

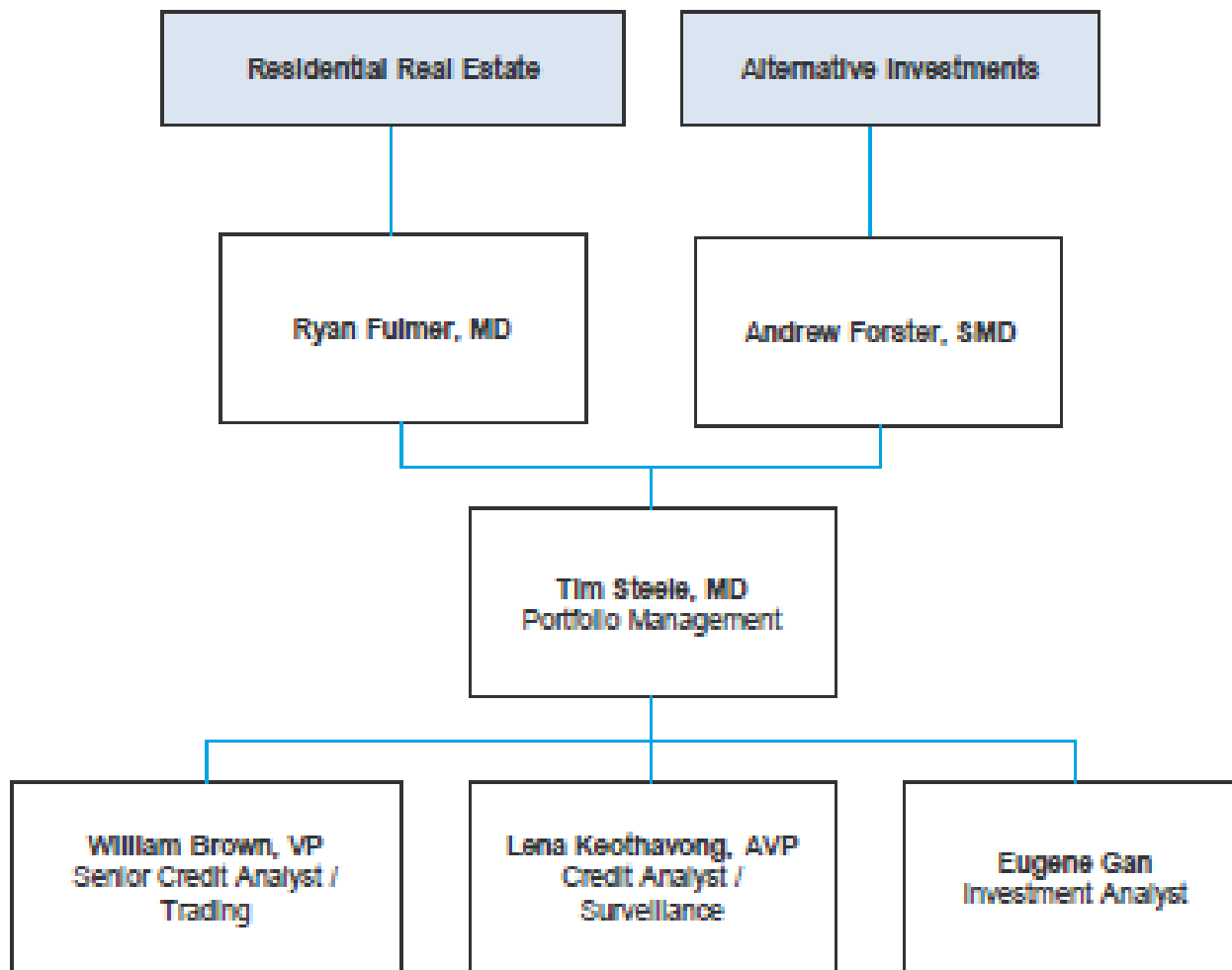
## **Agenda**

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- **Introduction of Team**
- **Structured Desks Trade Approval and Credit Impairment Purchase Identification**
  - **SOX Controls**
  - **Process Flows**
  - **Walkthrough Sample**
- **OTTI Process (RMBS, CMBS and CDO)**
  - **SOX Control**
  - **Process Flow**
  - **Walkthrough Sample**
- **MS CDO Reconciliation**
  - **SOX Control**
  - **Process Flow**
  - **Walkthrough Sample**

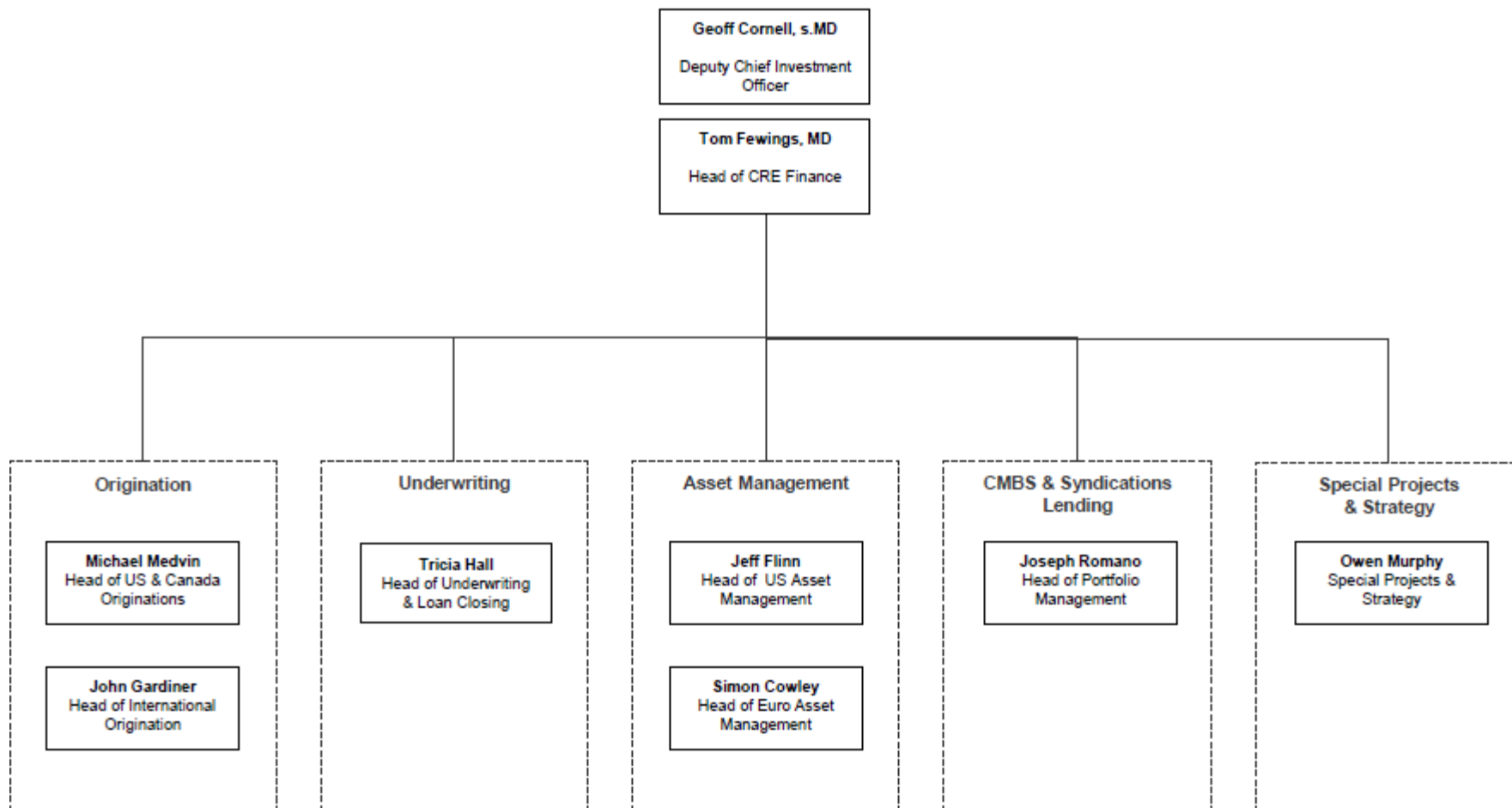
## Introduction of Team - Non-US Residential Real Estate

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## Introduction of Team – Global Commercial Real Estate(CRE) Finance

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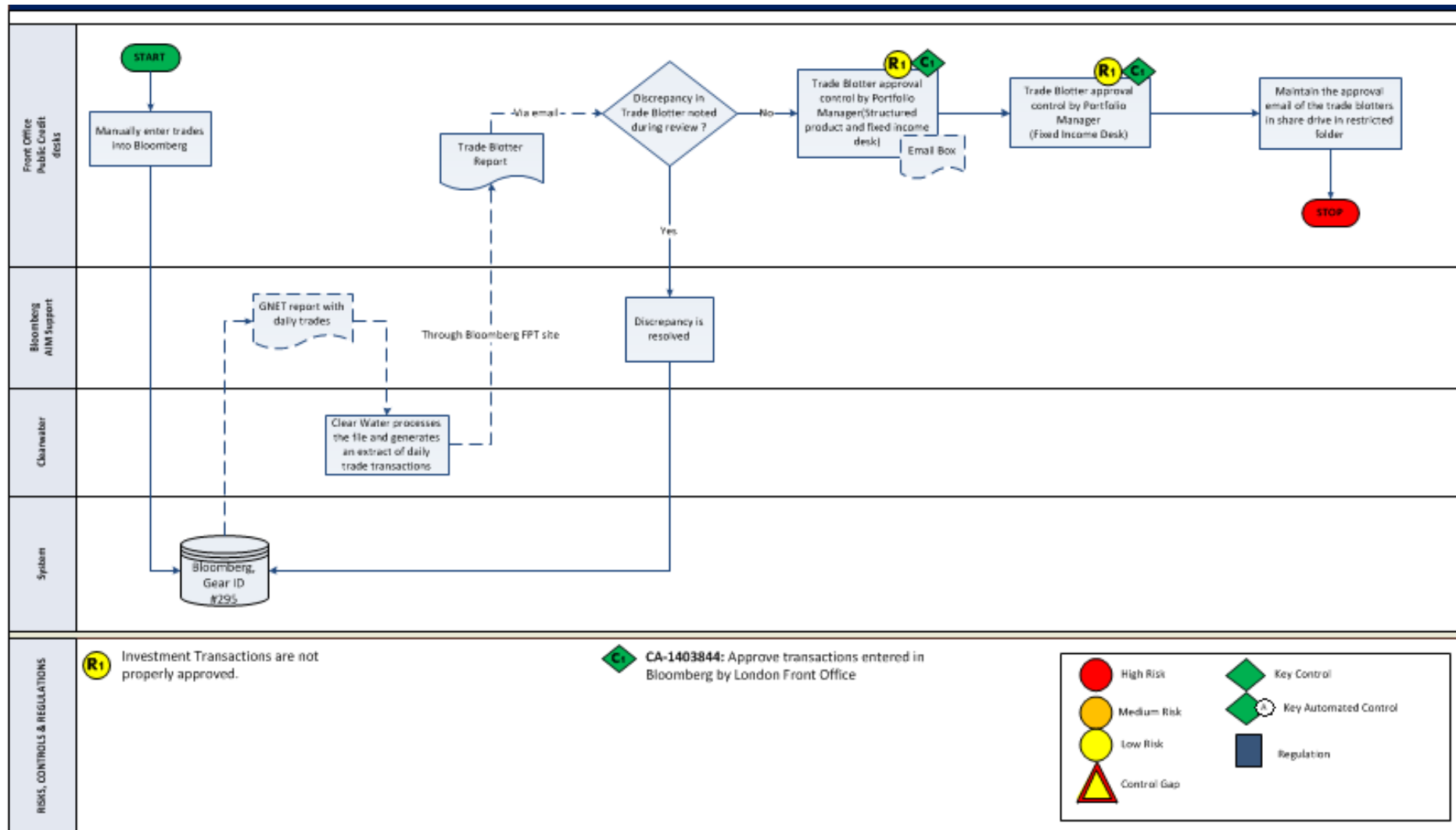
## SOX Control – London Structured Desks Trade Approval and CIPI

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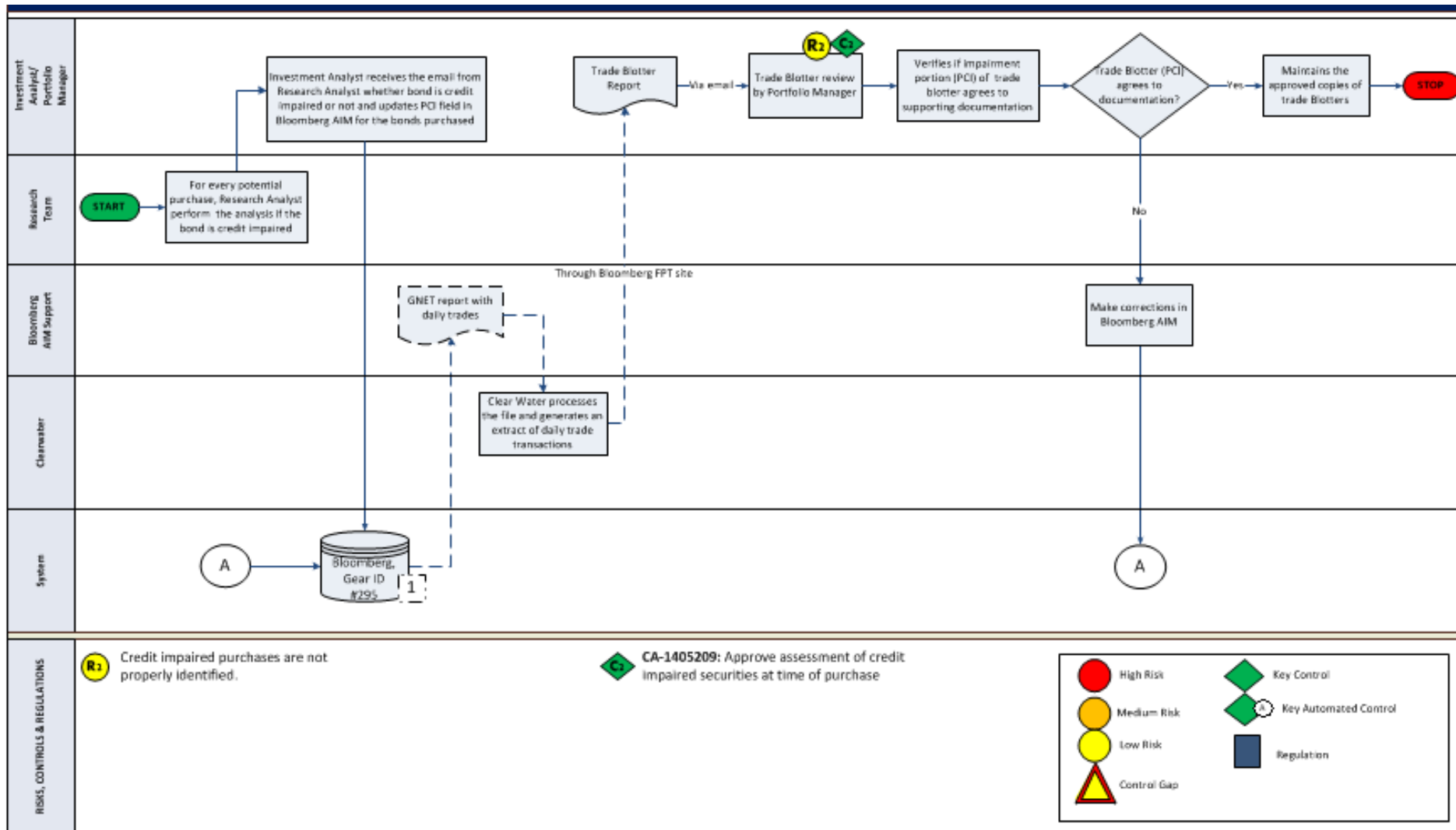
Control CA-1403844 (Risk – Low, Frequency – Daily)	
Description	Additional Description
Daily, London Portfolio Manager only (Structured Products group) and Senior Portfolio Manager and Senior Trader (non structured products group) approve transactions entered in Bloomberg AIM Trade Systems. The authorization of transaction is evidenced through email approval of trade blotters.	
Control CA-1405209 (Risk – Low, Frequency – As needed)	
Description	Additional Description
As needed, the Structured Products desks enter in Bloomberg trading system, at the time of purchase, whether or not a security is credit impaired based on pre-trade review of the credit analysis summary. The approval of whether each trade is designated as purchased credit impaired is evidenced through Portfolio Manager's sign off of daily trade blotters.	

On 04/04/2019, Lena Keothavong verified that the control descriptions are accurate for 2019. 

# Process Flow – London Structured Desks - Trade Approval








# Process Flow – London Structured Desks - CIPI



## Walkthrough Sample – London Trade Approval - CA-1403844






Evidence of approval of trade blotter and email from Clearwater with Trade blotter for approval

From:  Keothavong, Lena <Lena.Keothavong@aig.com> Sent: Fri 2/22/2019 12:17 PM  
To:  London\_SP\_Trade\_Blotter;  LNDProcedures  
Cc:  
Subject: FW: London SP Trades are attached (for 02-21-2019)  
-----  
 Message  LONDON\_SP\_02-21-2019.csv (957 B)

Confirmed

-----Original Message-----

From: [sysauto@aig.com](mailto:sysauto@aig.com) [<mailto:sysauto@aig.com>]  
Sent: 22 February 2019 03:42  
To: InvestmentAPPSUPPORT; London\_SP\_Trade\_Blotter  
Subject: London SP Trades are attached (for 02-21-2019)

From:  sysauto@aig.com Sent: Thu 2/21/2019 10:42 PM  
To:  InvestmentAPPSUPPORT;  London\_SP\_Trade\_Blotter  
Cc:  
Subject: London SP Trades are attached (for 02-21-2019)  
-----  
 Message  LONDON\_SP\_02-21-2019.csv (957 B)





# Walkthrough Sample – London Structured Desks - CIPI - CA-1405209

## Support for Credit Impairment Purchase Identification assessment



Deal write-up

Australian RMBS

Reviewed by:

Prepared by: AO

### Security information

Deal name	Pepper Residential Securities Trust No. 23
Asset class	Australian RMBS
Intex name	PEPR23

### Modelling assumptions - deal level

Scenario	CPR	CDR	LS	D90+	Calls
Base	20.00	0.88	25.00	3.44	Y/Y
Bull	20.00	0.88	25.00	3.44	Y/Y
Stress	12.50	2.19	30.30	6.72	N/N
Tail	5.00	3.50	35.59	10.00	N/N

### Tranche details

Name	A2	Pepper Residential Securities Trust No. 23 A2
ISIN	tbc	
Credit enhancement	8.6%	
BE loss	22.4%	
Rating without LMI		NO LMI


### Modelling results

Price: 100

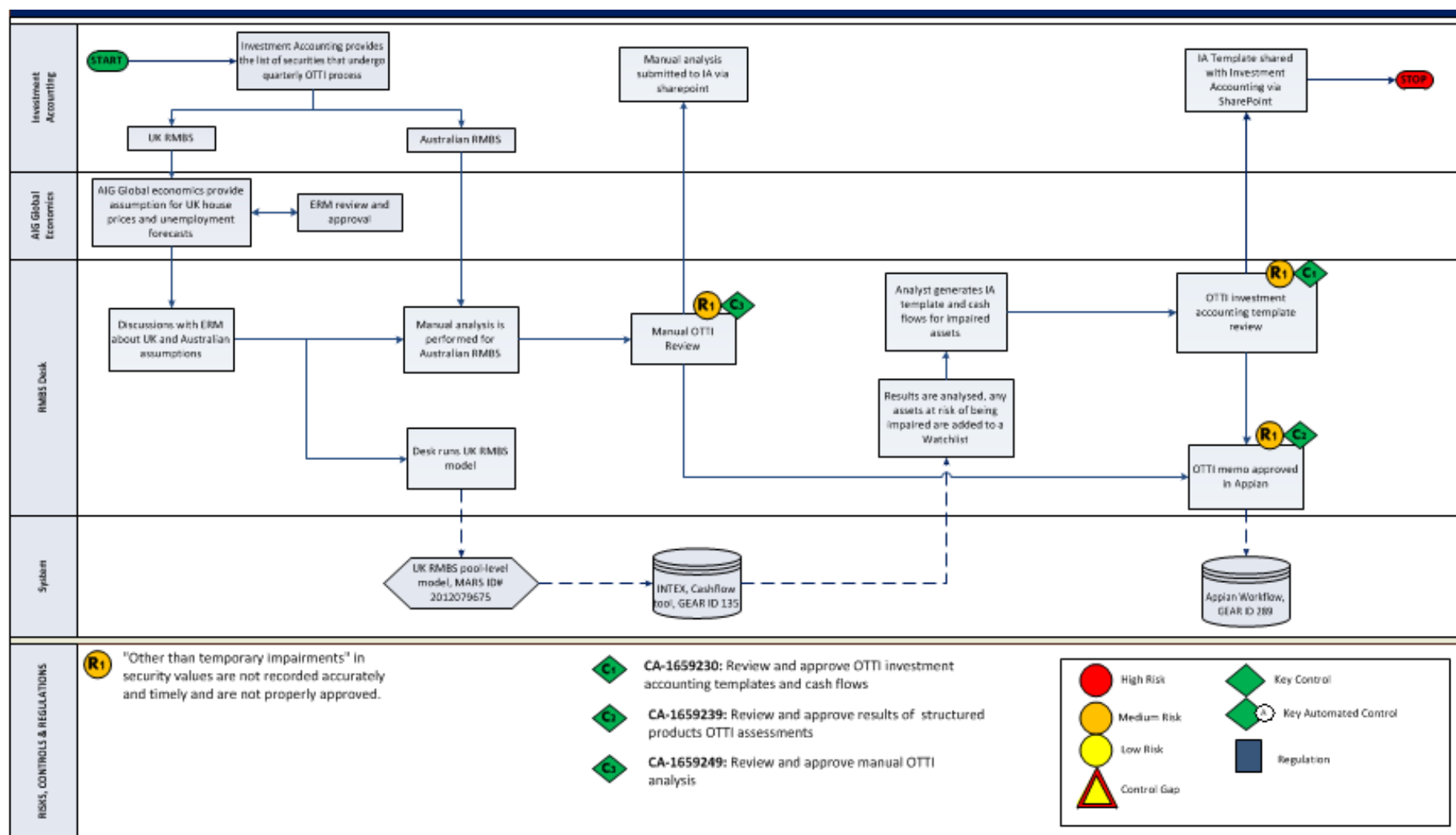
Scenario	Yield	DM	WAL	Writedown	Forward loss	LCM
Base	4.19	220	4.42	-	0.6%	13.39
Tail	4.19	220	18.41	-	11.0%	0.78

## OTTI Process – SOX Controls

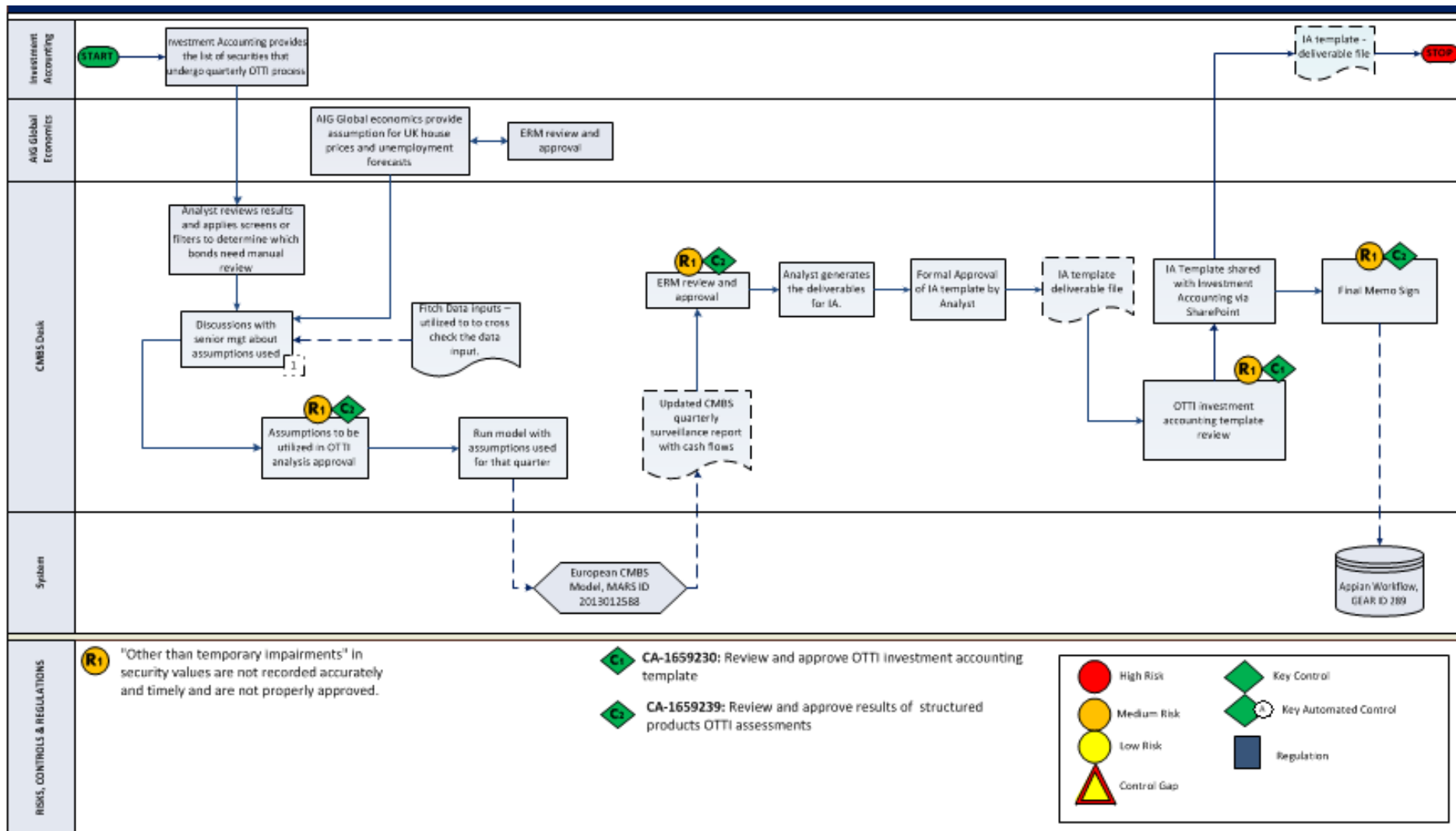
Control CA-1659239 (Risk – Medium, Frequency – Quarterly)	
Description	Additional Description
Quarterly, the Structured Product Desk's Senior Management and AIG Investments Chief Credit Officer review the results of the Desk's OTTI assessments. The results of the assessments including key economic assumptions are summarized in an OTTI memo. Approval of results is evidenced via email or Appian workflow.	
Control CA-1659230 (Risk – Medium, Frequency – Quarterly)	
Description	Additional Description
Quarterly, the Head of each Structured Products desk reviews and approves its OTTI Investment Accounting template that contains recovery values and related cash flow files prior to submission to Investment Accounting. Evidence of review and approval is documented via email or Appian approval of the investment Accounting template.	
Control CA-1659249 (Risk – Medium, Frequency – Quarterly)	
Description	Additional Description
Quarterly, Senior Management of the Structured Products desks perform a secondary review of the manual OTTI analysis prepared by its analysts. Management review and approval is evidenced through email or Appian workflow tool approval of the OTTI analysis file.	

On 04/04/2019, William Brown (Non-US RMBS), Sam Roberts (European CMBS), Lena Keothavong (CDO) verified that the control descriptions are accurate for 2019. 

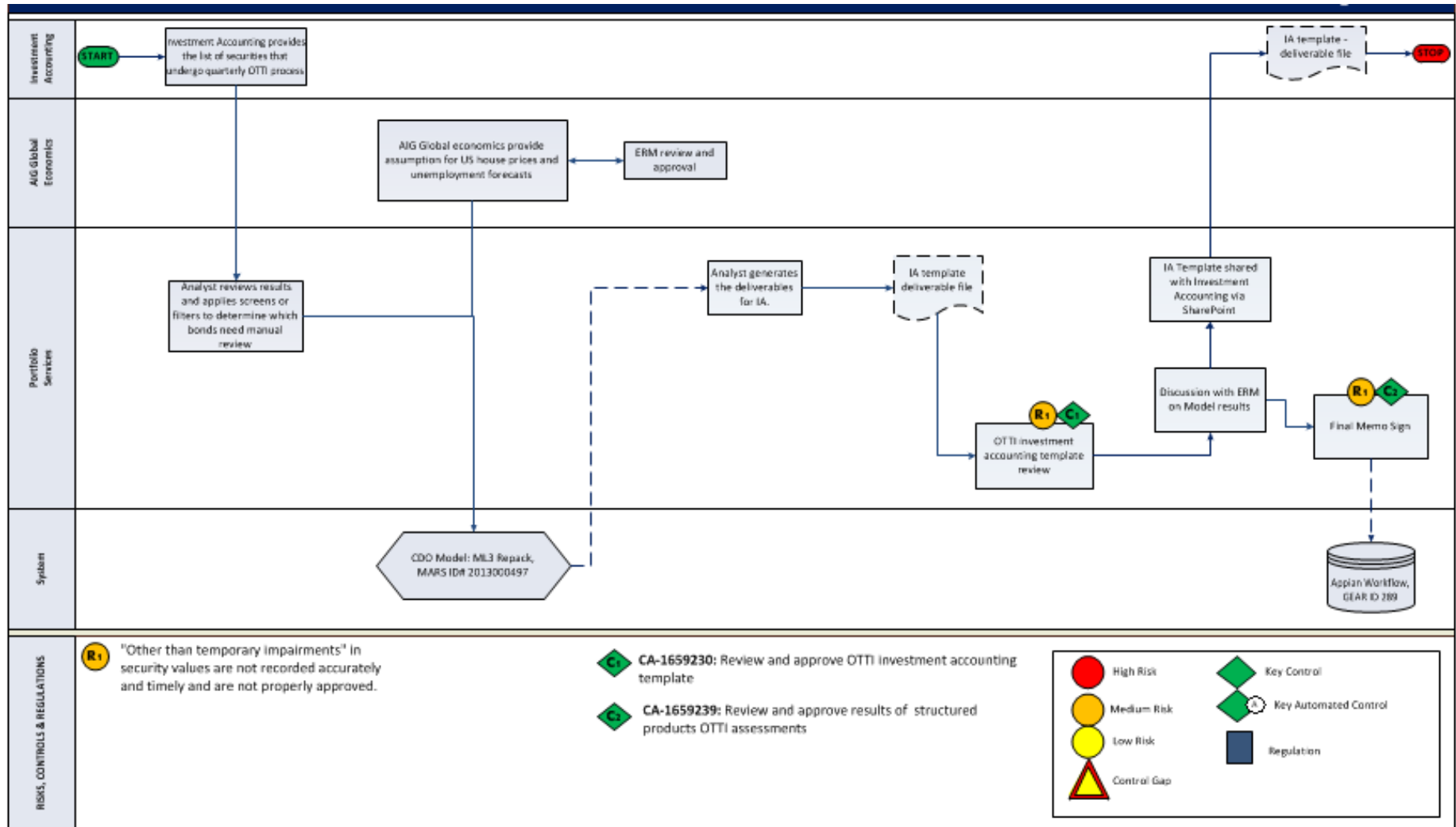
## Process Flow - Non-US RMBS OTTI



# Process Flow - European CMBS OTTI



# Process Flow - CDO OTTI



## Walkthrough Sample - Non-US RMBS OTTI

### Approval email from Head of desk for Q1 2019 Investment Accounting GAAP & STAT Templates

From: ☐ Steele, Tim  
To: ☐ Levy, Jasmin  
Cc: ☐ Brown, William  
Subject: Q1 2019 Non-US RMBS OTTI

Sent: Wed 2/27/2019 8:41 AM

As the Portfolio Manager of the non-US RMBS deals, I have reviewed the composition of the RMBS portfolio contained in the Q1 2019 foreign OTTI files provided by Investment Accounting and I have not identified any specific securities where I have the positive intent to sell at this time"

[Tim Steele](#)  
[AIG Investments](#)  
Managing Director – Structured Products  
AIG Asset Management (Europe) Limited

From: ☐ Brown, William  
To: ☐ Levy, Jasmin  
Cc:  
Subject: RE: Q1 2019 NonUS RMBS OTTI Sign off

Sent: Wed 2/27/2019 9:04 AM

Approved, thanks

[Will Brown](#)  
[AIG](#)  
58 Fenchurch Street,  
London, EC3M 4AB

**From:** Levy, Jasmin  
**Sent:** 27 February 2019 13:35  
**To:** Brown, William  
**Subject:** Q1 2019 NonUS RMBS OTTI Sign off

Hi Will,




Please can you review and sign off on the following OTTI Investment Accounting Templates.

Thank you,  
Jasmin


[Jasmin Levy](#)  
[AIG Investments](#)  
AIG Asset Management (Europe) Limited

## Walkthrough Sample - Non-US RMBS OTTI

### Approval email from Head of desk for Q1 2019 Investment Accounting Manual Template

From:  Steele, Tim <Tim.Steele@aig.com> Sent: Mon 4/1/2019 1:22 PM  
To:  Brown, William  
Cc:  Levy, Jasmin  
Subject: RE: Q1 2019 NonUS RMBS OTTI Sign off - Manual analysis

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 Message  Manual analysis - Australian RMBS 19Q1.xlsx (2 MB)

Approved.

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**From:** Brown, William  
**Sent:** Monday, April 01, 2019 5:39 PM  
**To:** Steele, Tim  
**Cc:** Levy, Jasmin  
**Subject:** FW: Q1 2019 NonUS RMBS OTTI Sign off - Manual analysis  
**Importance:** High

I approve the OTTI manual analysis for Q1 19, attached.

Tim, could you also approve, with the file attached to the email.

Thanks

Will Brown  
AIG  
58 Fenchurch Street,  
London, EC3M 4AB

# Walkthrough Sample – Non-US RMBS OTTI

## Example of Investment Accounting Template Q1 2019 – Non-US RMBS GAAP – extract

1Q2019_OTTIVal02062019_GAAP_NonUS_RMBS - Microsoft Excel																					
File Home Insert Page Layout Formulas Data Review View Acrobat																					
A2		Non Credit Impaired																			
	A	B	C	D	AE	AF	AG	BN	BO	BP	BQ	BR	BS	BT	BU	BV	Bw	BX	CQ	CS	CT
		Record	Accounting								LCL			USD							
		Control	System	Security Desc	Collateral Major	Collateral Minor	AIG Collateral Type	Orig Par Value L	Book Value LCL GAAP	Market Value LCL GAAP	d Gain/Loss	Market Value USD STAT	Book Value USD STAT	d Gain/Loss	Market Value LCL STAT	Book Value LCL STAT	d Gain/Loss	Acquisiti on Trade Date	Current Quarter Comm nt/Ra	Prev QTR Front Office Desk	Sec+Po rt Cr Imprmnt Flg
2	Non Credit Impaired																				
3	11287	13157055	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25000000	25698575	698575	25698575	26173818	-475243	25698575	26173818	-475243	40876		Not Credit Impaired	
4	11288	13157056	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25000000	25698575	698575	25698575	25696410	2164.97	25698575	25696410	2164.97	40876		Not Credit Impaired	
5	11289	13157057	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25000000	25698575	698575	25698575	26173818	-475243	25698575	26173818	-475243	40876		Not Credit Impaired	
6	11290	13157058	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			80000000	80000000	82235440	2235440	82235440	80000000	2235440	82235440	80000000	2235440	40876		Not Credit Impaired	
7	11291	13157059	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25000000	25698575	698575	25698575	26377126	-678551	25698575	26377126	-678551	40876		Not Credit Impaired	
8	11292	13157060	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25000000	25698575	698575	25698575	26146062	-447487	25698575	26146062	-447487	40876		Not Credit Impaired	
9	11293	13157061	34988MA	FOSSE MASTER ISSUER PL RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			45000000	45000000	46257435	1257435	46257435	45000000	1257435	46257435	45000000	1257435	40876		Not Credit Impaired	
10	18146	13170182	69913BA	Paragon Mortgages PLC SEI RMBS NON-AGENI	RMBS OTHEI UK B2L MORTGAI			19800000	7560235	7405020	-155215	7405020	7560235	-155215	7405020	7560235	-155215	42752		Not Credit Impaired	
11	18543	13170680	Q7385DA	Pepper Residential Securitie	RMBS NON-AGENI RMBS OTHEI AUS NC MORTGA			3000000	2248291	2235480	-12811	1624076	1633384	-9307.3	2235480	2248291	-12811	43034		Not Credit Impaired	
12	18544	13170681	Q7385DA	Pepper Residential Securitie	RMBS NON-AGENI RMBS OTHEI AUS NC MORTGA			3000000	2257015	2235480	-21535	1624076	1751331	-127255	2235480	2257015	-21535	43203		Not Credit Impaired	
13	20601	13174754	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			2000000	2000000	2030434	30434	2030434	1998128	32306.1	2030434	1998128	32306.1	40830		Not Credit Impaired	
14	20602	13174755	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			14000000	14000000	14213038	213038	14213038	13986895	226143	14213038	13986895	226143	40830		Not Credit Impaired	
15	20603	13174756	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			30000000	30000000	30456510	456510	30456510	30000000	456510	30456510	30000000	456510	40830		Not Credit Impaired	
16	20604	13174757	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			56000000	56000000	56852152	852152	56852152	56000000	852152	56852152	56000000	852152	40830		Not Credit Impaired	
17	20605	13174758	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			8000000	8000000	8121736	121736	8121736	8000000	121736	8121736	8000000	121736	40830		Not Credit Impaired	
18	20606	13174759	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			90000000	90000000	91369530	1369530	91369530	90000000	1369530	91369530	90000000	1369530	40830		Not Credit Impaired	
19	20607	13174760	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25380425	25380425	380425	25380425	25089583	-208958	25380425	25589383	-208958	40830		Not Credit Impaired	
20	20608	13174761	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			30000000	30000000	30456510	456510	30456510	30633460	-176950	30456510	30633460	-176950	40830		Not Credit Impaired	
21	20609	13174762	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25380425	25380425	380425	25380425	25527883	-147458	25380425	25527883	-147458	40830		Not Credit Impaired	
22	20610	13174763	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25380425	25380425	380425	25380425	25162079	218346	25380425	25162079	218346	40830		Not Credit Impaired	
23	20611	13174764	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50760850	760850	50760850	50000000	760850	50760850	50000000	760850	40830		Not Credit Impaired	
24	20612	13174765	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			25000000	25380425	25380425	380425	25380425	25215047	165378	25380425	25215047	165378	40830		Not Credit Impaired	
25	20613	13174766	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50760850	760850	50760850	51055767	-234917	50760850	51055767	-234917	40830		Not Credit Impaired	
26	20614	13174767	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50760850	760850	50760850	51055767	-234917	50760850	51055767	-234917	40830		Not Credit Impaired	
27	20615	13174768	82846GA	SILVERSTONE MASTER ISS RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			20000000	20000000	20304340	304340	20304340	20000000	304340	20304340	20000000	304340	40830		Not Credit Impaired	
28	21551	13176364	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			18500000	18500000	18854767	354767	18854767	19143265	-288498	18854767	19143265	-288498	40896		Not Credit Impaired	
29	21552	13176365	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	51738553	-779723	50958830	51738553	-779723	40896		Not Credit Impaired	
30	21553	13176366	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	50000000	958830	50958830	50000000	958830	40896		Not Credit Impaired	
31	21554	13176367	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	50000000	958830	50958830	50000000	958830	40896		Not Credit Impaired	
32	21555	13176368	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	50000000	958830	50958830	50000000	958830	40896		Not Credit Impaired	
33	21556	13176369	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	50000000	958830	50958830	50000000	958830	40896		Not Credit Impaired	
34	21557	13176370	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			55000000	5605471	5605471	105471	5605471	5595208	10263.7	5605471	5595208	10263.7	40896		Not Credit Impaired	
35	21558	13176371	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			30000000	30000000	3057530	57529.8	3057530	3081510	-23981	3057530	3081510	-23981	40896		Not Credit Impaired	
36	21559	13176372	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			1000000	1000000	1019177	19176.6	1019177	1017130	1866.13	1019177	1017130	1866.13	40896		Not Credit Impaired	
37	21560	13176373	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	50865524	93306.4	50958830	50865524	93306.4	40896		Not Credit Impaired	
38	21561	13176374	869667A	Swan Funding SER 2011-1A RMBS NON-AGENI	RMBS PRIME UK PRIME MORTG			50000000	50000000	50958830	958830	50958830	51358505	-339675	50958830	51358505	-339675	40896		Not Credit Impaired	



# Walkthrough Sample – Non-US RMBS OTTI

## Example of Investment Accounting Template Q1 2019 – Non-US RMBS STAT – extract

1Q2019_OTTIEVa102062019_STAT_NonUS_RMBS - Microsoft Excel																								
File Home Insert Page Layout Formulas Data Review View Acrobat																								
A2 Non Credit Impaired																								
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	CQ	CR	CS	CT	CU				
		Record Control	Acting System Primary ID	Security Desc	GL Group	Accounting portfolio ID	Accounting portfolio	Portfolio	Lot Number	Quantity	Orig Par Value USD	Book Value USD GAAP	Market Value USD GAAP	USD GAAP Unrealized Gain/Loss	MVvsBV pct	Current Quarter Comment /Rank	Prev QTR Front Office Desk	Prev QTR Front Office Desk2	GAAP Comment	Period STAT Scoping	IsNt			
1	Batch Seq #																							
2	Non Credit Impaired																							
3	11287	13157055	34988MAX FOSSE MA		0	129197	AIG-LEX-10 AIG-LEX-10		182718966	25000000	25000000	25000000	25698575	698575	102.7943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
4	11288	13157056	34988MAX FOSSE MA		0	129197	AIG-LEX-10 AIG-LEX-10		191016764	25000000	25000000	25000000	25698575	698575	102.7943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
5	11289	13157057	34988MAX FOSSE MA		0	129197	AIG-LEX-10 AIG-LEX-10		182718994	25000000	25000000	25000000	25698575	698575	102.7943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
6	11291	13157059	34988MAX FOSSE MA		0	132196	AIG-NUF-1 AIG-NUF-1		190563819	25000000	25000000	25000000	25698575	698575	102.7943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
7	11292	13157060	34988MAX FOSSE MA		0	132196	AIG-NUF-1 AIG-NUF-1		190563818	25000000	25000000	25000000	25698575	698575	102.7943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
8	20601	13174754	82846GAEC SILVERSTO		0	129659	AIG-VALIC- AIG-VALIC-		182728531	20000000	20000000	20000000	2030434	30434	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
9	20602	13174755	82846GAEC SILVERSTO		0	129659	AIG-VALIC- AIG-VALIC-		182728514	14000000	14000000	14000000	14213038	213038	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
10	20607	13174760	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563826	25000000	25000000	25000000	25380425	380425	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
11	20608	13174761	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563831	30000000	30000000	30000000	30456510	456510	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
12	20609	13174762	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563828	25000000	25000000	25000000	25380425	380425	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
13	20610	13174763	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563829	25000000	25000000	25000000	25380425	380425	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
14	20612	13174765	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563830	25000000	25000000	25000000	25380425	380425	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
15	20613	13174766	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563825	50000000	50000000	50000000	50760850	760850	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
16	20614	13174767	82846GAEC SILVERSTO		0	132196	AIG-NUF-1 AIG-NUF-1		190563832	50000000	50000000	50000000	50760850	760850	101.5217		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
17	21551	13176364	869667AA3 Swan Func		0	129300	AIG-NUF-1 AIG-NUF-1		182722143	18500000	18500000	18500000	18854767	354767.1	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
18	21552	13176365	869667AA3 Swan Func		0	129300	AIG-NUF-1 AIG-NUF-1		182722376	50000000	50000000	50000000	50958830	958830	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
19	21557	13176370	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		210910250	55000000	55000000	55000000	5605471.3	105471.3	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
20	21558	13176371	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		191016796	30000000	30000000	30000000	3057529.8	57529.8	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
21	21559	13176372	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		210910248	10000000	10000000	10000000	1019176.6	19176.6	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
22	21560	13176373	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		210910242	50000000	50000000	50000000	50958830	958830	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
23	21561	13176374	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		191016829	50000000	50000000	50000000	50958830	958830	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
24	21562	13176375	869667AA3 Swan Func		0	129197	AIG-LEX-10 AIG-LEX-10		210910244	17000000	17000000	17000000	17326002	326002.2	101.91766		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
25	25083	13182831	Q73898AB4 Pepper Re		0	128450	AIG-AIRCO AIG-AIRCO		181847261	30000000	30000000	2127450	2169287.3	41837.3	101.96655		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
26	25086	13182834	Q73898AC4 Pepper Re		0	128450	AIG-AIRCO AIG-AIRCO		181847270	50000000	50000000	3545750	3629369	83619.04	102.35829		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
27	25088	13182836	Q7416TAFE The Super		0	128450	AIG-AIRCO AIG-AIRCO		181847260	60000000	60000000	4246200	4392038.4	145838.39	103.43456		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
28	25090	13182838	Q7503TAH La Trobe F		0	128450	AIG-AIRCO AIG-AIRCO		181847264	16500000	16500000	1166220	1203250.3	37030.26	103.17524		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
29	25092	13182840	Q7503TAE La Trobe F		0	128450	AIG-AIRCO AIG-AIRCO		181847258	21000000	21000000	1546125	1542922.2	-3202.81	99.792849		Out of Scoj Not Credit Impaired		RMBS NON Out of Scope -					
30	25094	13182842	Q750AYAC Resimac S		0	128450	AIG-AIRCO AIG-AIRCO		181899572	10500000	10500000	739830	759054.2	19224.2	102.59846		Out of Scoj Not Credit Impaired		RMBS NON Out of Scope -					
31	25216	13182972	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182769718	20560000	20560000	27702100	27000321	-701778.4	97.466696		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
32	25217	13182973	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182770232	15000000	15000000	16292673	19698678	3406005.4	120.90514		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
33	25218	13182974	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182770067	11000000	11000000	15541036	14445697	-1095339	92.951957		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
34	25219	13182975	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182770150	25000000	25000000	31035284	32831130	1795846.1	105.78647		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
35	25220	13182976	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182770435	25000000	25000000	31376531	32831130	1454599.4	104.63595		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					
36	25221	13182977	BCC2AQQN Towd Poin		0	128691	AIG-AGL-2 AIG-AGL-2		182770108	25000000	25000000	31164033	32831130	1667095.9	105.34943		RMBS NON Not Credit Impaired		RMBS NON RMBS NON-AG					

# Walkthrough Sample – Non-US RMBS OTTI

## Example of Investment Accounting Template Q1 2019 – Australian(Manual) RMBS – extract

Manual analysis - Australian RMBS 19Q1 (2) [Protected View] - Microsoft Excel

File

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Protected View This file originated as an e-mail attachment and might be unsafe. Click for more details. Enable Editing

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Bond comparison

settle date  
datetime  
cash flow date  
Run status  
hp Stress  
ue Stress  
ir Stress

LCM: > OTTI classification

0.0 Critical

1.0 Serious

1.5 Concerned

2.0 Not Concerned

Name	Market Value (USDm)	Current rating	CE	AIG base case results	OTTI analysis	Tail case results	Breakeven											
		S&P	Moody's	Fitch	Current tranche credit enhancement	Forward collateral loss (% of CB)	Principal writedown (% of CB)	Simple Loss Coverage Multiple (= CE / losses)	OTTI classification	Forward collateral loss (% of CB)	Simple Loss Coverage Multiple (= CE / losses)	Principal writedown (% of CB)	CDR multiple	Forward collateral loss (% of CB)	BE CDR	CDR assumption	LS assumption	
AUS Prime																		
APLLO 2017-2 B	2.5	AA	NR	NR	3%	0.28%	0%	11.7	Not Concerned	3.0%	1.1	0%	2.6%	7%	3.0	1.2	38.6	
APLLO 2017-2 C	1.8	A	NR	NR	2%	0.28%	0%	6.0	Not Concerned	3.0%	0.6	0%	2.0%	6%	2.3	1.2	38.6	
APLLO 2018-1 C	2.1	A	NR	NR	1%	0.23%	0%	5.9	Not Concerned	3.0%	0.4	0%	1.7%	5%	1.9	1.1	40.0	
NRMB 2018-1 B	5.0	NR	Aa1	NR	3%	0.18%	0%	16.0	Not Concerned	2.2%	1.3	0%	3.1%	6%	2.5	0.8	36.6	
NRMB 2018-1 C	2.0	NR	A1	NR	2%	0.18%	0%	10.2	Not Concerned	2.2%	0.8	0%	2.7%	5%	2.1	0.8	36.6	
NRMB 2018-1 D	0.9	NR	Baa1	NR	1%	0.18%	0%	5.2	Not Concerned	2.2%	0.4	0%	2.3%	5%	1.8	0.8	36.6	
NRMB 2018-2 B	7.2	AA	NR	NR	2%	0.17%	0%	12.6	Not Concerned	2.2%	0.0	0%	2.5%	5%	2.0	0.8	36.6	
NRMB 2018-2 C	3.6	A	NR	NR	1%	0.17%	0%	6.9	Not Concerned	2.2%	0.0	0%	2.2%	5%	1.7	0.8	36.6	
PEPAU 2017-2 A1L	5.7	AAA	NR	NR	30%	0.61%	0%	49.0	Not Concerned	8.0%	3.7	0%	3.1%	20%	5.7	1.9	54.2	
PEPAU 2017-2 A2	7.1	AAA	NR	NR	12%	0.61%	0%	19.8	Not Concerned	8.0%	1.5	0%	3.1%	20%	5.7	1.9	54.2	
PEPAU 2017-3 A1L	2.8	AAA	NR	NR	26%	0.87%	0%	29.3	Not Concerned	8.1%	3.1	0%	6.0%	30%	10.9	1.8	55.7	
PEPAU 2017-3 A2	3.5	AAA	NR	NR	10%	0.87%	0%	11.8	Not Concerned	8.1%	1.3	0%	3.7%	23%	6.6	1.8	55.7	
PEPAU 2018-2X A2	1.4	AAA	NR	NR	9%	0.99%	0%	8.8	Not Concerned	8.2%	1.1	0%	3.4%	22%	6.2	1.8	55.6	
PEPAU 2018-2X B	6.4	AA	NR	NR	6%	0.99%	0%	6.2	Not Concerned	8.2%	0.7	0%	3.0%	20%	5.5	1.8	55.6	
SMHL 2017-1 B	8.6	AAA	NR	NR	4%	0.17%	0%	23.5	Not Concerned	1.6%	2.5	0%	12.2%	13%	9.3	0.8	31.2	
RESI 2018-1X B	4.2	AA	NR	NR	4%	0.15%	0%	28.3	Not Concerned	1.5%	3.0	0%	10.7%	13%	3.8	0.4	50.6	
RESI 2018-1X C	2.3	A	NR	NR	3%	0.15%	0%	21.5	Not Concerned	1.5%	2.2	0%	9.3%	11%	3.3	0.4	50.6	
TRTN 2014-1 A	4.5	AAA	NR	AAA	16%	0.09%	0%	172.9	Not Concerned	0.6%	28.0	0%	77.6%	18%	27.5	0.4	25.0	
TRTN 2017-2 AB	2.3	AAA	NR	AAA	4%	0.10%	0%	39.8	Not Concerned	1.5%	2.8	0%	16.0%	17%	5.5	0.3	50.2	
TRTN 2017-2 B	1.4	AA	NR	NR	2%	0.10%	0%	16.6	Not Concerned	1.5%	1.2	0%	13.8%	16%	4.8	0.3	50.2	

Base

## Walkthrough Sample – Non-US RMBS OTTI

### Email to Investment Accounting communicating the deliverables of Q1 2019 – Non-US RMBS OTTI Analysis

From:  Levy, Jasmin Sent: Wed 2/27/2019 1:12 PM  
To:  McIntyre, Steve@InvestACCT;  Silva, Rosa@InvestAcct  
Cc:  Fan, Hui;  Destro, Anthony;  McGloin, Kenneth;  Kogan, David S;  Petitto, James M;  Forster, Andrew;  Fewings, Tom;  RMBS\_investments;  Horsford, Colin;  Kang, Samuel;  Yu, Connie  
Subject: Q1 2019 RMBS NON US OTTI Submission

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 Message  Q1 2019 Non-US RMBS OTTI (18 KB)

Good afternoon,

We have reviewed the Foreign RMBS securities identified by Investment Accounting for possible impairment and do not have any new impaired securities in accordance with asset class specific credit policies and procedures which are approved by AIG Credit Risk Management.

Please find our 1Q 2019 file titled 2019Q1\_OTTI NonUS RMBS, with a time/date stamp of 2/27/2019 10:10 AM at the following link:

<https://share.connect.aig/teams/InvFixedIncome/Summary%20Reports/Forms/AllItems.aspx?RootFolder=%2Fteams%2FInvFixedIncome%2FSummary%20Reports%2FOTTI%2FOTTI%20Analysis%2FQ1%202019%20%2D%20Structured%20Analysis&FolderCTID=0x0120004255556918E20B4FA774FFE9D60A9C66&View=%7BD703CED%2D7F06%2D47D2%2D988D%2DB286ECF0E1FD%7D&InitialTabId=Ribbon%2ERead&VisibilityContext=WSSTabPersistence>

Please also see attached our Portfolio Manager's declaration.

Kind Regards,  
Jasmin

Jasmin Levy  
AIG Investments  
AIG Asset Management (Europe) Limited

# Walkthrough Sample – Non-US RMBS OTTI

## Appian approval for Non-US RMBS OTTI analysis memo

### General Document Approval

#### General Information

Request ID : 9886

Subject : Process Memo: Europe - Q1/2019 for Non-US RMBS Europe

Submission Date : 2/28/2019 1:11 PM EST

Final Approval Due Date : 3/27/2019 11:30 PM EDT

Initiator : Jasmin Levy

Second Initiator :

Documents Approved : 19Q1\_OTTI - International Resi\_v3\_version1

#### Initiator Comments

Comments	Comments made by	Comments made on
For review and approval.	Jasmin Levy	2/28/2019 1:18 PM EST

#### Reviewers Comments

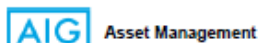
Reviewer level	Reviewer Name	Reviewed Documents Name	Comments	Decision	Assigned On	Completed On
1	Andrew Forster	19Q1_OTTI - International Resi_v3_version1	Approved.	Completed Review	2/28/2019 1:19 PM EST	2/28/2019 1:23 PM EST
2	Tim Parsons	19Q1_OTTI - International Resi_v3_version1		Completed Review	2/28/2019 1:23 PM EST	3/5/2019 10:12 AM EST
2	Tim Parsons	19Q1_OTTI - International Resi_v3_version1		Completed Review	3/6/2019 4:49 AM EST	3/6/2019 4:56 AM EST
2	Kenneth McGloin	19Q1_OTTI - International Resi_v3_version1	Review complete	Completed Review	3/6/2019 4:49 AM EST	3/6/2019 7:49 AM EST
3	Andrew Payne	19Q1_OTTI - International Resi_v3_version1	Review complete.	Completed Review	3/6/2019 7:49 AM EST	3/8/2019 11:50 AM EST
2	Kenneth McGloin	19Q1_OTTI - International Resi_v3_version1	Review time expired and was returned to initiator.	Skipped	2/28/2019 1:23 PM EST	

#### Approvers Comments

Approval level	Approver Name	Approved Documents Name	Comments	Decision	Assigned On	Completed On
1	Andrew Forster	19Q1_OTTI - International Resi_v3_version1	Approved.	Approved	3/8/2019 11:50 AM EST	3/8/2019 11:52 AM EST
2	Tim Parsons	19Q1_OTTI - International Resi_v3_version1	-	Approved	3/8/2019 11:52 AM EST	3/8/2019 11:56 AM EST
2	Kenneth McGloin	19Q1_OTTI - International Resi_v3_version1	Approved.	Approved	3/8/2019 11:52 AM EST	3/8/2019 1:10 PM EST
3	Andrew Payne	19Q1_OTTI - International Resi_v3_version1	Approved.	Approved	3/8/2019 1:10 PM EST	3/8/2019 4:50 PM EST
4	Geoffrey Cornell	19Q1_OTTI - International Resi_v3_version1	Approved	Approved	3/8/2019 4:50 PM EST	3/9/2019 11:29 AM EST

# Walkthrough Sample – Non-US RMBS OTTI

## Approved Non-US RMBS OTTI analysis memo – Excerpt



### Memorandum

TO: Andrew Payne, Tim Parsons, Ken McGloin, Geoffrey Cornell, Ryan Fulmer  
 FROM: International Residential Real Estate Team  
 DATE: February 2019

Residential Real Estate Asset Tower  
 European and Australian Residential Real Estate Risk (non-construction/development)

#### Results summary:

- OTTI: We have reviewed the RMBS securities identified by Investment Accounting for possible impairment and do not have any new impaired securities this quarter.
- ALLL: No allowances for loan and lease losses this quarter.

#### Holdings summary and modelling approaches

#	Process	Collateral Type	# ISINs	Book Value (GAAP) (\$m)	Modelling approach
1.	OTTI	UK Prime RMBS	8	1,821	UK RMBS model
		UK Non-Conforming (NCF)	41	250	UK RMBS model
		UK Buy-to-Let (BTL)	12	213	UK RMBS model
		Irish Prime RMBS	7	43	UK RMBS model
2.	OTTI	Australian RMBS	52	212	Expert assumptions + Intex
3.	OTTI	UK Student Loans	2	188	Expert assumptions + Intex
4.	ALLL	Irish NPL (Java)	1	57	Expert assumptions
5.	ALLL	Spanish REO	2	384	Expert assumptions
		Total	125	3,266	

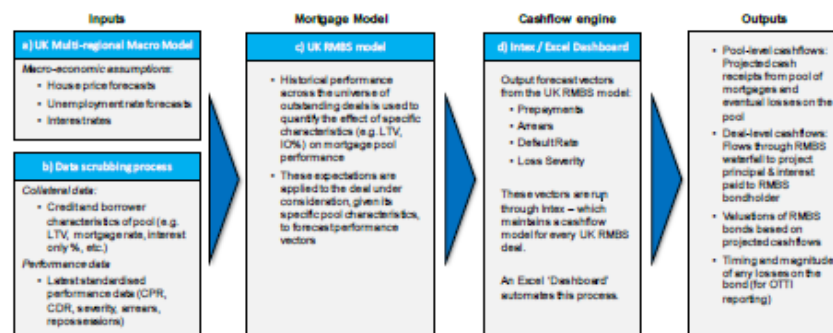
- Manual analysis is required for the following:
  - The Australian RMBS deals are modelled using an expert approach, whereby assumptions are based on historical performance of the assets with penalties for higher risk sectors, e.g. investor loans, apartments and regional concentrations. This is described further in section 2.
  - UK student loans securitisations are modelled using expert assumptions for earnings growth, RPI, Bank of England base rate and inactivity rates. The model is a deterministic translation of these assumptions to deal cash flows; it was prepared by the Government Actuary's Department and UK Government Investments, and has been validated by AIG Model Validation.
  - Irish NPL deals are modelled using expert assumptions based on past performance for mortgage pay-rates and foreclosure rates. Assumptions are run in the Irish residential mortgage model, which has been validated by AIG Model Validation.
  - Spanish REO deals are modelled using expert assumptions based on property valuations and recent performance for sales timelines and prices. Assumptions are run in the Spanish REO model.

### I. OTTI Process

#### 1. UK and Irish RMBS

##### a) Modelling Approach

- The diagram below summarises the approach used to model UK RMBS.
- The document "OTTI Process Manual – International RMBS" provides further detail of the steps involved in the process including SOX controls.



##### i. UK Multi-regional Macro Model:

- The macro-economic assumptions are the only user-defined inputs to the model. These are specified below:

Assumptions	Definition	Regional	Base case
House prices (HPI)	Nationwide Index	Nationwide regions (UK split into 13 regions)	Produced by AGE using UK Multi-regional Macro Model
Unemployment	ONS headline rate	Government Office Regions (UK split into 12 regions)	Produced by AGE using UK Multi-regional Macro Model
Interest rates	GBP LIBOR 3mo	n/a	Forward curve

- AIG Global Economics (AGE) produce base case forecasts for HPI and unemployment using the UK Multi-Regional Macro Model
  - AGE are the model owners and manage the process to generate forecasts; these are discussed and agreed with ERM and the process is documented in a memo entitled "UK Forecast Memo".
  - AGE also produce stress scenarios which are shown and discussed in section 0: Stress Sensitivities.

## Walkthrough Sample – European CMBS OTTI

### Approval of European CMBS OTTI Investment Accounting templates

From: ☐ Fewings, Tom <Tom.Fewings@aig.com>  
To: ☐ Roberts, Sam  
Cc: ☐ Levy, Jasmin; ☐ Cowley, Simon  
Subject: Re: Q1 2019 OTTI

Sent: Sat 2/23/2019 6:42 AM

Confirmed

On 22 Feb 2019, at 10:57, Roberts, Sam <[Sam.Roberts@aig.com](mailto:Sam.Roberts@aig.com)> wrote:

Dear Tom

Please can you confirm the below for this quarters OTTI.

*As Portfolio Manager of the Non-US CMBS deals I have reviewed the composition of the CMBS portfolio contained in the Q1 2019 foreign OTTI files provided by Investment Accounting and I have not identified any securities where I have the positive intent to sell at this time. While all portfolios may be subject to periodic rebalancing, no specific securities have been identified for planned sale at this time."*

Kind regards,

Sam

[Sam Roberts](#)  
[AIG Investments](#)  
Commercial Real Estate Finance



# Walkthrough Sample – European CMBS OTTI

## Example of Investment Accounting Template Q1 2019 – European CMBS GAAP – extract

1Q2019_OTTIVal02062019_GAAP CMBS EURO [Read-Only] - Microsoft Excel																								
NON CREDIT IMPAIRED SECURITIES																								
Batch Seq #	Record Control	Acting System Primary ID	Security Desc	GL Group	Accounti ngsyspo rtfolio	Accounti ngsyspo rtfolio	Accounti ngsyspo rtfolio	Portfoli o	Lot Number	Quantit	Orig Par Value U	Book Value USD GA	Market Value USD GAAP	USD Gain/Loss	MVvsBV pct.	RE Rtg Owner BL	Prev QTR Front Office Desk2	Sec+Port Cr Imprmnt Flg GAAP	Sec+Port Cr Imprmnt Flg GAAP	Is Navig ant	Is EITF 99-20			
1	25734	13183853	G1819GA CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	128721	AIG-AGL	AIG-AGL	182763370	9207000	9207000	7644637.3	10726657	3082020	140.316	Asset Ma	Not Credit Impaired								
2	25735	13183854	G1819GA CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	129300	AIG-NUF	AIG-NUF	217983802	3983000	3983000	3854810.1	4640412.1	785602	120.38	Asset Ma	Not Credit Impaired								
3	26045	13184391	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	191045197	103548.38	123053	106720.29	123820.55	17100.3	116.023	ERM - AIC	Not Credit Impaired								
4	26046	13184392	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	217983881	110247.52	131014	122591.1	131831.21	9240.11	107.537	ERM - AIC	Not Credit Impaired								
5	26047	13184393	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	217983889	25611254	30435450	25964098	30625293	4661195	117.952	ERM - AIC	Not Credit Impaired								
6	26048	13184394	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	217983896	364818.03	433536	405662.35	436240.21	30577.9	107.538	ERM - AIC	Not Credit Impaired								
7	26049	13184395	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	190601885	236546.54	281103	243353.87	282856.4	39502.5	116.233	ERM - AIC	Not Credit Impaired								
8	26050	13184396	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	182722052	37192.36	44198	40217.26	44473.69	4256.43	110.584	ERM - AIC	Not Credit Impaired								
9	26051	13184397	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	182722073	84961.46	100965	91789.77	101594.78	9805.01	110.682	ERM - AIC	Not Credit Impaired								
10	26052	13184398	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	190601883	5727993.7	6806932	5563080.6	6849390.7	1286310	123.122	ERM - AIC	Not Credit Impaired								
11	26053	13184399	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129039	AIG-AH P	AIG-AH P	182768110	58063099	69000000	60402605	69430392	9027786	114.946	ERM - AIC	Not Credit Impaired								
12	26054	13184400	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129687	AIG-VALI	AIG-VALI	182735456	13982267	16616000	18794758	16719643	2075114	88.9591	ERM - AIC	Not Credit Impaired								
13	26055	13184401	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129687	AIG-VALI	AIG-VALI	215474819	16829884	20000000	17492041	20124751	2632710	115.051	ERM - AIC	Not Credit Impaired								
14	26056	13184402	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	191045196	2507441.5	2979749	2439899.5	2998335.4	558436	122.888	ERM - AIC	Not Credit Impaired								
15	26057	13184403	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	220041865	21037355	25000000	22489404	25155939	2666535	111.857	ERM - AIC	Not Credit Impaired								
16	26058	13184404	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	220041851	4207471	5000000	4497880.8	5031187.8	533307	111.857	ERM - AIC	Not Credit Impaired								
17	26059	13184405	G816BYA SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	182770087	6121028.7	7274000	6777017.7	7319372	542354	108.003	ERM - AIC	Not Credit Impaired								
18	26060	13184406	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128867	AIG-AGL	AIG-AGL	220041872	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired								
19	26061	13184407	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129687	AIG-VALI	AIG-VALI	215474837	30000000	30000000	30083263	35807785	5724521	119.029	ERM - AIC	Not Credit Impaired								
20	26062	13184408	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129565	AIG-AGL	AIG-AGL	182724994	10000000	10000000	10433208	11935928	1502720	114.403	ERM - AIC	Not Credit Impaired								
21	26063	13184409	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129478	AIG-AGL	AIG-AGL	218555798	10000000	10000000	9981246.1	11935928	1954682	119.584	ERM - AIC	Not Credit Impaired								
22	26064	13184410	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041884	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired								
23	26065	13184411	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041891	10000000	10000000	9981221.3	11935928	1954707	119.584	ERM - AIC	Not Credit Impaired								
24	26066	13184412	G816BYA SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041897	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired								
25	26107	13184470	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	128867	AIG-AGL	AIG-AGL	182763989	9900000	9900000	12859826	12575439	-284387	97.7886	Asset Ma	Not Credit Impaired								
26	26108	13184471	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	129687	AIG-VALI	AIG-VALI	215474832	33400000	33400000	39584064	42426229	2842165	107.18	Asset Ma	Not Credit Impaired								
27	26109	13184472	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	129478	AIG-AGL	AIG-AGL	218555806	16700000	16700000	19791982	21213114	1421133	107.18	Asset Ma	Not Credit Impaired								
28	26110	13184473	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	129300	AIG-NUF	AIG-NUF	217983818	16700000	16700000	19788367	21213114	1424747	107.2	Asset Ma	Not Credit Impaired								
29	26111	13184474	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	128721	AIG-AGL	AIG-AGL	182763351	3300000	3300000	5982157.5	4191813	-1790344	70.0719	Asset Ma	Not Credit Impaired								
30	26112	13184475	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	128721	AIG-AGL	AIG-AGL	182763362	7358000	7358000	10210881	9346472.8	-864409	91.5344	Asset Ma	Not Credit Impaired								
31	26113	13184476	G8738KA TELEREAL SECURITISATION TELSEC 0 09/10/31	0	128721	AIG-AGL	AIG-AGL	182763373	13300000	13300000	15603873	16004377	-864409	91.5344	Asset Ma	Not Credit Impaired								

# Walkthrough Sample – European CMBS OTTI

## Example of Investment Accounting Template Q1 2019 – European CMBS STAT – extract

1Q2019_OTTIVal02062019_STAT CMBS EURO [Read-Only] - Microsoft Excel																			
NON CREDIT IMPAIRED SECURITIES																			
Batch	Record	Acting	GL	Accounting	Accounting	Portfolio	Lot	Quantit	Orig Par	Book	Market	USD	GAAP	USD	GAAP	USD	GAAP	USD	GAAP
Seq #	Control	System	Group	rtfolio	rtfolio	rtfolio	Number		Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
		Primary							USD	GAAP	GAAP	ss	pct.	MVvsBV	RE Rtg	Prev QTR	Front		
		ID														Office	Desk2		GAAP Comment
		Security Desc																	
3	NON CREDIT IMPAIRED SECURITIES																		
4	25734	13183853	G1819GA	CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	128721	AIG-AGL	AIG-AGL	182763370	9207000	9207000	7644637	10726657	3082020	140.316	Asset Ma	Not Credit Impaired	CMBS NON-AGENCY	
5	25735	13183854	G1819GA	CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	129300	AIG-NUF	AIG-NUF	217983802	3983000	3983000	3854810	4640412.1	785602	120.38	Asset Ma	Not Credit Impaired	CMBS NON-AGENCY	
6	25736	13183855	G1819GA	CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	128691	AIG-AGL	AIG-AGL	218840913	25000000	24999362	29126363	4127001	116.508	Asset Ma	Not Credit Impaired	Out of Scope - Trading		
7	25737	13183856	G1819GA	CANARY WHARF FINANCE PLC SER 23-APR-07-II	0	129478	AIG-USL	AIG-USL	218556103	10000000	10000000	8817473	11217647	2400174	127.221	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
8	25828	13184068	G40880A	GREENE KING FINANCE PLC GNKLN 0 06/15/31	0	128450	AIG-AIRO	AIG-AIRO	215317165	5537455	9500000	6471247	6573011.5	101764	101.573	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
9	25829	13184069	G40880A	GREENE KING FINANCE PLC GNKLN 0 06/15/31	0	128691	AIG-AGL	AIG-AGL	218840940	5537455	9500000	6394007	6573011.5	179005	102.8	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
10	25834	13184074	G4158GA	GREENE KING FINANCE PLC GNKLN 0 09/15/21	0	128450	AIG-AIRO	AIG-AIRO	215317176	3651520	16000000	4492762	4695493.7	202731	104.512	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
11	25835	13184075	G4158GA	GREENE KING FINANCE PLC GNKLN 0 03/15/36	0	129478	AIG-USL	AIG-USL	218556215	2950000	2950000	3315304	3157218.8	-158086	95.2316	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
12	25836	13184076	G4158GA	GREENE KING FINANCE PLC GNKLN 0 03/15/36	0	129687	AIG-VALH	AIG-VALH	215474879	20000000	20000000	6695.98	2140487.3	2133791	31966.8	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
13	25872	13184117	G48831A	MARSTONS ISSUER PLC MARSLN 0 07/15/20	0	128450	AIG-AIRO	AIG-AIRO	215317190	3247496.2	25998689	4017184	4180693	163509	104.07	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
14	25873	13184118	G48831A	MARSTONS ISSUER PLC MARSLN 0 07/15/20	0	128450	AIG-AIRO	AIG-AIRO	215317205	163.78	1311.16	202.59	210.84	8.25	104.072	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
15	25944	13184215	G6160KA	MITCHELLS & BUTLERS FINA MABLN 0 12/15/30	0	129478	AIG-USL	AIG-USL	218555871	2648928	4100000	2416336	2420865.9	4529.49	100.187	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
16	25945	13184216	G6160KA	MITCHELLS & BUTLERS FINA MABLN 0 09/15/34	0	129478	AIG-USL	AIG-USL	218555887	90000000	90000000	9173803	9332828	159025	101.733	Asset Ma	Not Credit Impaired	Out of Scope - Trading	
17	26047	13184393	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	217983889	25611254	30435450	25964098	30625293	4661195	117.952	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
18	26052	13184398	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	190601883	5727993.7	6806932	5563081	6849390.7	1286310	123.122	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
19	26053	13184399	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129039	AIG-AH	AIG-AH	182768110	58063099	69000000	60402605	69430392	9027786	114.946	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
20	26054	13184400	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129687	AIG-VALH	AIG-VALH	182735456	13982267	16616000	18794758	16719643	-2075114	88.9591	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
21	26055	13184401	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129687	AIG-VALH	AIG-VALH	215474819	16829884	20000000	17492041	20124751	2632710	115.051	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
22	26056	13184402	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	129300	AIG-NUF	AIG-NUF	191045196	2507441.5	2979749	2439899	2998335.4	558436	122.888	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
23	26057	13184403	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	220041865	21037355	25000000	22489404	25155939	2666535	111.857	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
24	26058	13184404	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	220041851	4207471	5000000	4497881	5031187.8	533307	111.857	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
25	26059	13184405	G8168YA	SILVERBACK FINANCE SLVBCK 3.1261 02/25/37	0	128691	AIG-AGL	AIG-AGL	182770087	6121028.7	7274000	6777018	7319372	542354	108.003	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
26	26060	13184406	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128867	AIG-AGL	AIG-AGL	220041872	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
27	26061	13184407	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129687	AIG-VALH	AIG-VALH	215474837	30000000	30000000	30083263	35807785	5724521	119.029	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
28	26062	13184408	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129565	AIG-USL	AIG-USL	182724994	10000000	10000000	10433208	11935928	1502720	114.403	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
29	26063	13184409	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	129478	AIG-USL	AIG-USL	218555798	10000000	10000000	9981226	11935928	1954682	119.584	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
30	26064	13184410	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041884	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
31	26065	13184411	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041891	10000000	10000000	9981221	11935928	1954707	119.584	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	
32	26066	13184412	G8168YA	SILVERBACK FINANCE SLVBCK 3.7529 05/25/39	0	128691	AIG-AGL	AIG-AGL	220041897	30000000	30000000	29943664	35807785	5864121	119.584	ERM - AIC	Not Credit Impaired	CMBS NON-AGENCY	



## Walkthrough Sample – European CMBS OTTI

### Email to Investment Accounting communicating the deliverables of Q1 2019 – European CMBS - Extracts

From: Roberts, Sam <Sam.Roberts@aig.com> Sent: Thu 2/28/2019 6:08 AM  
To: Levy, Jasmin; McIntyre, Steve@InvestACCT; Sapia, Joseph Hidden on 30-12-2018, 17:47:06 SCTASK1964718; Silva, Rosa@InvestAcct  
Cc: Fan, Hui; Destro, Anthony; McGloin, Kenneth; Kogan, David S; Petitto, James M; Forster, Andrew; Fewings, Tom; CMBS\_investments; Horsford, Colin; Kang, Samuel; Yu, Connie  
Subject: Q1 2019 CMBS NON US OTTI Submission

Message Re: Q1 2019 OTTI (21 KB)

We have reviewed the Foreign CMBS securities identified by Investment Accounting for possible impairment and do not have any new impaired securities in accordance with asset class specific credit policies and procedures which are approved by AIG Credit Risk Management.

Please find our 1Q 2019 files in the link below, with a time/date stamp of 2/28/2019 2:41 AM at the following link:

[https://share.connect.aig/teams/InvFixedIncome/Summary%20Reports/OTTI/OTTI%20Analysis/Q1%202019%20-%20Structured%20Analysis/1Q2019\\_OTTI\\_CML\\_CMBS.zip](https://share.connect.aig/teams/InvFixedIncome/Summary%20Reports/OTTI/OTTI%20Analysis/Q1%202019%20-%20Structured%20Analysis/1Q2019_OTTI_CML_CMBS.zip)

Please also see attached our Portfolio Manager's declaration.

Kind regards,

Sam

Sam Roberts  
AIG Investments  
Commercial Real Estate Finance

# Walkthrough Sample – European CMBS OTTI

## Appian approval for European CMBS OTTI memo

### General Document Approval

#### General Information

Request ID : 9826

Subject : Process Memo: Europe - Q1/2019 for CMBS and CML Europe

Submission Date : 2/25/2019 5:37 AM EST

Final Approval Due Date : 3/29/2019 11:30 PM EDT

Initiator : Sam Roberts

Second Initiator : Jasmin Levy

Documents Approved : Q1 2019 OTTI European CMBS Memo FINALv1\_version1; Q1 2019 ALLL European CML Portfolio FINALv2\_version1

#### Initiator Comments

Comments	Comments made by	Comments made on
For review and approval	Sam Roberts	2/25/2019 5:43 AM EST

#### Reviewers Comments

Reviewer level	Reviewer Name	Reviewed Documents Name	Comments	Decision	Assigned On	Completed On
1	Tom Fewings	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	approved	Completed Review	2/28/2019 3:37 AM EST	2/28/2019 3:53 AM EST
2	Tim Parsons	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	.	Completed Review	2/28/2019 3:54 AM EST	2/28/2019 7:10 AM EST
3	Andrew Payne	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Review complete.	Completed Review	2/28/2019 7:10 AM EST	2/28/2019 3:30 PM EST
1	Tom Fewings	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Review time expired and was returned to initiator.	Skipped	2/25/2019 5:43 AM EST	

#### Approver's Comments

Approval level	Approver Name	Approved Documents Name	Comments	Decision	Assigned On	Completed On
1	Tom Fewings	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Approved.	Approved	2/28/2019 3:30 PM EST	3/4/2019 8:35 AM EST
2	Kenneth McGloin	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Approved	Approved	3/4/2019 8:35 AM EST	3/6/2019 7:50 AM EST
3	Geoffrey Cornell	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Approved	Approved	3/6/2019 7:50 AM EST	3/6/2019 3:20 PM EST
3	Andrew Payne	Q1 2019 OTTI European CMBS Memo FINALv1_version1, Q1 2019 ALLL European CML Portfolio FINALv2_version1	Approved.	Approved	3/6/2019 7:50 AM EST	3/8/2019 11:50 AM EST

# Walkthrough Sample – European CMBS OTTI

## Approved European CMBS OTTI memo



Asset Management

### Memorandum

TO: Andrew Payne, Ken McGloin, Tim Parsons, Tom Fewings & Geoff Cornell  
 FROM: Sam Roberts & Simon Cowley  
 CC: European CMBS/CML Team  
 DATE: February 2019  
 RE: Q1 2019 - European Pub ABS & CMBS OTTI

#### Pub ABS Portfolio ('ABS Other')

There are no impairments on our Pub ABS portfolio for this quarter's analysis; all deals in our portfolio are categorized as 'Not Concerned'.

#### European CMBS Portfolio

There are no impairments on our CMBS portfolio for this quarter's analysis; all deals in our portfolio are categorized as 'Not Concerned'.

#### Pub ABS & CMBS Portfolio changes since last quarter.

AIG bought \$126.8m of AAA and AA rated bonds in Morgan Stanley's Salus Eloc 33 – an origination of a £354 million 5 year (3+1+1), floating rate interest-only mortgage to Brookfield in connection with their pre-owned property known as City-Point, a 36-story, 709,000 sq ft class B office tower located in the City of London, adjacent to Moorgate station. The AAA and AA class of notes, represent £391 psf or 46% LTV based on the current valuation of £600 million (£845 psf).

#### Summary of positions

Following the 2018 review, this Memorandum has simplified information into the table below. Deal descriptions are in the appendix. Our quarterly OTTI analysis covers 8 deals, none of which are currently in default and are all still current in interest payments. Summarized as follows, the in-scope portfolio book value currently stands at \$722m.

#### Canary Wharf Finance II Plc

Canary Wharf Finance II Plc has had its class B, B3, C2 and D2 notes upgraded by Moody's by one notch to Aa3, Aa3, A3 and Baa3 respectively. The ratings action reflects the continued deleveraging of the transaction from scheduled amortization, the high proportion of offices let on a long term basis to highly rated tenants, the stable high occupancy of the two multi-let offices and the steady improvement in Canary Wharf as a viable long term office location.

The transaction benefits from strong medium term cash flows from Barclays Bank Plc, The Secretary of State for Community and Local Government, Morgan Stanley and Citibank; tenants who respectively occupy four of the assets and account for over 60% of in place rent, having leases with expiry dates that range from 2026 to 2032. The occupancy rates of the two multi-let assets, One Canada Square and 40 Bank Street, have been high and currently stand at 93%.

#### Marston's

Amid challenging market conditions, Marston's PLC—the ultimate parent, which consolidates Marston's Pubs—reported relatively robust results, with like-for-like sales up 0.6% in the financial year ending Sept. 22, 2018. This compares favorably with Greene King, who reported like-for-like declines of 1.7% over a similar period, but is behind M&B at 1.2%. This modest sales growth reflects strong like-for-like performance in the group's wet-led estate—which benefitted from the World Cup and warm summer weather—offset by declines in the group's more food-led pubs. Lastly, their leased segment reported like-for-like sales growth of 2.0%.

That said, Marston's Pubs' margins over the same period remained under pressure amid cost inflation, stemming from increases in the National Living Wage, higher food and drinks costs, and business rates. As such, overall profitability has weakened. Despite these headwinds, S&P only expect a moderate contraction in margins in each of the next two years as Marston's Pubs continues to benefit from longer-term contracts with suppliers, somewhat delaying the impact of this cost inflation. S&P also give some credit to the company's ability to pass a portion of these cost increases through to customers, supported by modest (about 2%) inflation in the U.K. and Marston's Pubs' recent focus on improving the quality of its estate and driving a more food-led offering. They also expect a similar, albeit slower, contraction in margins in the group's tenanted segment, as landlords are likely to seek mechanisms of passing some of the inflation in these costs onto their suppliers, including their landlords. Therefore S&P have downgraded the A and B class notes by one notch to BB+ and BB respectively.

Table 1: Summary of CMBS OTTI Analysis

CMBS Name	Tranche/Class	MTL Exposure (\$mm)	Term LTV	Rate Subordination (\$mm)	Rating MOB	Rating SAT	Rating Risk	Weight	Start Date	Maturity	SPCR (in %)	Underlying Loan	Description	Current and Classification
<b>PRR ABS</b>														
Greene King	A1	\$ 4,402,000	49.7%	\$ 1,037,000,000	BB	BBB+	BBB+	L+125bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Greene King	A1	\$ 12,884,000	88.7%	\$ 1,270,000,000	BB	BBB	BBB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Greene King	B2	\$ 5,521,000	51.5%	\$ -	BB	BBB	BBB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Marston's Pubs	B2	\$ 2,016,000	51.0%	\$ 1,270,000,000	BB	BBB	BBB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Marston's Pubs	C2	\$ 9,173,000	47.0%	\$ 1,100,000,000	BB	BBB	BBB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Marston's Pubs	A1	\$ 8,972,000	45.1%	\$ 700,140,000	BB	BBB	BBB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
<b>Sub Total</b>		<b>\$ 36,968,000</b>		<b>\$ 5,107,040,000</b>										
<b>CMBS</b>														
Canary Wharf II	B1	\$ 3,016,746	22.7%	\$ 349,662,000	Aa3	A+	A+	L+25bps	\$ -	2007	2.5b	Single Loan	Large Office/Industrial office portfolio - 95.2% occupied	Not Concerned
Canary Wharf II	C2	\$ 35,000,000	41.1%	\$ 120,000,000	A3	A	A	L+100bps	\$ -	2007	2.5b	Single Loan	Large Office/Industrial office portfolio - 95.2% occupied	Not Concerned
Canary Wharf II	D2	\$ 35,000,000	44.0%	\$ -	Baa3	A-	A-	L+25bps	\$ -	2007	2.5b	Single Loan	Large Office/Industrial office portfolio - 95.2% occupied	Not Concerned
Shenandoah	A1	\$ 155,028,000	49.0%	\$ 470,000,000	BB	BB	BB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Shenandoah	A2	\$ 155,028,000	51.1%	\$ -	BB	BB	BB	L+100bps	\$ -	2008	1.2b (1.1b)	Corporate Securitization	UK Pub Exposure - 1,420 assets, net North of £600 (imagined a covenant at £100m)	Not Concerned
Marston's Pubs	B1	\$ 124,010,700	55.5%	\$ 100,241,000	BBB	Baa2	Baa2	L+50bps	\$ -	2001	1.4b	Single Loan	UK portfolio of 87 offices & specialist industrial exchanges. Recent valuation increases conservatively not attributed to IAC analysis	Not Concerned
Marston's Pubs	Fixed	\$ 25,251,000	36.0%	\$ -	Baa2	BB	BB	L+100bps	\$ -	2001	1.4b	Single Loan	UK portfolio of 87 offices & specialist industrial exchanges. Recent valuation increases conservatively not attributed to IAC analysis	Not Concerned
City-Point II	A	\$ 71,000,000	25.2%	\$ 107,000,000	BB	Aa3	Aa3	L+100bps	\$ -	2001	2.5b	Single Loan	City of London office - 700,000 sq ft multi let	Not Concerned
City-Point II	B	\$ 55,228,218	45.2%	\$ 71,000,000	BB	Aa3	Aa3	L+200bps	\$ -	2001	2.5b	Single Loan	City of London office - 700,000 sq ft multi let	Not Concerned
<b>Sub Total</b>		<b>\$ 685,727,462</b>		<b>\$ 1,341,860,000</b>										
<b>Total</b>		<b>\$ 722,695,462</b>		<b>\$ 6,448,900,000</b>										

Where relevant, our analysis reflects the updated PRR<sup>1</sup> forecasts following the UK's vote to leave the EU. The breakdown of our current portfolio can be seen in the charts below and are weighted based on deal exposure:

#### Portfolio breakdown by Geography/Sector/Vintage




Geography	Q1 2019	Q4 2018	Sector	Q1 2019	Q4 2018	Vintage	Q1 2019	Q4 2018
Germany & Netherlands	0%	0%	Pubs	5%	7%	2004	8%	0%
Spain	44%	53%	Office	29%	14%	2005	6.50%	1%
US	50%	47%	Retail	44%	52%	2006	16%	15%
<b>Total</b>	<b>100%</b>	<b>100%</b>	Multi-family	8%	0%	2007	8%	0%
			Logistics	8%	0%	2015	66%	0%
			Light Industrial	8%	0%	2016	10%	22%
			Office/Telephone Exchange	22%	20%	<b>Total</b>	<b>100%</b>	<b>100%</b>
			<b>Total</b>	<b>100%</b>	<b>100%</b>			

<sup>1</sup> PRR: part of the Co-Star Group, a leading US & European Real Estate Research and Data company









## Walkthrough Sample – CDO OTTI

### Approval email from Head of Structured product for CDO

From:  Steele, Tim <Tim.Steele@aig.com> Sent: Thu 3/7/2019 12:32 PM  
To:  Keothavong, Lena  
Cc:  Brown, William  
Subject: RE: CDO OTTI Deliverables Q1 2019 - Please Approve

Approved.

From:  Keothavong, Lena <Lena.Keothavong@aig.com> Sent: Thu 3/7/2019 12:30 PM  
To:  Steele, Tim  
Cc:  Brown, William;  Keothavong, Lena  
Subject: CDO OTTI Deliverables Q1 2019 - Please Approve

 Message:  19Q1 OTTI ABS CDO - templates and CFs.xlsx (2 MB)

Tim,

Please see attached the CDO OTTI Q1 2019 Investment Accounting template deliverable file for approval.

Following our call with ERM too, we confirm there are no new credit impaired assets this quarter.

Thanks,  
Lena

[Lena Keothavong](#)  
[AIG Investments](#)  
AIG Asset Management (Europe) Limited

# Walkthrough Sample – CDO OTTI

## Example IA template of CDO OTTI analysis - GAAP

19Q1 OTTI ABS CDO - templates and CFs - Microsoft Excel

FileHomeInsertPage LayoutFormulasDataReviewViewAcrobat

A2

# Walkthrough Sample – CDO OTTI

## Example IA template of CDO OTTI analysis - STAT

19Q1 OTTI ABS CDO - templates and CFs - Microsoft Excel																
File Home Insert Page Layout Formulas Data Review View Acrobat																
A2 Key																
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Key	Batch Seq #	Record Control #	Accounting System Primary ID	Security Desc	Quantity	Orig Par Value USD	Book Value USD GAAP	Market Value USD GAAP	Recovery Val % of Cur Par Struct	Undisc Sum of Principal Recvd	Undisc Sum of Interest Recvd	Undisc Sum of Cash Flow	Undisc Sum of Cash Flow % of Cur Par	Current Quarter Comment/Rank	Prev QTR Front Office Desk	
3	2371	13133984	05473WAN6	Ayresome CDO Ltd SE	37124000	37124000	4947254.25	6733933.5	13.7564522	0	0	20817181.88	20817181.88	55.32805816	Credit Impaired	CDO
4	2372	13133985	05473WAN6	Ayresome CDO Ltd SE	501000	501000	66764.75	90876.54	13.7564522	0	0	20817181.88	20817181.88	55.32805816	Credit Impaired	CDO
5	3380	13135737	085558AA2	BERNOULLI HIGH GR	22655457.09	25000000	2870713.87	3266916.91	12.9378258	0	0	216724151.3	216724151.3	25.30711755	Credit Impaired	CDO
6	3381	13135738	085558AA2	BERNOULLI HIGH GR	243210028	275000000	31577369.88	35936086.03	12.9378258	0	0	216724151.3	216724151.3	25.30711755	Credit Impaired	CDO
7	3382	13135739	085558AA2	BERNOULLI HIGH GR	265068847.9	292500000	33588258.36	38222927.87	12.9378258	0	0	216724151.3	216724151.3	25.30711755	Credit Impaired	CDO
8	3383	13135740	085558AA2	BERNOULLI HIGH GR	176712565.3	195000000	22403907.76	25481951.91	12.9378258	0	0	216724151.3	216724151.3	25.30711755	Credit Impaired	CDO
9	3384	13135741	085558AA2	BERNOULLI HIGH GR	142729379.7	157500000	18067159.46	20581576.55	12.9378258	0	0	216724151.3	216724151.3	25.30711755	Credit Impaired	CDO
10	3848	13136620	12497SAA1	C-BASS LTD SER 15-	2196693.37	15000000	558416.05	557776.03	23.6621821	68074.66421	3.099	637992.2857	706066.9499	32.14226253	Credit Impaired	CDO
11	3849	13136621	12497SAB9	C-BASS LTD SER 15-	4500000	4500000	384549.74	499035	10.6443346	0	0	645267.8618	645267.8618	14.33928582	Credit Impaired	CDO
12	3850	13136622	12498FAA8	C-BASS LTD SER 17-	10302025.69	78000000	2136898.2	978632.44	9.55775779	0	0	1036012.302	1036012.302	10.05639408	Credit Impaired	CDO
13	5741	13145686	202638AF9	COMMODORE CDO L	24467286.6	36000000	4926211.94	9807836.62	41.45517	0	0	15519763.41	15519763.41	63.43066833	Credit Impaired	CDO
14	5742	13145713	202648AA9	Commodore CDO Ltd	6457660.88	16700000	2075106.06	2248557.52	32.8600145	0	0	3910398.975	3910398.975	60.55441819	Credit Impaired	CDO
15	5743	13145714	202648AC5	Commodore CDO Ltd	18500000	18500000	1941752.25	1677950	10.0905468	0	0	7225458.069	7225458.069	39.0565301	Credit Impaired	CDO
16	5744	13145715	202648AJ0	Commodore CDO Ltd	6433722.35	100000000	172386.61	2121841.63	30.9207856	0	0	3680516.41	3680516.41	57.20664041	Credit Impaired	CDO
17	7142	13149702	264403AB2	DUKE FUNDING LTD	15333893.89	16000000	1342705.73	1164210.56	8.28067316	0	0	2436963.37	2436963.37	15.89265836	Credit Impaired	CDO
18	7143	13149703	264407AA5	DUKE FUNDING LTD	35532303.43	100092000	4837357.68	4976729.04	12.2601464	5253159.529	2.9287	52337688.36	57590847.89	32.10784234	Credit Impaired	CDO
19	7144	13149704	264407AA5	DUKE FUNDING LTD	47107672.27	132699000	0	6597999.5	12.2601464	5253159.529	2.9287	52337688.36	57590847.89	32.10784234	Credit Impaired	CDO
20	7145	13149705	264407AA5	DUKE FUNDING LTD	49994148.31	140830000	6806189.26	7002285.4	12.2601464	5253159.529	2.9287	52337688.36	57590847.89	32.10784234	Credit Impaired	CDO
21	7146	13149706	264407AA5	DUKE FUNDING LTD	2646498.44	7455000	0	370674.13	12.2601464	5253159.529	2.9287	52337688.36	57590847.89	32.10784234	Credit Impaired	CDO
22	7147	13149707	264407AA5	DUKE FUNDING LTD	44086297.59	124188000	6001896.15	6174819.42	12.2601464	5253159.529	2.9287	52337688.36	57590847.89	32.10784234	Credit Impaired	CDO
23	7224	13149817	26545QAL3	DUNHILL ABS CDO L	2892103.57	20000000	1681369.15	2085495.88	39.0296169	83098.47979	2.8733	1621197.995	1704296.474	58.92930295	Credit Impaired	CDO
24	7225	13149818	26545QAG2	DUNHILL ABS CDO L	37614385.86	260000000	15416329.1	18901228.89	19.7820473	1359275.82	2.8733	26518600.23	27877876.05	58.92930278	Credit Impaired	CDO
25	7226	13149819	26545QAG2	DUNHILL ABS CDO L	9692937.89	67000000	3972669.67	4870701.29	19.7820473	1359275.82	2.8733	26518600.23	27877876.05	58.92930278	Credit Impaired	CDO
26	7232	13149838	26702TAA0	Dutch Hill Funding Ltc	56308545.29	124336000	2111738.53	6475482.71	4.36899453	0	0	13386794.38	13386794.38	23.58466119	Credit Impaired	CDO
27	7233	13149839	26702TAA0	Dutch Hill Funding Ltc	452051.22	1003000	16953.65	51985.89	4.36899453	0	0	13386794.38	13386794.38	23.58466119	Credit Impaired	CDO
28	7342	13150113	26925XAC8	E* Trade ABS CDO Ltc	111293606.9	152800000	11320473.33	12282796.5	10.6697089	0	0	24237154.68	24237154.68	21.77767022	Credit Impaired	CDO
29	7343	13150114	26925XAG9	E* Trade ABS CDO Ltc	35363397.07	38200000	2761792.77	4265373.62	6.93887535	0	0	8363191.658	8363191.658	23.27220406	Credit Impaired	CDO
30	13379	13160938	453433AA2	INDEPENDENCE IV CI	14207988.46	120000000	712567.01	4984162.35	5.48820952	0	0	7719718.486	7719718.486	54.33364834	Credit Impaired	CDO
31	13380	13160939	453433AB0	INDEPENDENCE IV CI	14207988.46	120000000	1688354.08	4984162.35	14.2636632	0	0	7719718.486	7719718.486	54.33364834	Credit Impaired	CDO
32	14210	13162259	48205MAA1	JUPITER HIGH GRAD	6331295.5	62500000	6137170.68	6666074.33						Not Credit Impaired	CDO	
33	14211	13162260	48205MAA1	JUPITER HIGH GRAD	1109007.28	10000000	980072.58	1066571.89						Not Credit Impaired	CDO	
34	14212	13162261	48205MAA1	JUPITER HIGH GRAD	11644576.45	105000000	10332453.53	11199004.88						Not Credit Impaired	CDO	
35	14213	13162262	48205MAA1	JUPITER HIGH GRAD	10282826.41	92721000	9099194.59	9889361.25						Not Credit Impaired	CDO	
36	14214	13162263	48205MAA1	JUPITER HIGH GRAD	2218014.56	200000000	1958639.99	2133143.79						Not Credit Impaired	CDO	
37	14857	13163311	52902TAA4	LEXINGTON CAPITAL	16277248.38	36263000	2354825.41	3606875.47	13.5689916	0	0	22754497.49	22754497.49	37.55675589	Credit Impaired	CDO
38	14858	13163312	52902TAA4	LEXINGTON CAPITAL	24114059.74	53731000	3486874.12	5343434.5	13.5689916	0	0	22754497.49	22754497.49	37.55675589	Credit Impaired	CDO
39	14859	13163313	52902TAA4	LEXINGTON CAPITAL	20195654.06	45000000	2921699.27	4475154.98	13.5689916	0	0	22754497.49	22754497.49	37.55675589	Credit Impaired	CDO
40	14860	13163314	52902TAG1	LEXINGTON CAPITAL	22298294.23	250000000	1019780.22	452655.37	4.08770663	0	0	1282481.298	1282481.298	5.751477153	Credit Impaired	CDO
41	15171	13163958	54910EAE5	LSTREET II, LLC BD F	774867.35	51243995	18816335.79	20171656.82						Not Credit Impaired	CDO	
42	15172	13163959	54910EAE5	LSTREET II, LLC BD F	483517.32	31980003	1173987.73	12587116.26						Not Credit Impaired	CDO	

## Walkthrough Sample – CDO OTTI

### Submission of CDO OTTI analysis IA templates to Investment Accounting

From: Keothavong, Lena <Lena.Keothavong@aig.com> Sent: Thu 3/7/2019 1:19 PM  
To: Kang, Samuel  
Cc: Payne, Andrew; Parsons, Tim; McGloin, Kenneth; Fan, Hui; Destro, Anthony; Kogan, David S; Petitto, James M; Brown, William; Levy, Jasmin; Steele, Tim; Fulmer, Ryan; Sapia, Joseph Hidden on 30-12-2018, 17:47:06 SCTASK1964718; McIntyre, Steve@InvestACCT; Silva, Rosa@InvestAcct; Yu, Connie  
Subject: Q1 2019 ABS CDO OTTI File Posted

We have reviewed the ABS CDO securities identified by Investment Accounting for possible impairment and do not have any new impaired securities in accordance with asset class specific credit policies and procedures which are approved by AIG Credit Risk Management.

Please find our Q1 2019 file titled 19Q1 OTTI ABS CDO, with a time/date stamp of 03/07/19 10:15 at the following link:

<https://share.connect.aig/teams/InvFixedIncome/Summary%20Reports/Forms/AllItems.aspx?RootFolder=%2Fteams%2FInvFixedIncome%2FSummary%20Reports%2FOTTI%2FOTTI%20Analysis%2FQ1%202019%20%2D%20Structured%20Analysis&FolderCTID=0x0120004255556918E20B4FA774FFE9D60A9C66&View=%7BD703CECD%2D7F06%2D47D2%2D988D%2DB286ECF0E1FD%7D&InitialTabId=Ribbon%2ERead&VisibilityContext=WSSTabPersistence>

Thanks,  
Lena

Lena Keothavong  
AIG Investments  
AIG Asset Management (Europe) Limited



# Walkthrough Sample – CDO OTTI

## Appian approvals for Q1'19 CDO OTTI memo

### General Document Approval

#### General Information

Request ID : 9934

Subject : Process Memo: Europe - Q1/2019 for ABS CDO +ML3 Repack Europe

Submission Date : 3/12/2019 9:31 AM EDT

Final Approval Due Date : 3/28/2019 11:30 PM EDT

Initiator : Jasmin Levy

Second Initiator :

Documents Approved : 19Q1 OTTI - ABS CDO and ML3 Repack\_final\_version2

#### Initiator Comments

Comments	Comments made by	Comments made on
For review and approval	Jasmin Levy	3/12/2019 9:52 AM EDT
For review and approval	Jasmin Levy	3/13/2019 5:17 AM EDT

#### Reviewers Comments

Reviewer level	Reviewer Name	Reviewed Documents Name	Comments	Decision	Assigned On	Completed On
1	Ryan Fulmer	19Q1 OTTI - ABS CDO and ML3 Repack_final_version1	Please incorporate the discussed clarification regarding HPI scenarios.	Return to Initiator	3/12/2019 9:52 AM EDT	3/12/2019 10:23 AM EDT
1	Ryan Fulmer	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	reviewed	Completed Review	3/13/2019 5:17 AM EDT	3/13/2019 9:41 AM EDT
2	Tim Parsons	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	.	Completed Review	3/13/2019 9:41 AM EDT	3/13/2019 10:36 AM EDT
2	Kenneth McGloin	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	Review complete	Completed Review	3/13/2019 9:41 AM EDT	3/13/2019 6:53 PM EDT
3	Andrew Payne	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	Review complete	Completed Review	3/13/2019 6:53 PM EDT	3/14/2019 6:01 PM EDT

#### Approvers Comments

Approval level	Approver Name	Approved Documents Name	Comments	Decision	Assigned On	Completed On
1	Ryan Fulmer	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	approved	Approved	3/14/2019 6:01 PM EDT	3/18/2019 11:26 AM EDT
2	Tim Parsons	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	approved	Approved	3/18/2019 11:26 AM EDT	3/19/2019 12:14 PM EDT
2	Kenneth McGloin	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	Approved	Approved	3/18/2019 11:26 AM EDT	3/19/2019 1:59 PM EDT
3	Andrew Payne	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	Approved	Approved	3/19/2019 1:59 PM EDT	3/22/2019 3:41 PM EDT
4	Geoffrey Cornell	19Q1 OTTI - ABS CDO and ML3 Repack_final_version2	approved	Approved	3/22/2019 3:42 PM EDT	3/25/2019 9:35 PM EDT



# Walkthrough Sample – CDO OTTI

## Approved CDO OTTI memo



### Asset Management

FOR INTERNAL USE ONLY

TO: Andrew Payne, Ken McGloin, Tim Parsons, Geoff Cornell, Ryan Fulmer, Tim Steele

FROM: Will Brown, Lena Keothavong

DATE: March 2019

SUBJECT: 2019 Q1 OTTI – ABS CDO & ML3 Repack

### Executive Summary

The scope of this memo is ABS CDO assets held on Statutory balance sheets by AIG Ins Cos which totals \$2.433bn Book Value across the following categories:

- ABS CDOs held directly by AIG Ins Cos (~\$342.8mm Book Value), which can be split into:
  - Not Purchase Credit Impaired (full principal recovery expected at purchase): \$59.8mm Book Value
  - Purchase Credit Impaired: \$283mm Book Value

Note that 'credit impaired' refers to securities where we did not expect 100% recovery of principal at the time of purchase. It is an accounting classification only and does not refer to the expected yield.

- Senior Notes from the ML3 (LStreet) Repack Transactions (~\$2.090bn Book Value)

This memo does not cover the following:

- The multi-sector CDO – CDS positions held at AIG-DIB are not in scope for the OTTI process. MLIII Repack Junior notes are also not in scope for OTTI.

Key changes to portfolio since the previous OTTI review are summarized below:

- Non-Credit Impaired ABS CDOs: No new exposures.
- Credit Impaired ABS CDOs: No new exposures.
- ML3 repack Senior Notes: No new repacks. Continuing analysis on the book to potentially conduct a further round of repacks in 2019.

This memo incorporates results from the ABS CDO Model developed by AIG Investment Analytics.

### OTTI Analysis & Results

#### Accounting treatment for OTTI

- In this analysis, we project principal recovery on all bonds. If less than full recovery is projected in base case, then the bonds are classed as Credit Impaired. Once a bond is classed as Credit Impaired, it will remain as such going forward, even if principal recovery projections recover. If a bond is not Credit Impaired, then no OTTI is recorded.
- If the bond is not in an unrealized loss at quarter end (i.e. if market price exceeds book price) then no OTTI is recorded. This analysis is completed by Investment Accounting.
- If the bond is in an unrealized loss at quarter end, it will be written down to the Recoverable Value (the present value of expected future cash flows). The desk performs the calculation of Recoverable Value and provides to Investment Accounting.

### Purchased Non-credit Impaired CDOs

The table below shows the yield and WAL by scenario for the ABS CDOs that were not credit impaired at the point of purchase.

CDO Deal Name	CUSIP	Current Par	OVN	Book Value	Book Price	BULL			BASE			TALL			Credit Impaired?
						Yield	Prtn Recovery	WAL	Yield	Prtn Recovery	WAL	Yield	Prtn Recovery	WAL	
LAKESIDE	511212ZMA2	29.4	224.40	14.4	87.4	5%	100%	0.0	5%	100%	0.0	5%	100%	0.0	No
JUPITER	48305ZMA2	13.7	113.80	12.1	89.0	10%	100%	0.0	10%	100%	0.0	10%	100%	0.0	No
FABUK	48305ZMA3	32.3	260.22	28.0	88.0	10%	100%	0.0	10%	100%	0.0	10%	100%	0.0	No
GRAND TOTAL		75.4		54.5		10.0%		0.0	10.0%		0.0	10.0%		0.0	

CDO Deal Name	CUSIP	Current Par	OVN	Book Value	Book Price	BULL			BASE			TALL			Credit Impaired?
						Yield	Prtn Recovery	WAL	Yield	Prtn Recovery	WAL	Yield	Prtn Recovery	WAL	
FABUK	511212ZMA2	6.0	6.00	5.7	80.0	5%	100%	0.0	5%	100%	0.0	5%	100%	0.0	No
GRAND TOTAL		6.0		5.7		5.0%		0.0	5.0%		0.0	5.0%		0.0	

These securities are split across 3 deals: Lakeside 2003-1A (1 cusip), Jupiter High Grade (2 cusips) and FabUK 2014-1 (1 cusip). For deals above with more than one cusip, these are all pari passu tranches which share similar economics (although coupons, book price and thus exact yield may differ by tranche).

**Lakeside 2003-1A:** We forecast a principal loss on this bond, and as such it is classified as Credit Impaired. This deal is backed by c.54% inner CDOs of which c.24% are trust-preferred CDOs. Investment Analytics have revisited modelling assumptions in recent months and concluded they are reasonable given the limited collateral information available.

No OTTI is expected on this bond as it is not currently in a position of unrealized loss (market price = 80.9, provided by Markit, exceeds book price = 47.1). If the market price were to decline below book price, then the bond would be written down to its Recoverable Value (56.6).

**Jupiter High Grade CDO I, II and III:** On 26th February 2019, Dock Street Capital Management succeeded Harding Advisory as the Collateral Manager across all three of the Jupiter High Grade CDO deals we have exposure to. Dock Street will assume all the responsibilities, duties and obligations of the Collateral Manager under the Amended Agreements and under the applicable terms of the Indenture.



## MS CDO Reconciliation – SOX Controls

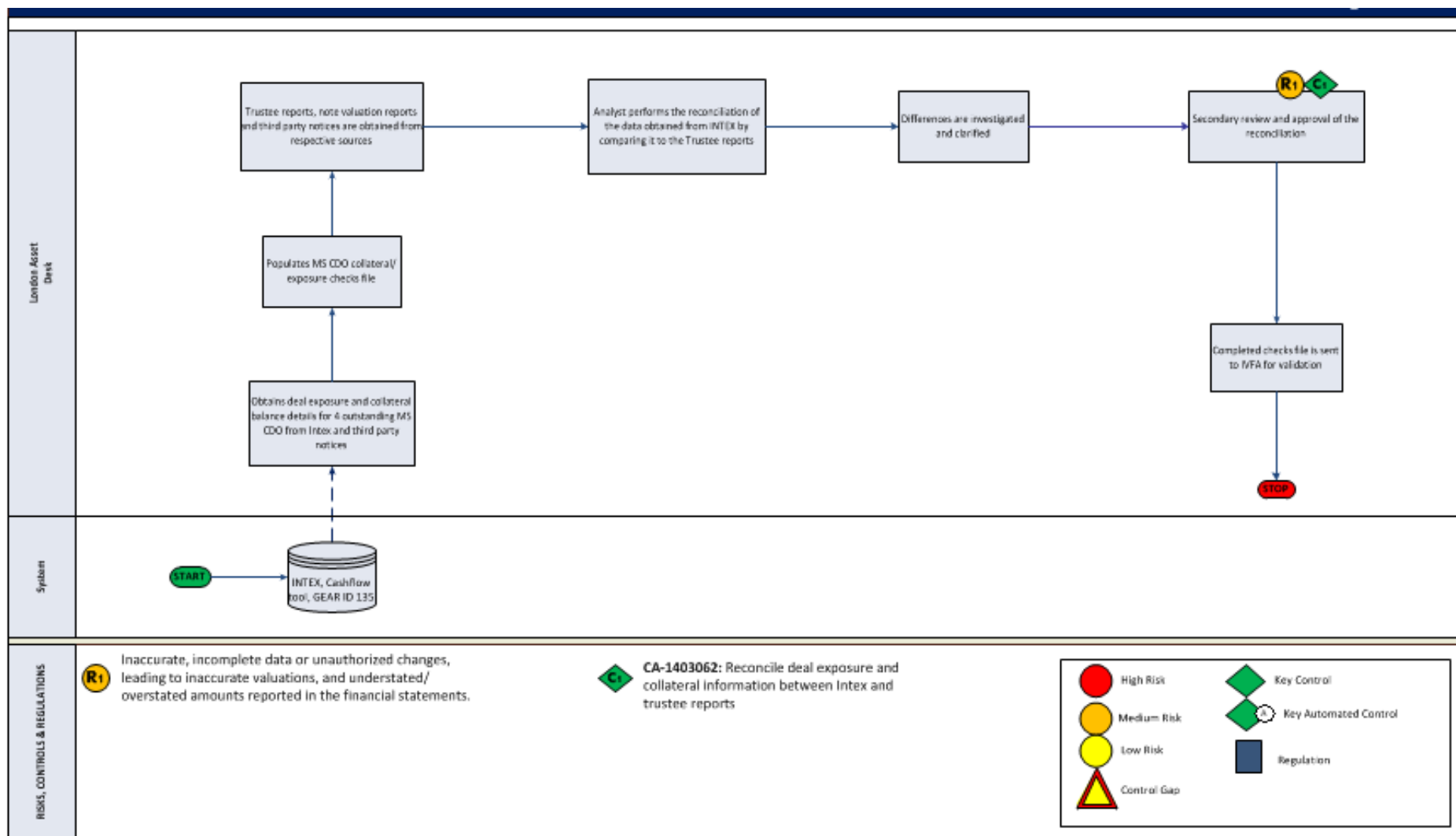
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Control CA-1403062 (Risk – Medium, Frequency – Quarterly)	
Description	Additional Description
Quarterly, the Front Office Structured Products team reviews and reconciles details of the outstanding 4 Multi-Sector CDO transactions and track the USD deal exposures and collateral balance information between Intex output file and the Trustee Reports/Notices. Differences are investigated and resolved. Also, the quarterly change is reviewed for reasonableness. Evidence of review and sign off is via email approval of the reconciliation file.	

On 04/04/2019, Lena Keothavong verified that the control description is accurate for 2019.





## Process Flow – MS CDO Reconciliation






## Walkthrough Sample – MS CDO Reconciliation



### Evidence of review and approval of collateral balance and exposure reconciliation

From:  Keothavong, Lena <Lena.Keothavong@aig.com> Sent: Fri 3/29/2019 6:44 AM  
To:  Levy, Jasmin  
Cc:  
Subject: RE: MS CDO - Q1 2019

Thanks Jasmin, this is approved.

Lena

From:  Levy, Jasmin <Jasmin.Levy@AIG.com> Sent: Thu 3/28/2019 12:54 PM  
To:  Keothavong, Lena  
Cc:  Levy, Jasmin  
Subject: MS CDO - Q1 2019

 Message  201903\_MSCDO Checks File.xlsx (2 MB)

Please see attached the Q1 2019 checks file for the MS CDO positions.

Please can you review and approve the file.

Thanks,  
Jasmin

Jasmin Levy  
AIG Investments  
AIG Asset Management (Europe) Limited

# Walkthrough Sample – MS CDO Reconciliation

## Evidence of Collateral Balance reconciliation between Intex and Trustee

201903\_MSCDO Checks File [Read-Only] - Microsoft Excel

Deal Name	Collateral Bal Prior Quarter	Collateral Balance Source	Collateral Bal Current Quarter	Collateral Bal Diff	Collateral Bal Diff %	Trustee Report Date Current	Checked vs Trustee Report?	Comment	Principal Collection Account (\$mm)	Current Contributing Balance (\$mm)	Excess Capacity (\$MM)	Delivered Obligations	Total	Difference
ICNA1	407,922,736	Intex	444,491,409	36,568,674	8.96%	1/24/2019	✓	Checked Intex's collateral balance against the Trustee Report. Intex have included the details of the delivered obligations which needs to be omitted. There is also a cash balance that has not been included in Intex's number.	632,518	399,918,643		44,572,767	400,551,161	632,518
RFC3	68,395,951	Intex	64,728,579	-3,667,372	-5.36%	3/6/2019	✓	Collateral balance matches to the trustee report and total needs to include the excess capacity amount. Intex's number has not included EC.		64,728,579	2,375,379		67,103,958	2,375,379
BERNOU1	79,219,442	Intex	73,392,514	-5,826,928	-7.36%	2/28/2019	✓	Collateral balance in Intex does not include the cash amount. Balances have been taken from the Trustee Report for the total amount.	2,127,253	73,392,514			75,519,767	2,127,253
SKYBX	106,258,332	Notice	105,360,825	-897,508	-0.84%	3/8/2019	✓	Collateral balance is correct and matches to the notice dated 08.03.19.		105,360,825			105,360,825	0

# Walkthrough Sample – MS CDO Reconciliation

## Evidence of Exposure Balance reconciliation between Intex and Trustee

201903\_MSCDO Checks File [Read-Only] - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Acrobat

P2 Exposure calculated from Trustee Reports

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Q1 2019																		
2		Deal Name	Cusip	Tranche	Tranche Balance Prior Quarter	Tranche Balance Curr Quarter	Tranche Balance checked in Intex?	Balance Diff	Balance Diff %	Trustee Report Date	% AIG Owns of Tranche	Tranche Balance Source	Notional Balance from Trustee Report	Checked vs Trustee Report?	Comment	Exposure calculated from Trustee Reports	Difference		
3		BERNOUI	085558AA2	BNLI 2006-1A A1A	856,376,278	856,376,278	✓	0	0.00%	2/28/2019	100%	Trustee Report	856,376,278	✓	Exposure is correct and ties back to the trustee report.	856,376,278			
4		BERNOUI	085558AC8	BNLI 2006-1A A1B Drawn	17,100,429	16,683,521	✓	-416,908	-2.44%	2/28/2019	100%	Trustee Report	16,683,521	✓	Exposure is correct and ties back to the trustee report.	16,683,521			
5		BERNOUI	085558AC8	BNLI 2006-1A A1B Undrawn	14,315,852	13,983,631	✓	-332,220	-2.32%	2/28/2019	100%	Trustee Report	13,983,631	✓	Exposure is correct and ties back to the trustee report.	13,983,631			
6		IONA1	IONA1	SUPER SENIOR CDS	404,729,464	397,553,481	✓	-7,175,982	-1.77%	1/24/2019	100%	Trustee Report	397,553,481	✓	Exposure is correct and ties back to the trustee report.	397,553,481			
7		RFC3	RFC3	SUPER SENIOR CDS	49,143,640	49,143,640	✓	0	0.00%	3/15/2019	100%	Trustee Report	46,768,261	✓	Exposure in Intex is not the latest available. Email sent to Intex with supporting Trustee Report as at 15.03.19 as evidence of notional update.	46,768,261			
8		SKYBX	SKYBX	SUPER SENIOR CDS	106,258,332	105,360,825	✓	-897,508	-0.84%	3/8/2019	100%	Notice	105,360,825	✓	Exposure is correct and ties back to the notice dated 10.12.18.	105,360,825			

Collateral Checks Mar 2019 Exposure Checks Mar 2019 Support

## Intex Screenshot evidencing Collateral Balance for a sample

- 40 -

# Walkthrough Sample – MS CDO Reconciliation

## Trustee report evidencing Collateral Balance for a sample

### IONA CDO I

#### Outstanding Principal Balance

Class	Value (USD)
Class A Secured Floating Rate Credit-Linked Notes	78,000,000.00
Class B Secured Floating Rate Credit-Linked Notes	40,500,000.00
Class C Deferrable Interest Secured Floating Rate Notes	17,058,044.24
Class M Subordinated Secured Variable Rate Notes	13,500,000.00

#### Collateral Quality Tests

Test	Initial	Prior	Current	Trigger	Result
(a) Minimum Weighted Average Spread Test*	0.53%	0.47%	0.47%	0.48%	BREACH
(b) Moody's Min Weighted Average Recovery Rate Test	69.9%	68.0%	68.0%	67.5%	PASS
(c) S&P Min Wtd Average Recovery Rate Test - Class A	69.54%	71.96%	71.96%	68.50%	PASS
- Class B	75.97%	78.29%	78.31%	75.00%	PASS
- Class C	85.07%	86.43%	86.44%	84.50%	PASS
(d) Moody's Minimum Diversity Test	22.49	69.24	69.24	25.00	PASS
(e) Moodys Maximum Rating Factor Test	22	4615	4635	27	BREACH
(f) S&P CDO Evaluator Test - Class A Loss Differential	7.65%	5.14%	5.14%	0.00%	PASS
- Class B Loss Differential	5.71%	3.13%	3.13%	0.00%	PASS
- Class C Loss Differential	4.87%	1.94%	1.94%	0.00%	PASS
(g) Maximum Weighted Average Life Test	5.8	5.5	5.5	7.0	PASS
(h) Forward Minimum Weighted Average Spread Test	N/A	N/A	N/A	N/A	N/A
(i) Single A Moody's Maximum Rating Factor Test	152	6109	6136	158	BREACH

\* WAS amendment (20/05/2006) incorporated into current score

### Monthly Report for the period 25 Dec 2018 to 24 Jan 2019

#### General Statistics

Statistic	Value (USD)
<b>Portfolio</b>	
Outstanding Portfolio Notional Amount	399,918,642.76
Maximum Portfolio Notional Amount	1,500,000,000.00
Market Value of Delivered Obligations	17,473,139.79
<b>Collateral Portfolio</b>	
Collateral Portfolio Balance	2,365,161.65

#### Account Balances

Collection Account	632,518.17
Credit Support Account	968,332.95
Interest Reserve Account	2,836,287.90
Collateral Account	0.00
Custody Account	0.00

#### Loss Amount

Aggregate Loss Amount	130,051,991.89
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# Walkthrough Sample – MS CDO Reconciliation

## Intex screenshot evidencing Exposure Balance for a sample

INTEXcalc (Web Mode, 64-bit) - [Iona CDO I -- IONA1]

File Edit Layout Reports Tools Add-Ins Help William Brown - AIG PROCUREMENT SERVICES, INC. - ASSET MANAGEMENT Help: Enter search terms (Ctrl+H)

Dashboard BERNOU1 RFC3 **IONA1**

Deal/Tranche ID: Iona1 Settle Date: T+3 Load

**IONA1**

- Quick Summary
- Deal Detail
- Tranche Detail
- Tranche History
- All Tranches
- Structure Chart
- Credit Enhancements
- Hedges
- Tests/Triggers
- Historical Info
- Documents
- Intex Notes

**Collateral**

- Collat Stats
- Strats
- Collat Detail
- Deal Tree

**Forecasts**

- Scenarios
- Asset Forecasts
- Script Model Builder

**Reports**

- Price/Yield
- Deal Price/Yield
- Cashflows
- Deal Cashflows
- Graphical Waterfall
- Forecasted Triggers
- Call Protection
- Asset CF/PY
- Horizon Return
- Decrement Tables
- WAL Report
- Cashflow Events

**All Tranches (Default - CLO/CDO)**

Tranche	Tranche ID	Coupon	Type	Currency	Orig Balance	Curr Balance	Factor	Implied Balance	Capitalizes Defrd Int	Floater Formula	Freq	Accrual Date	Orig Ratings (MD/S&P)	Curr f
SPR_SNR	IONA1SPRS	0.1000	SEN_FLT	USD	1,350,000,000.00	397,553,481.76	0.2945		No		Quarterly	Feb 25, 2019	-/-	
A	462055AA2	3.2893	SEN_FLT	USD	78,000,000.00	78,000,000.00	1.0000	0.00	No	LIBOR_3MO + 0.60	Quarterly	Feb 25, 2019	Aaa/AAA	
B	462055AB0	3.5892	MEZ_FLT	USD	40,500,000.00	40,500,000.00	1.0000	0.00	No	LIBOR_3MO + 0.90	Quarterly	Feb 25, 2019	Aa2/AA	
C	462055AC8	5.9393	MEZ_FLT	USD	18,000,000.00	17,185,105.20	0.9547	0.00	Yes	LIBOR_3MO + 3.25	Quarterly	Feb 25, 2019	Baa2/BBB	
M	462055AA5	0.0000	JUN_SUB	USD	13,500,000.00	13,500,000.00	1.0000	0.00	No		Quarterly	Feb 24, 2019	NR/NR	
#COLLATERALACCOUNT		0.0000	Model Variable	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
#AMLOSSTRIGGER		0.0000	Model Variable	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
TARGET_IRR1		17.0000	IRR Class	USD	13,500,000.00	86,207,281.39	6.3857		No		Quarterly	Feb 24, 2019	-/-	
TARGET_IRR@0%		0.0000	IRR Class	USD	13,500,000.00	4,432,975.50	0.3284		No		Quarterly	Feb 24, 2019	-/-	
CALL_M@0%		0.0000	IRR Class	USD	13,500,000.00	4,432,975.50	0.3284		No		Quarterly	Feb 24, 2019	-/-	
ELIGIBLE_INVESTMENTS		0.0000	Reserve Fund	USD	150,000,000.00	46,937,927.58	0.3129		No		Quarterly	Feb 25, 2019	-/-	
INTEREST_RESERVE		0.0000	Reserve Fund	USD	0.00	2,836,287.90	0.0000		No		Quarterly	Feb 25, 2019	-/-	
SENIOR_EXPENSES		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
EXPENSE_INSTALMENT1		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
EXPENSE_INSTALMENT2		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
Snr Management Fee		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
STRUCTURING_FEE		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
INC_MGMT_FEE		0.0000	Expense	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
CDS		0.0000	Hedge Net	USD	0.00	0.00	0.0000		No		Quarterly	Feb 25, 2019	-/-	
COLLAT		0.6371	Collateral	USD	1,500,000,000.00	441,053,433.84	0.2940		No		Monthly	Mar 17, 2019	-/-	
COLLAT: BOND		0.3262	Collateral	USD	0.00	441,053,433.84	0.0000		No		Monthly	Mar 17, 2019	-/-	
COLLAT: FIXED		6.3039	Collateral	USD	0.00	44,572,766.60	0.0000		No		Monthly	Mar 17, 2019	-/-	
COLLAT: INIT_FIXED		6.3039	Collateral	USD	0.00	44,572,766.60	0.0000		No		Monthly	Mar 17, 2019	-/-	
COLLAT: REIN_FIXED		0.0000	Collateral	USD	0.00	0.00	0.0000		No		Monthly	Mar 17, 2019	-/-	
COLLAT: FLOAT		0.0000	Collateral	USD	957,821,932.68	396,480,667.25	0.4139		No		Monthly	Mar 17, 2019	-/-	
COLLAT: INIT_FLOAT		0.0000	Collateral	USD	957,821,932.68	396,480,667.25	0.4139		No		Monthly	Mar 17, 2019	-/-	
COLLAT: REIN_FLOAT		0.0000	Collateral	USD	0.00	0.00	0.0000		No		Monthly	Mar 17, 2019	-/-	

Quick Summary Collat Stats **All Tranches** Tranche Detail Scenarios Tree Model Builder Price/Yield Cashflows

Latest Update Jan 24, 2019 Collat Detail Actual Collateral

# Walkthrough Sample – MS CDO Reconciliation

## Trustee report evidencing Exposure Balance for a sample

### IONA CDO I

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399,918,643

2,365,162

397,553,481

## Walkthrough Sample – MS CDO Reconciliation

### Communicating the reconciliation results to IVFA

From: Keothavong, Lena <Lena.Keothavong@aig.com> Sent: Fri 3/29/2019 1:04 PM  
To: Timperman, Jeffrey  
Cc: Levy, Jasmin; Keothavong, Lena  
Subject: MS CDOs - Q1 2019

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Message

MS CDO - Q1 2019 (2 MB)	RE: MS CDO - Q1 2019 (18 KB)	Skybox Floating Rate Draw Notice March 8 2019.pdf (51 KB)
BERNOU1_20190228.xlsx (95 KB)	Bernoulli HG CDO I Ltd, Intra-Period, 02-28-2019.pdf (4 MB)	Iona CDO I 24Jan19.pdf (379 KB)
Iona CDO I 25Feb2019.pdf (103 KB)	IONA1_20190124.xlsx (164 KB)	RFC_III_2006III_MRPT_6Mar2019.pdf (794 KB)

Jeff,

Please see attached the checks file and supporting data for the super senior CDS deals for Q1 2019.

Let me know if you have any questions.

Thanks,  
Lena

Lena Keothavong  
AIG Investments  
AIG Asset Management (Europe) Limited