancel closes the Bank Ratings window ret

Delete will remove the selected record, assuming the User has Delete rights to Rate Cap Maintenance. A message window to confirm deleting the window appears.



Delete removes the record and returns you to the Update Bank Ratings page. No records are active. Select a record, click **New**, **Ok** or **Cancel** (from the Update Bank Ratings page) to continue.

Cancel returns you to the Update Bank Ratings page without deleting the record. No records are active.

PBANKRAT – Bank Rating File

Location	New/Existing	Field/Description	Required / Comments
1	New	Rating Agency	Required field
	VRRAGENCY		Generally this value is set to '1'. PINFO RA
2	New	Rating Agency's Company ID	
	VRRABNKID		
3	New	Financial Strength Rating	Required field
	VRFSTRAT	If Rating Agency is	Fitch - PINFO FW If Rating Agency is Moody's PINFO FX

Location	New/Existing	Field/Description	Required / Comments
			If Rating Agency is S& P PINFO FY Rules 254, 255, & 256
4	New	Long Term Rating	If Rating Agency is Fitch – PINFO LJ If Rating Agency is Moody’s PINFO LI If Rating Agency is S&P PINFO LH If AM Best – drop down is blank.
5	New	Short Term Rating	If Rating Agency is Fitch – PINFO LV If Rating Agency is Moody’s PINFO LT If Rating Agency is S&P PINFO LU If AM Best – drop down is blank.
4	New	Financial Size Category VRFSIZCAT	PINFO FZ
5	New	Rating Effective Date VRRATEFFDT	Required Field Date the entered rating took effect.

Users with appropriate authority can use the New button to add a rating.

Ok – saves any changes and closes the Update Bank Ratings window

Apply – saves any changes. The Update Bank Ratings window remains open for additional review or changes.

Delete – Deletes the record selected in the Ratings grid. A confirmation window appears to confirm delete.

Dayend Program

On a nightly basis a program runs in dayend to look for 2 conditions. These involve the Date Threshold Reached field

and the Threshold Reached Status field.

Rate Cap Details	
Notification Duration	1
Days or Months	DAYS (D) ▼
Strike/Threshold Rate	4.5
Active Status	YES (Y) ▼
Threshold Reached Status	
Date Threshold Reached	
Hedge Type	HEDGED UNDER (HU) ▼
Effective Date	02/01/2019
Termination Date	02/01/2021

12- THE THRESHOLD REACHED STATUS AND DATE THRESHOLD REACHED FIELDS ARE UPDATED IN DAY END.

If there is a date in the Date Threshold Reached field, the system checks to see if there is a 'Y' in the Status field. If a record is found with a date in Date Threshold Reached and a 'Y' in the Status field, the system sets the Status field to blank.

If there is no Date Threshold Reached date, the system evaluates the current interest rate against the Strike/Threshold Rate.

If the Current Interest Rate or (Current Pay Rate + DIAL Rate) is equal to or greater than the Strike/Threshold Rate, the system will use the Daily Balance and Rate file (PDBNR) to see how long the Current Interest Rate has been in effect. The system will determine if the time elapsed since the Strike/Threshold Rate was met or exceeded is equal to or greater than the Notification Duration. If so, the system will:

- 1) Date Threshold Reached – the field is updated with the GL Voucher Date
- 2) The Threshold Reached Status Code is set to 'Y'
- 3) File Maintenance record is written out to track the change.
- 4) The Threshold Reached Status Field = 'Y' will trigger Rule 138 to perform the requested action or actions.

Job Stream Maintenance

CMB171X must be in your dayend Job Stream to analyze the Current Interest Rate and Strike/Threshold Rates. Place after day the Adjustable Rate Loan processing has completed..

Reporting on Rate Cap Monitoring

A view has been added to the Reports widget for creating reports over the Rate Cap Monitoring information. Users will be able to write reports using the following files:

Include	Sequence	Description	System Name	From Date	To Date
<input type="checkbox"/>	1	LOAN NUMBER	SWLN		
<input type="checkbox"/>	2	LOAN NUMBER	SWLN		
<input type="checkbox"/>	3	LOAN NUMBER	SWLN		
<input type="checkbox"/>		RATE CAP MONITORING FILE	PRACAMO ▶		
<input type="checkbox"/>		NAME FILE	PNAME ▶		
<input type="checkbox"/>		CUSTOMER MASTER FILE	PMASTR ▶		
<input type="checkbox"/>		PROPERTY FILE	PPROP ▶		
<input type="checkbox"/>		COLLATERAL FILE	PCCOLLCRE ▶		
<input type="checkbox"/>		ROLES - LOAN LEVEL (PANAME)	PROLELOAN ▶		
<input type="checkbox"/>		ADDITIONAL NAMES FILE	PANAME ▶		
<input type="checkbox"/>		LINKED NAME AND ADDRESS FILE	PNAMADD ▶		
<input type="checkbox"/>		NAMES FILE	ANAME ▶		
<input type="checkbox"/>		ADDRESS FILE	PADDRESS ▶		
<input type="checkbox"/>		CORRESPONDENT(SUBSERVICER)	PSSRV ▶		

VVRATCAP0 – Rate Cap/Hedges

This view will be created by joining the following Core views.

- VMASTR0 – PMASTR
- VBORR0 - PNAME/PANAME/PNAMADD/PADDRESS(selects primary borrower)
- VRACAMO0 - PRACAMO
- VSSRV0 - PSSRV
- VVPROPCOL0- PPROP/PCCOLLCRE
- VROLELOAN0 - PROLELOAN
 - VRACAMO0 and VMASTR0 will join by loan(SWLN/CML#)
 - VMASTR0 and VSSRV0 will join by loan(CMXRB/SUSUB#)
 - VMASTR0 and VPROPCOL0 will join by loan (CML#/PQLN)
 - VROLELOAN0 and VNAMADD0 will join by loan/seq (loana,N4SEQ/LOANA,TNSEQ)
 - VNAMADD0 and VNAME will join by link id (LKNAMID/NMNAMID)
 - VNAMADD0 and VADDRESS will join by link id (LKNADDID/ADADDID)

N4ROLETYP = 'BORR'

PQPLSQ = 0001

Rules

Rules have been added to the Rules Engine to monitor for the Rate Cap Threshold, Agreement Termination pending or past due, Hedge Revaluation is Pending, Springing Cap Rate has been reached and whether the Hedge Provider has sufficient Ratings. The following information is available in PRURULEM.

<i>Rule ID</i>	<i>Rule</i>	<i>Logic</i>	<i>Rule Alert Text</i>
138	Rate Cap Monitoring	Rate cap threshold met or exceeded. Variable value: none. Logic: Select Rate Cap Monitor file PRACAMO record where Date Threshold Reached field SWDTR is not null and Status field SWSTAT = 'Y'	Current pay rate meets or exceeds threshold.
250	Hedge Termination Pending	Hedge termination/expiration pending. Variable value: specify the number of days before hedge termination/expiration to take the designated actions. Logic: For any active hedge (PRACAMO.SWACTV = Y), find the number of days between its Termination/Expiration Date PRACAMO.SWTRMDT and System Process Through Date PSYSCPER.S2PTDT. If that number is less than or equal to rule detail variable value PRURULED.RDVALUEN, take the designated action.	[Borrower] hedge termination/expiration date is due in XX days [Date]
251	Hedge Termination Past Due	Hedge termination/expiration date past due. Specify the number of days past Hedge Termination/Expiration Date to take the designated actions. For any active Hedge (PRACAMO.SWACTV = Y) find the number of days between System Process Through Date PSYSCPER.S2PTDT and Termination/Expiration Date PRACAMO.SWTRMDT. If that number is greater than or equal to rule detail variable value PRURULED.RDVALUEN, take the designated action.	[Borrower] Hedge Termination/Expiration date XX days overdue [Date]
252	Hedge Escrow Revalue Pending	Hedge Escrow Revalue Date pending. Variable value: specify the number of days before first hedge escrow revaluation to take the designated actions. Logic: for any active Hedge (PRACAMO.SWACTV = Y), find the number of days between First Hedge Escrow Revalue Date PRACAMO.SWFHERD and System Process Through Date PSYSCPER.S2PTDT. If that number is less than or equal to rule detail variable value PRURULED.RDVALUEN, take the designated actions.	[Borrower] hedge escrow revaluation due in XX days [date]

<i>Rule ID</i>	<i>Rule</i>	<i>Logic</i>	<i>Rule Alert Text</i>
253	Springing Cap Index	Springing Cap has hit Index. Variable Value: none. Logic: retrieve Threshold Strike Rate PRACAMO.SWTR for any active Hedge (PRACAMO.SWACTV = Y) with Springing Caps (PRACAMO.SWSCAPS = Y). If that rate is greater than or equal to the most recent index rate (PINDEX.IXIRAT where max PINDEX.IXEFF not later than System Process Through Date PSYSCPER.S2PTDT) where index PINDEX.IXICOD matches Hedge Type of Index PRACAMO.SWTOI, take the designated action. Index name is in PINFO table I2.	[Borrower] springing cap threshold/strike rate XX meets or exceeds the rate of the index [Index full description]
254	Bank S&P Rating Requirement	Bank must meet minimum S&P rating requirement. Variable Value: specify minimum rating required. Logic: For any active Hedge {PRACAMO.SWACTV = Y}, retrieve the effective S&P bank rating where Bank Rating Bank ID PBANKRAT.VRBANKID matches Hedge Provider Name PRACAMO.SWPRNAM and Rating Agency ID PBANKRAT.VRRAGENCY is 'SP'. If Financial Strength Rating PBANKRAT.VRFSTRRAT falls below the rating in the rule detail variable value, take designated action.	[Bank] S&P rating XX does not meet minimum requirement
255	Bank Moody's Rating Requirement	Bank must meet minimum Moody rating requirement. Variable Value: specify minimum rating required. Logic: For any active Hedge {PRACAMO.SWACTV = Y}, retrieve the effective Moody's bank rating where Bank Rating Bank ID PBANKRAT.VRBANKID matches Hedge Provider Name PRACAMO.SWPRNAM and Rating Agency ID PBANKRAT.VRRAGENCY is 'MO'. If Financial Strength Rating PBANKRAT.VRFSTRRAT falls below the rating in the rule detail variable value, take designated action.	[Bank] Moody's rating XX does not meet minimum requirement
256	Bank Fitch Rating Requirement	Bank must meet minimum Fitch rating requirement. Variable Value: specify minimum rating required. Logic: For any active Hedge {PRACAMO.SWACTV = Y}, retrieve the effective Fitch bank rating where Bank Rating Bank ID PBANKRAT.VRBANKID matches Hedge Provider Name PRACAMO.SWPRNAM and Rating Agency ID PBANKRAT.VRRAGENCY is 'FI'. If Financial Strength Rating PBANKRAT.VRFSTRRAT falls below the rating in the rule detail variable value, take designated action	[Bank] Fitch rating XX does not meet minimum requirement

Security

There are two levels of security for Rate Cap Monitoring. These can be found by expanding the Web Portal section in the Task pane at the bottom of the Security Maintenance window.

The first level, Rate Cap Monitoring – Provides access to users to execute and view the Rate Cap Listing. (160580). System Default Security value is Execute.

The second security task assigned is Rate Cap Maintenance. This controls the rights to the Rate Cap Edit page. (160581). Default System values are Read, Write, Delete, Print.

New Files/File Changes

PRACAMO – Rate Cap/Hedge Monitoring File – Maintained via the Rate Cap Monitoring widget available in the Portal. This file was greatly expanded with the additional fields. Fields in blue were added. Fields in italics are keys.

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
LOAN NUMBER	SWLN	5	PACKED	9,00	1	5	Required, Must already exists in database (PMASTR/CML#)
THRESHOLD RATE	SWTR	8	PACKED	14,10	6	13	
DAYS OR MONTHS (D/M)	SWDORM	1	CHAR	1	14	14	
DURATION	SWDURA	2	PACKED	3,00	15	16	
DATE THRESHOLD REACHE	SWDTR	10	DATE	10,00	17	26	
COMMENT	SWCOMNT	4002	VARCHAR	4000	27	4028	
STATUS	SWSTAT	1	CHAR	1	4029	4029	Will be 'Y' or Blank
<i>HEDGE IDENTIFIER</i>	<i>SWHDID</i>	<i>6</i>	<i>PACKED</i>	<i>11,00</i>	<i>4030</i>	<i>40535</i>	<i>Unique Primary Key assigned by Strategy</i>
PROVIDER NAME	SWPRNAM	3	CHAR	3	4036	4038	Foreign Key to PBANKRAT, PBANK
HEDGE TYPE	SWHD TYP	2	CHAR	2	4039	4040	
HEDGE ESCROW REQUIRED	SWHER	1	CHAR	1	4041	4041	

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
HEDGE ESCROW REVALUE	SWHERVF	2	CHAR	2	4042	4043	
FIRST HEDGE ESC REVAL	SWFHERD	10	DATE	10,00	4044	4053	
REQ ESCROW %	SWRQES	8	PACKED	14,10	4054	4061	
EFFECTIVE DATE	SWEFFDT	10	DATE	10,00	4062	4071	
TERMINATION DATE	SWTRMDT	10	DATE	10,00	4072	4081	
TERM_MONTHS	SWTERM	2	PACKED	10,00	4082	4087	
TYPE OF INDEX	SWTOI	2	CHAR	2	4088	4089	
ORIG NOTIONAL AMT	SWONA	9	PACKED	20,02	4090	4100	
NOTIONAL AMT AMRTZ	SWNAMZ	1	CHAR	1	4101	4101	
SUBSEQUENT HEDGE REQ	SWSHR	2	CHAR	2	4102	4103	
SPRINGING CAPS	SWSCAPS	1	CHAR	1	4104	4104	
ACTIVE STATUS	SWACTV	1	CHAR	1	4105	4105	
STATE OF THE HEDGE	SWSOH	2	CHAR	2	4106	4107	
LOAN DOC AGREEMENT RE	SWLDOC	1	CHAR	1	4108	4108	
CREDIT ENHANCED BOND A	SWCEBA	6	PACKED	10,00	4109	4114	

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
SECURITY ASSET ID	SWSAID	6	PACKED	10,00	4115	4120	
CREDIT ENHANCEMENT BON	SWCEBI	6	PACKED	10,00	4121	4126	
DUS BOND IDENTIFIER	SWDBI	6	PACKED	10,00	4127	4132	
REQ MIN HEDGE TERM	SWRMHT	2	PACKED	2,00	4133	4134	
CAP ESCROW PERCENT	SWCEFP	8	PACKED	15,13	4135	4142	
MAX HEDGE STRIKE RATE	SWMAHS	8	PACKED	15,13	4143	4150	
REQ DSCR AT STRIKE RA	SWRDSCR	9	PACKED	17,10	4151	4159	
CREDIT ENHANCMENT PER	SWCEP	8	PACKED	15,13	4160	4167	
FM HEDGE IDENTIFIER	SWFMHDID	38	ZONED	38,00	4168	4205	
SOURCE APPLICAION NAME	SWSAPN	5	CHAR	5	4206	4210	
SYSCRT	SYSCRT	26	DATETIM	26,00	4211	4236	
SYSUPD	SYSUPD	26	DATETIM	26,00	4237	4262	
SYSCRTBY	SYSCRTBY	10	CHAR	10	4263	4272	
SYSUPDBY	SYSUPDBY	10	CHAR	10	4273	4282	
PGMCRTBY	PGMCRTBY	10	CHAR	10	4283	4292	

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
PGMUPDBY	PGMUPDBY	10	CHAR	10	4293	4302	

PBANKRAT – Bank Rating File - A new file containing Bank Ratings from the three primary Rating Agencies for Bank Financial Strength (Moody's, S&P, and Fitch). Information is primarily maintained from the Bank Rating window available from the Rate Cap Monitoring Edit page, using the Update Ratings button.

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
STRATEGY BANK ID	<i>VRBANKID</i>	3	<i>CHAR</i>	3	1	3	<i>Primary Key 1 Foreign Key to PBANK</i>
RATING AGENCY ID	<i>VRRAGENCY</i>	2	<i>CHAR</i>	2	4	5	<i>Primary Key 2</i>
RATING AGENCY BANK ID	VRRABNKID	10	CHAR	10	6	15	
FINANCIAL STRENGTH RATING	VRFSTRAT	2	CHAR	2	16	17	When VRAGENCY = 'FI' use PINFO Table FW When VRAGENCY = 'MO' use PINFO Table FX When VRAGENCY = 'SP' use PINFO Table FY
FINANCIAL SIZE CATEGORY	VRFSIZCAT	2	CHAR	2	18	19	
RATING EFFICIENCY DATE	<i>VRRATEFFDT</i>	10	<i>DATE</i>	10,00	20	29	<i>Primary Key 3</i>
LONG TERM RATING	VRLOTRAT	2	CHAR	2,0	30	31	
SHORT TERM RATING	VRSHTRAT	2	CHAR	2,0	32	33	

Field Description	Field Name	Length	Type	Act Length	Start Position	End Position	Comments
DATE/TIME CREATED	SYSCRT	26	DATETIM	26,00	34	59	
DATE/TIME UPDATED	SYSUPD	26	DATETIM	26,00	60	85	
CREATED BY USER	SYSCRTBY	10	CHAR	10	86	95	
UPDATED BY USER	SYSUPDBY	10	CHAR	10	96	105	
CREATED BY PROGRAM	PGMCRTBY	10	CHAR	10	106	115	
UPDATED BY PROGRAM	PGMUPDBY	10	CHAR	10	116	125	

LH	S&P LONG TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LH	01	AAA	2
LH	02	AA+	2
LH	03	AA	2
LH	04	AA-	2
LH	05	A+	2
LH	06	A	2
LH	07	A-	2
LH	08	BBB+	2
LH	09	BBB	2
LH	10	BBB-	2
LH	11	BB+	2
LH	12	BB	2
LH	13	B	2
LH	14	CCC	2
LH	15	CC	2
LH	16	C	2
LH	17	D	2

LT	S&P SHORT TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LT	01	A-1	2
LT	02	A-2	2
LT	03	A-3	2
LT	04	B	2
LT	05	C	2
LT	06	D	2

LI	MOODY'S LONG TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LI	01	Aaa1	2
LI	02	Aaa2	2
LI	03	Aaa3	2
LI	04	Aa1	2
LI	05	Aa2	2
LI	06	Aa3	2
LI	07	A1	2
LI	08	A2	2
LI	09	A3	2
LI	10	Baa1	2
LI	11	Baa2	2
LI	12	Baa3	2
LI	13	Ba1	2
LI	14	Ba2	2
LI	15	Ba3	2
LI	16	B1	2
LI	17	B2	2

LU	MOODY'S SHORT TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LU	01	P-1	2
LU	02	P-2	2
LU	03	P-3	2
LU	04	NP	2

LI	MOODY'S LONG TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LI	18	B3	2
LI	19	Caa1	2
LI	20	Caa2	2
LI	21	Caa3	2
LI	22	Ca	2
LI	23	C	2

LJ	FITCH LONG TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LJ	01	AAA	2
LJ	02	AA+	2
LJ	03	AA	2
LJ	04	AA-	2
LJ	05	A+	2
LJ	06	A	2
LJ	07	A-	2
LJ	08	BBB+	2
LJ	09	BBB	2
LJ	10	BBB-	2
LJ	11	BB+	2
LJ	12	BB	2
LJ	13	B	2
LJ	14	CCC	2
LJ	15	CC	2
LJ	16	C	2
LJ	17	D	2
LJ	18	NR	2

LV	FITCH SHORT TERM RATING		
Table	Code	Rating (SIFFUL)	Size
LV	01	F1+	2
LV	02	F1	2
LV	03	F2	2
LV	04	F3	2
LV	05	B	2
LV	06	C	2
LV	07	D	2