UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

FEDERAL HOUSING FINANCE AGENCY, Plaintiff, -v- NOMURA HOLDING AMERICA, INC., et al., Defendants.	11cv6201 (DLC) OPINION & ORDER

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Table of Contents

PROCEDURAL HISTORY 7
BACKGROUND 19
I. RMBS 19
A. Originating a Residential Mortgage Loan 20
1. Credit and Capacity 21
2. Collateral 25
B. Overview of the Securitization Process 30
1. The Sponsor 31
2. The Depositor 32
3. The Underwriter 32
4. The Servicer 33
C. Structure of an RMBS Instrument and Credit Enhancement . 34
1. Subordination 34
2. Overcollateralization 35
D. Securing a Credit Rating 36
E. "Scratch-and-Dent" Loans 38
F. RMBS Market Dynamics 39
II. The Seven At-Issue Securitizations 40
A. Principal and Interest Payments 44
B. Age of Supporting Loans 45
C. The Certificates' Credit Enhancements 46
III. Due Diligence 48
A. Nomura's Due Diligence 50
1. Bidding Process 50
2. The Diligence Group 52
3. Credit & Compliance Due Diligence 55
a. Sampling 56
b. Instructions to Vendors 57
c. Credit and Compliance Vendor Procedures 60
d. Nomura's Review of Vendors' Results 61
e. Ignored Warning Signs 67
4. Valuation Due Diligence 69
a. Valuation Due Diligence Vendors 70
b. Nomura Reviews Results; Broker Price Opinions 71
5. Reviews 72
6. Purchasing the Loans 74
7. Selecting Loans for a Securitization 75
8. Data Integrity Due Diligence 76
9. Obtaining the Credit Ratings 78
B. RBS's Due Diligence 78
1. NEHLI 2006-HE3 and NHELI 2006-FM2 79
2. NHELI 2007-1 and NHELI 2007-2 81
a. Sample Selection 82
b. Due Diligence 83
3. Fraud Review 85
C. The Loan Pools for the Seven Securitizations 86

IV. The Offering Documents..... 92
A. The Supplements' "Summary" Section 93
B. Collateral Tables 95
C. Loans "Were Originated" Generally in Accordance with Guidelines. 98
D. Risk Advisories 104
V. Sample Selection..... 106
VI. Appraisals..... 113
A. Kilpatrick 118
1. Greenfield AVM..... 119
a. The Mechanics of the Greenfield AVM..... 120
b. Confirming the Accuracy of the Greenfield AVM..... 121
c. Defendants' Criticisms of the GAVM..... 124
i. Daubert Challenge..... 124
ii. Variable Omission..... 127
iii. Negative Coefficients..... 129
iv. Inclusion of TAV as a Variable..... 130
v. CV Filter..... 131
vi. GAVM's Performance Vis-à-vis Four Commercial AVMs. 132
vii. Attacks on AVMs Generally..... 135
viii. Statistical Errors..... 137
2. The CAM..... 138
a. USPAP..... 139
b. The CAM Questions..... 142
c. Gathering CAM Answers..... 143
d. CAM Scoring..... 144
e. Kilpatrick's Conclusions from the CAM Study..... 145
f. Defendants' Critiques of the CAM and its Results..... 147
i. The Failure of Hedden's Project 148
ii. Field and Desk Reviews Are Preferable. 155
iii. The CAM Is Not Derived from USPAP. 155
iv. The CAM Weightings Are Flawed and the Threshold of Twenty is "Frivolous." 156
v. Errors in Application 158
3. Futile Attempts to Discredit Kilpatrick..... 159
B. Petition 160
C. Appraisers Used Sales Amounts for Subject Properties as Predetermined Values for Establishing the Appraisal Value. 162
D. Defendants' Four Appraiser Witnesses 163
E. Defendants' Due Diligence 168
VII. Underwriting Guidelines..... 170
A. Hunter's Re-Underwriting Review 173
B. Forester's Audit of Hunter's Work 177
C. Defendants' Objections to Hunter's Re-underwriting 180
1. Hunter Applied the Originator's Guidelines Too Strictly. 181

2. Minimum Standards 182
3. Using BLS Data to Assess Reasonableness of Income 186
4. Owner Occupancy 188
5. Post-Origination Documents 191
6. Originator Deposition Testimony 194
D. The Court's Review 196
VIII. Credit Ratings 202
IX. Materiality 204
A. LTV Ratios 207
B. Compliance with Underwriting Guidelines 208
C. Credit Ratings 209
X. Rise and Fall of the Home Mortgage Market and Its Effect on Losses in the GSEs' RMBS Portfolios 210
A. Growth in the U.S. Housing Market: Late 1990s Through Early 2006 212
B. The Bubble Bursts 214
C. Causes of Contraction in Housing Market 216
D. Vandell's Study of the Hunter Loans 219
E. GSE Witnesses 225
XI. Corporate Entities and Individual Defendants 227
A. The Nomura Family 228
1. NCCI 228
2. NAAC & NHELI 229
3. Nomura Securities 230
4. NHA 231
B. RBS 232
C. Individual Defendants 233
1. Findlay 235
2. Graham 241
3. LaRocca 243
4. Gorin 245
5. McCarthy 246
DISCUSSION 248
I. Legal Standards 248
A. Law Surrounding RMBS 248
B. Background and Purpose of the Securities Act 249
C. Securities Act Section 12(a)(2) 251
1. Statutory Seller 253
2. Material Misrepresentation 255
a. Falsity 255
b. Materiality 259
3. Damages 263
II. Falsity 264
A. Underwritten in Accordance with Guidelines 264
1. General Adherence to Process 268
2. Whose Guidelines? 269
3. The Meaning of "Generally" 273

4. Context 274
5. ResMAE Bankruptcy Advisory 276
6. Representations of "Belief" 278
7. Due Diligence Confirmation 280
B. LTV Ratios and Appraisals 281
1. BPO Statistics 283
2. Text of the Offering Documents 284
C. Owner Occupancy Collateral Tables 285
D. Credit Ratings 286
E. Excluded Evidence 287
1. Retention of Residuals 288
2. GSEs' Single-Family Due Diligence 289
III. Materiality 291
IV. Control Person Liability 299
A. Section 15 299
1. Control 301
a. Nature of the Controlled Entity 303
b. Status of Controlling Entity 304
c. Actions Taken on Behalf of Controlled Entity 306
2. Defense 310
B. Application 313
1. NHA 314
2. NCCI 315
3. Individual Defendants 316
4. Unsuccessful Affirmative Defense 317
V. Damages 322
A. Date of Tender 323
B. Interest Rate 326
VI. Loss Causation 328
A. Second Circuit Caselaw 333
B. Zone of Risk 335
C. The Seven Securitizations Were Comparatively Small. ... 336
D. The Government's Contribution to the Bubble and Recession 338
E. Admissions by FHFA and the GSEs 338
F. Excluded Evidence 345
1. Testimony from Niculescu and Cook 345
2. Housing Goals and GSE Selection of Loans in Securitizations 347
VII. Blue Sky Laws 349
A. Legal Standards 349
1. Damages 351
2. Loss Causation 352
3. Control Person Liability 352
4. Jurisdictional Elements 353
B. Applying the Blue Sky Laws 354
1. Place of Sale 356

a. Three Freddie Mac Transactions 356
b. Fannie Mae Transaction 357
2. The Dormant Commerce Clause 359
CONCLUSION 360

DENISE COTE, District Judge:

This case is complex from almost any angle, but at its core there is a single, simple question. Did defendants accurately describe the home mortgages in the Offering Documents for the securities they sold that were backed by those mortgages? Following trial, the answer to that question is clear. The Offering Documents did not correctly describe the mortgage loans. The magnitude of falsity, conservatively measured, is enormous.

Given the magnitude of the falsity, it is perhaps not surprising that in defending this lawsuit defendants did not opt to prove that the statements in the Offering Documents were truthful. Instead, defendants relied, as they are entitled to do, on a multifaceted attack on plaintiff's evidence. That attack failed, as did defendants' sole surviving affirmative defense of loss causation. Accordingly, judgment will be entered in favor of plaintiff.

PROCEDURAL HISTORY

In September 2011, the Federal Housing Finance Agency ("FHFA") brought sixteen lawsuits against banks and related entities and individuals to recover damages on behalf of two

Government-Sponsored Enterprises, the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac") (collectively "GSEs") arising out of the GSEs' investments in residential mortgage-backed securities ("RMBS"), specifically their investment in so-called private-label RMBS ("PLS").[1] FHFA had been created in the midst of the financial crisis, on July 30, 2008, pursuant to the Housing and Economic Recovery Act of 2008, Pub. L. No. 110-289, 122 Stat. 2654 (codified at 12 U.S.C. § 4617), to oversee the GSEs as well as the Federal Home Loan Banks. It became conservator of the GSEs on September 6, 2008.

The discovery, motion practice, and trials of the sixteen actions were coordinated before this Court, as described in FHFA v. UBS Americas Inc., No. 11cv5201 (DLC), 2013 WL 3284118, at *1-9 (S.D.N.Y. June 28, 2013), reconsideration denied sub nom. FHFA v. JPMorgan Chase & Co., No. 11cv6188 (DLC), 2013 WL 5354212 (S.D.N.Y. Sept. 25, 2013). Fact discovery in the actions largely concluded on December 6, 2013. The trials of the sixteen cases were separated into four tranches, with the earliest tranche scheduled for trial in January 2014, and the fourth tranche set for trial in early 2015. Expert discovery

[1] A seventeenth related action is proceeding in the District of Connecticut before the Hon. Alvin W. Thompson. FHFA v. RBS et al., No. 11cv1383 (AWT) (D. Conn).

concluded in waves, with the final wave ending on November 26, 2014.

Ultimately, only this lawsuit, one of the sixteen actions, proceeded to trial. This case is referred to as the "Nomura Action."[2] The Nomura corporate defendants are Nomura Holding America, Inc. ("NHA"), Nomura Securities International, Inc. ("Nomura Securities"), Nomura Credit & Capital, Inc. ("NCCI"), Nomura Asset Acceptance Corporation ("NAAC"), and Nomura Home Equity Loan, Inc. ("NHELI").[3] The five individual Nomura defendants -- David Findlay ("Findlay"), John Graham ("Graham"), Dante LaRocca ("LaRocca"), Nathan Gorin ("Gorin"), and John McCarthy ("McCarthy") (collectively "Individual Defendants") -- signed Registration Statements for the PLS and were officers or directors of multiple Nomura defendants. Co-defendant RBS Securities Inc. ("RBS"), known at the time of the transactions as Greenwich Capital Markets, Inc., underwrote four of the seven securitizations ("Securitizations") at issue here.

FHFA alleges that defendants are liable under Sections 12(a)(2) and 15 of the Securities Act of 1933, 15 U.S.C.

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[2] This Opinion uses the term "Nomura" to refer collectively to the Nomura family of corporate entities and associated individuals.

[3] Nomura entities that are not named parties play a part in this story, too; these are Nomura Asset Capital Corporation ("NACC") and Nomura American Mortgage Finance ("NAMF").

§§ 77l(a)(2), 77o (the "Securities Act claims"), and parallel provisions of the District of Columbia's and Virginia's Blue Sky laws, D.C. Code § 31-5606.05(a)(1)(B), (c), Va. Code Ann. § 13.1-522(A)(ii) (collectively the "Blue Sky claims"). FHFA alleges that four sets of representations in each of the seven Prospectus Supplements were false. They are representations regarding the origination and underwriting of the loans within the SLGs backing the Certificates; loan-to-value ("LTV") and combined loan-to-value ("CLTV") ratios[4] and appraisals, including compliance with Uniform Standards of Professional Appraisal Practice ("USPAP"); occupancy status; and the credit ratings of the Certificates.

In advance of trial several rulings on summary judgment motions, Daubert motions, and motions in limine were issued. Of particular importance are decisions ruling that, as a matter of law, defendants were not entitled to two statutory affirmative defenses -- the GSEs' knowledge of falsity, and defendants' due diligence and reasonable care, FHFA v. HSBC N. Am. Holdings Inc., 33 F. Supp. 3d 455, 493 (S.D.N.Y. 2014), FHFA v. Nomura Holding Am. Inc. ("Due Diligence Opinion"), --- F. Supp. 3d ---,

[4] LTV ratios represent the amount of a loan against the value of its collateral. CLTV ratios are used when the same collateral is used to support more than one loan. Following industry custom, this opinion variously uses the shorthand LTV (or LTVs) to refer to both LTV and CLTV.

2014 WL 7232443, at *40 (S.D.N.Y. Dec. 18, 2014); decisions excluding evidence of the GSEs' affordable housing goals ("Housing Goals"), FHFA v. Nomura Holding Am., Inc. ("Housing Goals Opinion"), No. 11cv6201 (DLC), 2014 WL 7229361, at *4 (S.D.N.Y. Dec. 18, 2014), and the flawed statistical analysis regarding loss causation offered by defendants' expert Kerry Vandell ("Vandell"), FHFA v. Nomura Holding Am., Inc. ("Vandell Opinion"), No. 11cv6201 (DLC), 2015 WL 539489, at *11 (S.D.N.Y. Feb. 10, 2015); and a decision interpreting certain language in the Prospectus Supplements at issue here, FHFA v. Nomura Holding Am., Inc. ("Hunter Opinion"), --- F. Supp. 3d ---, 2015 WL 568788, at *11 (S.D.N.Y. Feb. 11, 2015). On January 15, 2015, FHFA was granted leave to voluntarily withdraw its Securities Act Section 11 claim, and the parties prepared for a bench trial in lieu of a jury trial. See FHFA v. Nomura Holding Am. Inc. ("Post-Filing Payments Opinion"), --- F. Supp. 3d ---, 2014 WL 7232590, at *9-11 (S.D.N.Y. Dec. 18, 2014) (holding no right to jury trial in Section 12(a)(2) action).

The parties' pretrial order in the Nomura Action, proposed findings of fact and conclusions of law, and defendants' pretrial memorandum were submitted on February 20, 2015. FHFA submitted an opposition to defendants' pretrial memorandum on February 27; over FHFA's objections, the Court received defendants' response on March 9.

With the parties' consent, the trial was conducted in accordance with the Court's customary practices for non-jury proceedings, which includes taking direct testimony from witnesses under a party's control through affidavits submitted with the pretrial order. The parties also served copies of all exhibits and deposition testimony that they intended to offer as evidence in chief at trial with the pretrial order. Affiants were cross-examined and presented their redirect testimony in court beginning on March 16. Additional witnesses also testified at that time.

Accommodating the Court's request, the parties largely organized the presentation at trial around topics. This meant that plaintiff's and defendants' witnesses on a topic were typically called to the stand right after each other. The nine topics, in roughly the order they were presented at trial, were background to the PLS industry, valuation, data summary, re-underwriting, sampling and extrapolation, diligence, Individual Defendants, materiality, damages, and loss causation. No witnesses were ultimately called for cross-examination on two additional issues: the location of sale, and principal and interest payments.

At trial, FHFA called thirteen fact witnesses and nine experts. FHFA's fact witnesses fell into three categories. FHFA called witnesses to testify about defendants' due diligence

practices, including Brian Farrell ("Farrell"), Vice President in the Credit Risk Department at RBS; Joseph Kohout ("Kohout"), former head (until mid-2006) of the Diligence Group at Nomura Securities and later NCCI; Randall Lee ("Lee"), former collateral analyst at Nomura Securities and NCCI; Neil Spagna ("Spagna"), former head (after mid-2006) of the Diligence Group at Nomura Securities and later NCCI; and Charles Cipione ("Cipione"), Managing Director at AlixPartners, LLP, a financial and operational consulting firm, who presented data and summary statistics about defendants' due diligence practices. FHFA also called the five Individual Defendants. In addition, FHFA offered the affidavits of several witnesses to testify to the location of the GSEs' headquarters during the period relevant here. They are Kenneth Johansen, Financial Controller Manager at Freddie Mac, Chaka Long, Senior Account Executive at Fannie Mae, and Kevin Palmer, Vice President of Strategic Credit Costing and Structuring at Freddie Mac. Defendants chose not to cross-examine these witnesses and they did not appear at the trial.

FHFA's ten expert witnesses and the principal subjects of their testimony were: Peter Rubenstein, an independent consultant with expertise in residential real estate, who provided background on the PLS and RMBS industry generally; John Kilpatrick ("Kilpatrick"), Managing Director of Greenfield

Advisors, a real estate and economic consulting firm headquartered in Seattle, Washington, who testified about property appraisals underlying the sample of loans at issue here ("Sample loans"); Robert Hunter ("Hunter"), an independent consultant with expertise in residential loan credit issues, who testified about the results of his re-underwriting review of the Sample loans; Dr. Charles Cowan ("Cowan"), Managing Partner of Analytic Focus LLC, a statistical research and analysis consultancy firm, who testified about his statistical extrapolations of Kilpatrick's and Hunter's findings; Steven Campo, founder and principal of SeaView Advisors, LLC, a private equity firm, who testified to the role of independent accountants in reviewing representations in Offering Documents; Leonard Blum, a principal at Blum Capital Advisors LLP, an investment banking consulting firm, who testified as to what information those in the RMBS industry considered to be material, as did Dr. William Schwert ("Schwert"), Distinguished University Professor of Finance and Statistics at the William E. Simon Graduate School of Business Administration of the University of Rochester and Research Associate of the National Bureau of Economic Research;[5] James Finkel, Managing Director at

[5] Schwert also offered testimony relevant to defendants' affirmative defense of loss causation.

Duff & Phelps, LLC, a corporate finance consulting firm, who opined as to the appropriate amount of damages due FHFA; and Dr. James Barth ("Barth"), the Lowder Eminent Scholar in Finance at Auburn University, a Senior Finance Fellow at the Milken Institute, and a Fellow at the Wharton Financial Institutions Center, who testified regarding defendants' loss causation defense.

FHFA also offered excerpts from the depositions of Michael Aneiro ("Aneiro"), former Freddie Mac PLS trader; Vicki Beal ("Beal"), corporate representative of Clayton Holdings LLC ("Clayton"), speaking as fact witness and Rule 30(b)(6) designee; Frank Camacho, former Vice President for Credit Risk at RBS; Debashish Chatterjee, Rule 30(b)(6) designee for Moody's Investors Service ("Moody's"); James DePalma, former Director at Nomura Securities; Jacqueline Doty ("Doty"), corporative representative for CoreLogic, Inc. ("CoreLogic"), a valuation diligence firm; David Hackney ("Hackney"), former PLS trader at Freddie Mac; Jeffrey Hartnagel ("Hartnagel"), former member of Nomura's Diligence Group; Tracy Jordan, former due diligence underwriter at Clayton; Steven Katz ("Katz"), former managing director of Nomura's trading desk ("Trading Desk"); Peter Kempf ("Kempf"), Rule 30(b)(6) designee for American Mortgage Consultants, Inc. ("AMC"); Pamela Kohlbek, a former employee of Clayton; Sharif Mahdavian, Rule 30(b)(6) designee for Standard &

Poor's ("S&P"); Brett Marvin ("Marvin"), former managing director and head of the Trading Desk at Nomura; Nancy Prahofer, former Head of Litigation at NHA; Shayan Salahuddin, ("Salahuddin"), former PLS trader at Fannie Mae; Christopher Scampoli ("Scampoli"), Senior Credit Analyst consultant in Nomura's Diligence Group; Richard Syron ("Syron"), former Chairman and CEO of Freddie Mac; and James Whittemore, former Senior Vice President and Chief Underwriter at RBS.

Defendants called seventeen fact witnesses and nine experts. In addition to Kohout, Lee, Spagna, and the five Individual Defendants, defendants' fact witnesses included four residential real estate appraisers who had conducted or supervised some of the appraisals at issue here, Lee Clagett ("Clagett"), Michele Morris ("Morris"), Dan Platt ("Platt"), and William Schall ("Schall"). Defendants also called three former GSE officials, Patricia Cook ("Cook"), former Executive VP of Investments and Capital Markets at Freddie Mac; Daniel Mudd ("Mudd"), former President and CEO of Fannie Mae; and Peter Niculescu ("Niculsecu"), former Executive Vice President and Chief Business Officer at Fannie Mae. To testify about third-party due diligence practices, defendants called Derek Greene, Client Services Manager for Nomura at Clayton. And to counter Cipione's statistics on defendants' due diligence, they called

David Mishol ("Mishol"), Vice President with Analysis Group, Inc., an economic consulting company.

Defendants' expert witnesses included several who addressed aspects of the analyses conducted by FHFA's expert Kilpatrick. They were Michael Hedden ("Hedden"), a Managing Director at FTI Consulting, Inc. ("FTI"), a business consulting firm; Lee Kennedy ("Kennedy"), Founder and Managing Director of AVMetrics, an automated valuation model ("AVM") testing firm; Dr. Hans Isakson ("Isakson"), Professor of Economics at the University of Northern Iowa; and Dr. Jerry Hausman ("Hausman"), MacDonald Professor of Economics at the Massachusetts Institute of Technology. Michael Forester ("Forester"), co-founder and managing director of CrossCheck Compliance LLC, a regulatory compliance, loan review, and internal audit services firm, testified regarding his review of Hunter's re-underwriting project. Dr. Andrew Barnett ("Barnett"), George Eastman Professor of Management and Professor of Statistics at the Sloan School of Management, Massachusetts Institute of Technology, testified about his analysis of Cowan's extrapolations. John Richard, a portfolio manager and financial consultant, testified about the types of information that reasonable investors in the PLS market considered significant during the period 2005 to 2007. Vandell, Dean's Professor of Finance and Director of the Center for Real Estate at the Paul Merage School of Business,

University of California, Irvine testified about defendants' loss causation defense. Dr. Timothy Riddiough ("Riddiough"), E.J. Plesko Chair and Professor in the Department of Real Estate and Urban Land Economics at the Wisconsin School of Business, testified about defendants' loss causation defense as well as the appropriate measure of damages.

Defendants offered their own excerpts from the depositions of Aneiro, Beal, Doty, Hackney, Katz, Kempf, Marvin, Salahuddin, and Syron. In addition, they offered excerpts from the depositions of Clint Bonkowski, former Operations Director and Divisional Vice President at Quicken Loans, Inc., a residential loan originator ("Quicken"); Jeff Crusinberry, Rule 30(b)(6) designee for Fremont Investment & Loan ("Fremont"); Teresita Duran, Rule 30(b)(6) designee for the former Ocwen Financial Corp.; Ashley Dyson, former Senior Trader on Fannie Mae's PLS desk; Natasha Hanson, Rule 30(b)(6) designee for Fitch Ratings ("Fitch"); Tracy Hillsgrove, Rule 30(b)(6) designee for Ocwen Financial; Perri Henderson, former Associate Director in Portfolio Management at the adjustable-rate mortgage desk at Freddie Mac; Gary Kain, former Senior Vice President of Investments and Capital Markets at Fannie Mae; Gretchen Leff, Rule 30(b)(6) designee for Wells Fargo Bank, N.A. ("Wells Fargo"); Richard Rothleder, Rule 30(b)(6) designee for WMC Mortgage LLC ("WMC"); Guy Sindle, Rule 30(b)(6) designee for

Deloitte & Touche ("Deloitte"); and Theresa Whitecotton, Rule 30(b)(6) designee of Bridgefield Mortgage Corp., testifying as to ResMAE Mortgage Corp.'s ("ResMAE") originating practices.

The bench trial was held from March 16 to April 9, 2015, and this Opinion presents the Court's findings of fact and conclusions of law. The findings of fact appear principally in the following Background section, but also appear in the remaining sections of the Opinion.

BACKGROUND

I. RMBS

The RMBS industry was a major economic force in 2005, 2006, and 2007, when defendants sold the securities at issue to the GSEs. RMBS are intricately structured financial instruments backed by hundreds or thousands of individual residential mortgages, each obtained by individual borrowers for individual houses. The process by which these discrete loans were to be issued, bundled, securitized, and sold is summarized first.

RMBS entitle the holder to a stream of income from pools of residential mortgage loans held by a trust.[6] Non-agency RMBS -- RMBS offered by entities other than GSEs and the Government National Mortgage Association, or Ginnie Mae -- are

[6] In this context, "residential" refers to loans collateralized by one- to four-family residential properties.

known as PLS.[7] The PLS purchased by the GSEs were backed by subprime and Alt-A mortgages. Subprime loans are made to borrowers with impaired credit. Alt-A loans are typically offered to borrowers with stronger credit, but they are a riskier loan than a prime loan. Because they are riskier than prime loans, subprime and Alt-A loans generally have higher interest rates.

A. Originating a Residential Mortgage Loan

Originators issuing subprime loans and Alt-A loans are the entities charged with evaluating and approving would-be borrowers' applications for mortgage loans. While this process inevitably involves judgment, the originator's underwriting guidelines are central to the process of originating mortgages. Underwriting guidelines are intended to ensure that loans are originated in a consistent manner throughout an organization. They assist an originator in assessing the borrower's ability to pay the mortgage debt and the sufficiency of the collateral that will secure the loan; they also help the originator decide the terms on which to approve a loan. To the extent the originator intends to sell the loan, the guidelines also permit the originator to describe the qualifying characteristics for a

[7] In this Opinion, the term RMBS will refer to PLS unless otherwise noted.

group of loans and to negotiate a sale based on that description.

1. Credit and Capacity

Borrowers typically apply for a loan by completing a Uniform Residential Loan Application (known as "Form 1003").[8] In completing the Form 1003, a borrower discloses under penalty of civil liability or criminal prosecution her income, employment, housing history, assets, liabilities, intended occupancy status for the property, and the sources of the funds she will use in paying the costs of closing the loan. Every loan at issue here required a final Form 1003 signed by all borrowers.

Among other things, originators rely on objective factors, such as a borrower's credit score (often called a FICO score[9]) and history, and a borrower's debt-to-income ("DTI") ratio, to assess a borrower's ability and willingness to make required mortgage payments. FICO scores may determine the maximum amount of the loan that the originator will issue and the originator's ceiling for the LTV ratio for the property. Originators often require that the borrower's credit history, as reflected in a credit report, contain at least three trade lines -- that is,

[8] The Uniform Residential Loan Application is produced by the GSEs; "Form 1003" is its designation by Fannie Mae. The identical document is Freddie Mac Form 65.

[9] FICO refers to a consumer credit score issued by the Fair Isaac Corporation.

credit accounts reported to credit rating agencies. Unexplained credit inquiries on a credit report may suggest undisclosed debt obligations that may negatively affect the borrower's DTI ratio calculation or even reflect deceit by the borrower. Credit inquiries made right around the time of the borrower's application for the loan, however, may reflect nothing more than the borrower shopping around for a good mortgage loan rate. The calculation of a borrower's DTI ratio will also typically include consideration of "payment shock," which refers to the degree to which a borrower's monthly housing payments will increase with the new loan.

The amount of information an originator gathers from a borrower depends on the type of loan being issued. A full documentation or "full doc" loan requires the borrower to substantiate current income and assets by providing documents, such as pay stubs, a W-2 form, and bank account statements. Other types of loans require less. Stated income, verified assets ("SIVA") programs do not require a borrower to provide documentation to support her represented income, but do require verification of assets. Stated income, stated assets ("SISA") programs do not require the borrower to provide documentation confirming her claim of either income or assets. And "No income, no assets" ("NINA") programs do not require borrowers

even to state an income or their assets, let alone confirm them with documentation.[10]

No matter what the loan program, however, underwriting guidelines require an originator to evaluate the borrower's ability and willingness to repay a mortgage loan. Accordingly, originators assess, inter alia, the reasonableness of disclosed income asserted by the borrower and use a variety of information to verify income and assets. For instance, a written or verbal verification of employment may be obtained and online sources may provide the underwriter with information about salary ranges based on occupation and location.

When a borrower fails to meet the requirements of an originator's underwriting guidelines, many originators permit their underwriters to exercise discretion and allow exceptions to the guidelines. The originators' guidelines typically explain the circumstances under which exceptions may be granted, including how to document any exception that has been made. Exceptions to guidelines are documented in the loan file (described below) so that the exceptions may be understood and evaluated by others within the organization and, in those cases in which the loan will be sold, by those who acquire the loan.

[10] For NINA loans, underwriters must rely on the borrower's credit history, credit score, and strength of the collateral, but may be required to obtain verification of employment.

Exceptions to underwriting guidelines typically require the presence of compensating factors. For example, a low LTV ratio, which reflects strong collateral securing the loan, might compensate for a higher-than-guidelines-permitted DTI ratio.

During the origination process, originators assemble the documents associated with the mortgage loan into a "loan file." The loan file includes, at a minimum, a borrower's completed Form 1003, a property appraisal, a credit report, and legally required documents like HUD-1 forms and TIL disclosures.[11] During the relevant period, documents were frequently received in paper form and then scanned to convert them to digital images, but this conversion might not occur until after the origination process. Some originators created and relied on electronic loan files.

[11] If a loan is approved, certain documents are required by law to be completed in connection with the issuance of the loan. The closing costs for the mortgage loan appear on a "HUD-1" form called a Settlement Statement or Closing Statement, which itemizes all of the money changing hands at closing. In addition, the originator must notify the borrower of the true cost of the loan, including finance charges and the schedule of payments. This appears on a truth-in-lending ("TIL") disclosure. Borrowers also have a right to rescind ("ROR") the transaction within three days of closing, which must likewise be disclosed. If the TIL and ROR disclosure are not available, it is more difficult to foreclose on the property in the event of a default.

2. Collateral

During the underwriting process, originators must also determine whether the value of the mortgaged property is sufficient to support repayment of the loan in the event of default. The primary tool for assessing the value of the collateral for the loan is an appraisal of the property. The most common metric for measuring the collateral risk associated with a loan is the LTV ratio. When the mortgage supports the purchase of a property, the value of the collateral is usually measured as the lesser of the sales price or the appraisal value. Appraisals are also prepared in connection with the refinancing of existing debt. Accurate appraisals are particularly important in the case of second mortgages, because an overstated appraisal value increases the likelihood that the liquidated collateral value will be insufficient to cover both the first and second mortgages.

Appraisals are, essentially, an estimate of a property's market value as of a given date. A central component of all residential appraisals is the selection of comparable properties with which to assess the value of the subject property ("comparables"). Appraisers are supposed to select the best comparables -- which typically means the geographically closest properties with the most similar characteristics, such as lot size, house size, style, and number of bathrooms -- that have

been the subject of sales transactions within the past year. Appraisers also consider market conditions, including housing supply and demand in the property's neighborhood.

Appraisers document their work in a formal report, usually using a Fannie Mae Form 1004 or Freddie Mac Form 70 Uniform Residential Appraisal Report ("URAR"). When the appraisal is in connection with a sale of the property, the appraiser is required to analyze the sales contract.

While accuracy and good faith should be the watchwords of appraisers, it is easy for appraisers to inflate their appraisals through their selection and analysis of comparables. For instance, an appraiser can choose a comparable from a nicer neighborhood, ignore key features of a comparable's sales price, such as thousands of dollars of assistance with closing costs or escrowed repair funds that are not associated with the value of the property, or ignore more recent comparables that reflect a local market's turn for the worse. An appraiser might also mislabel the number of stories in a comparable, or fail to follow up on evidence that a property had been flipped, raising doubt about the sales price's reflection of market value. For these reasons, the URAR is supposed to include sufficient information about each selected comparable and its relevant characteristics to permit meaningful review.

Appraisers may inflate their appraisals because of pressure from loan officers. An officer may mention the desired appraisal value he is seeking, ask for the appraiser to call back if she cannot hit a specific value, or send out appraisal assignments to multiple appraisers with the explanation that the assignment will be given to the first one who can find the target value. Appraisers can be made to understand that their ability to receive future assignments depends upon delivery of the desired results.

During the overheated housing market at issue here, residential appraisers felt intense pressure to inflate appraisals. Defendants' appraisal expert, Hedden, observed that such pressure was simply part of what appraisers were faced with "on a regular basis." Defendants' appraiser witnesses acknowledged that they and other appraisers with whom they worked experienced pressure to provide "predetermined appraisal values."

In a national survey of appraisers conducted in late 2006, 90% of the participating appraisers indicated that they felt some level of "uncomfortable pressure" to adjust property valuations.[12] This was an increase of 35% from a survey conducted three years earlier.

[12] The 2007 National Appraisal Survey was composed of 33 questions presented to "a representative group of the nation's

Indeed, the widespread feelings of discomfort prompted 11,000 appraisers in 2007 to submit a petition to Congress and the Appraisal Subcommittee of the Federal Financial Institutions Examination Council,[13] copying "[o]ther state or federal agencies with authority in the . . . matter." The petition explained that the signatories were licensed and certified real estate appraisers who

> seek your assistance in solving a problem facing us on a daily basis. Lenders . . . have individuals within their ranks, who, as a normal course of business, apply pressure on appraisers to hit or exceed a predetermined value.
>
> This pressure comes in many forms and includes the following:

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leading real estate appraisers." It was intended to give a comprehensive understanding of the real estate appraisal business in the second half of 2006 through 2007. Its predecessor, conducted in 2003, "shocked the industry when 55% of appraisers surveyed indicated that they felt uncomfortable pressure to overstate property values in greater than half of their appraisals." The component of the survey conducted in the last half of 2006 represented responses from 1,200 appraisers, and showed "an alarming increase" in the extent of pressure felt by real estate appraisers.

[13] The Federal Financial Institutions Examinations Council (FFEIC) is a formal interagency body empowered to prescribe uniform principles, standards, and forms for the federal examination of financial institutions, and to make recommendations to promote uniformity in the supervision of financial institutions. FFIEC, https://www.ffiec.gov (last visited May 11, 2015). The FFEIC Appraisal Subcommittee was created to provide federal oversight of state appraiser regulatory programs and a monitoring framework for the Federal Financial Institutions Regulatory Agencies in their roles to protect federal financial and public policy interests in real estate appraisals utilized in federally related transactions. Appraisal Subcommittee, https://www.asc.gov/Home.aspx (last visited May 11, 2015).

- the withholding of business if we refuse to inflate values,
- the withholding of business if we refuse to guarantee a predetermined value,
- the withholding of business if we refuse to ignore deficiencies in the property,
- refusing to pay for an appraisal that does not give them what they want,
- black listing honest appraisers in order to use "rubber stamp" appraisers, etc.

The petition requested action. It added, "We believe that this practice has adverse effects on our local and national economies and that the potential for great financial loss exists. We also believe that many individuals have been adversely affected by the purchase of homes which have been over-valued."[14]

It was against this backdrop that in 2008 FHFA announced the Home Valuation Code of Conduct ("HVCC"). See T. Dietrich Hill, Note, The Arithmetic of Justice: Calculating Restitution for Mortgage Fraud, 113 Colum. L. Rev. 1939, 1946 & n.49 (2013). Under the HVCC, the lender, whether it be a bank or a mortgage company, was not permitted to have direct, substantive contact

[14] While the survey and petition were received only for the state of mind of the appraisers, and not for the truth that lending officers actually exerted the pressure of which the survey participants and petitioners complained, virtually every trial witness with knowledge of the appraisal industry, including defendants' witnesses, confirmed that such pressure existed.

with the appraiser. Even though the HVCC was only briefly in effect, see 15 U.S.C. § 1639e(j) ("[T]he Home Valuation Code of Conduct announced by the Federal Housing Finance Agency on December 23, 2008, shall have no force or effect."), one of the residential home appraisers testifying for defendants indicated that the HVCC had a salutary effect on the practices of lending officers.

B. Overview of the Securitization Process

The loans at issue here were sold almost immediately after origination. During the period 2005 to 2007, originators sold subprime and Alt-A loans either individually or in the aggregate in what are known as trade pools to sponsors, like Nomura. With these sales, the originators received payments allowing them to originate more loans.

A sponsor could accumulate tens of thousands of loans from scores of originators. Sponsors would then select loans from among those on its books, place the selected loans into groups for securitization, and sell them to depositors, typically a sponsor's affiliate. Depositors would transfer the groups of loans to trusts created specifically for each securitization. These loans formed the supporting loan groups ("SLGs") whose principal and interest payments were channeled to investors. Depositors issued certificates entitling holders to payments; these would then be marketed and sold by underwriters.

When selling a pool of loans, the originator provided a "loan tape" for the loans. Loan tapes are spreadsheets containing 50 to 80 fields of collateral and borrower data for each loan, including the borrower's name, street address, FICO score, DTI ratio, LTV ratio, property type, loan amount, loan purpose, interest rate, owner-occupancy status, documentation program, and presence of mortgage insurance. The information on these loan tapes was the principal source of data for the disclosures to investors and the SEC that were made in the Offering Documents for the PLS. A more detailed description of this process and the roles played by critical participants in this process follows.

1. The Sponsor

Each RMBS needed a sponsor. Sponsors purchase loans from originators or loan aggregators, a transaction that is generally governed by a Mortgage Loan Purchase Agreement, which contains representations and warranties. The sponsor holds title to the loans before they are transferred to the RMBS depositor. During the securitization process, sponsors have access to information about individual loans, including the loan files created at the time the loan was originated and the loan originator's guidelines. As the loans it holds on its books mature, sponsors also have access to information about loan performance from the loan's servicers, such as any delinquency or default history.

2. The Depositor

Depositors are special purpose vehicles ("SPVs") -- essentially shell corporations -- that exist for one purpose: to purchase the loans from the sponsor and deposit them in a trust. This step creates a true sale of the assets, thereby protecting certificate-holders against the risk of a subsequent bankruptcy by the sponsor. The depositor establishes a trust and deposits the loans into the trust in exchange for certificates. The depositor also issues Registration Statements, Prospectus Supplements, and other Offering Documents for the securitization. Apart from their directors and officers, SPVs typically have no employees or other business operations.

The RMBS trusts created by depositors are typically established pursuant to a Pooling and Servicing Agreement ("PSA"). The trustee for each trust is generally responsible for maintaining custody of operative documents related to the mortgage loans, receiving the cash flows each month from the entities servicing the loans, and allocating the cash flows to the certificate-holders and others pursuant to the rules laid out in the PSA.

3. The Underwriter

To pay for the loans it has purchased, the depositor sells the certificates produced during the trust transaction to the underwriters who will take the securities to market. The lead

underwriter for an RMBS often designs the structure of the securitization and coordinates with the rating agencies to obtain credit ratings for the deal. Typically, the lead underwriter is also responsible for performing due diligence to ensure that the Offering Documents are accurate and complete. If an underwriter's due diligence uncovers discrepancies between the loans intended for the RMBS and the description of the loans in the Offering Documents for the securitization, it may choose to eliminate non-conforming loans from the loan pool or to revise the Offering Documents for the securitization so that they accurately describe the loans.

4. The Servicer

Another entity essential to securitization is the loan servicer. The servicer for the mortgage loans interacts with the individual borrowers on behalf of the trust. It collects monthly mortgage payments and forwards the receipts to a master servicer or trustee. When a loan becomes delinquent, the servicer takes steps to cure the delinquency. These steps may include foreclosure proceedings that may in turn result in the trust obtaining ownership of the property, which is referred to as Real Estate Owned ("REO"). The servicer is then responsible for selling the REO property and forwarding the liquidation proceeds to the master servicer or trustee.

C. Structure of an RMBS Instrument and Credit Enhancement

RMBS certificates are backed by one or more groups of loans that collateralize a certificate. The stream of payments that are made to investors in RMBS over time consist of the principal and interest payments on the certificates. These flow from the underlying principal and interest payments made by the individual borrowers on the mortgage loans within the SLG (or SLGs); the rate at which interest payments are made to investors in an RMBS is referred to as the coupon rate.

The credit profile of RMBS can be improved through "credit enhancement" features. These features are critically important to credit rating agencies, particularly for RMBS supported by subprime and Alt-A loans. Enhancements are designed to protect investors in the more senior certificates -- the more expensive, less risky, and higher-rated certificates -- from loss. Credit enhancements can be external or internal. External enhancements include bond insurance or financial guarantees. Internal RMBS credit enhancements include subordination and overcollateralization.

1. Subordination

Subordination refers to a structure in which each class or tranche of certificates has a different right to the flow of payments and the allocation of losses. Credit risk in the pool is thus distributed unequally among the certificate-holders,

usually protecting the senior certificates against losses at the expense of junior certificates. Certificates in senior tranches are given a first claim on cash flows and a last position with regard to losses. Only after senior-tranche certificates have been "filled up" does payment flow to more junior tranches. This pattern is followed for all subordinate certificates; once they are filled up, the next in line receives its payments. This is referred to as a "waterfall," as the payments cascade from the senior tranches to the junior in a fixed order.[15] Because they carry less risk, the more senior class of certificates have higher credit ratings and earn less in interest. In subprime RMBS during 2005 to 2007, subordinate tranches were typically designed to absorb a complete loss on the order of 20% to 30% of the underlying collateral; in Alt-A transactions, the subordinated tranches were generally designed to protect against losses on the magnitude of 5% to 10%.

2. Overcollateralization

Overcollateralization occurs when the total balance on the mortgage loans in the securitization exceeds the total balance on the mortgage loans underlying the certificates issued. This excess collateral insulates the certificates from loss.

[15] Rules of allocation among the certificates are set out in the PSA. Depending on the terms of the PSA, senior certificates may also receive portions of the cash flows from loans in other SLGs.

D. Securing a Credit Rating

Credit ratings for securities reflect a judgment by credit agencies about the credit risk of owning the security. A higher rating signals a less risky security. Senior certificates in RMBS are usually rated AAA (or triple-A), which is the highest rating level. Junior certificates usually have lower credit ratings. Since the rating of AAA conveys the same credit risk regardless of whether the RMBS are backed by prime or non-prime loans, RMBS backed by non-prime loans necessarily require greater credit enhancement to obtain a AAA rating.

Three rating agencies were principally involved in rating the RMBS at issue here: Moody's, S&P, and Fitch. The sponsor, depositor, or the underwriter of an RMBS provides information to rating agencies so that the agencies can evaluate the risk in the pool of loans and issue appropriate credit ratings for the certificates. Such information was contained on loan tapes.

Of particular importance to agencies providing ratings for subprime and Alt-A RMBS were the LTV ratios of the loans in the proposed securitization. In their view, LTV ratios were "key predictors" of foreclosure rates and an LTV ratio of 80% was a particularly critical threshold. According to S&P's criteria for reviewing subprime transactions, loans with LTV ratios between 80% and 90% are one-and-a-half times more likely to be foreclosed than loans with LTV ratios below 80%. And loans with

LTV ratios between 95% and 100% are 4.5 times more likely to enter foreclosure than loans with LTV ratios below 80%. Rating agencies also attached importance to the property's occupancy status, since borrowers are more likely to make payments on their primary residence, and to originators' compliance with their own underwriting guidelines, because agencies viewed compliance with an originator's guidelines as assurance that a loan was legitimate.

To assess a securitization, rating agencies relied on the accuracy of the loan tapes provided by the sponsor or underwriter. The agencies did not have access to the loan files or conduct any due diligence to verify the loan tape data. Using loan tape data, the three credit rating agencies used models to forecast foreclosure frequency, expected losses, and cash flows on the RMBS that they rated. The ratings and loss estimates generated by the models were extremely sensitive to loan-level data; if incorrect data was used -- data reflecting more favorable loan characteristics -- these models would require less credit support than should have been required of the securitization. At times, rating agencies advised sponsors what degree of subordination would be required to obtain a AAA or equivalent rating. Credit rating agencies reserved the right to request additional information about the loans to maintain their ratings or to withdraw their ratings entirely in the event

information supplied to them was inaccurate or misrepresented. Analysts at rating agencies also reviewed Offering Documents to confirm that they included representations and warranties attesting to the accuracy of the loan-level information and that the mortgage loans had been originated in compliance with the originators' underwriting guidelines.

E. "Scratch-and-Dent" Loans

RMBS were only as good as their underlying mortgage loans. When, at the time of securitization, loans were known not to comply with originators' guidelines, to have missing documentation, or to have already become delinquent, the loans were referred to as "scratch-and-dent" loans. To obtain AAA ratings, credit rating agencies would typically demand more credit enhancements and structural safeguards like more overcollateralization or higher levels of subordination. RMBS with scratch-and-dent loans typically traded at discounts to par value.

When loans that were acknowledged as scratch-and-dent loans were securitized and sold, non-compliance was reported in Offering Documents, for instance, by referring to the loans as having impaired loan documentation or as loans that have been delinquent or "modified." The disclosure documents might also advise that a specific percentage of the loans were originated with "substantial deviations" from the originators' guidelines,

or even specifically state that the loans "violated the underwriting guidelines or program guidelines under which they were intended to have been originated" and describe specific defects such as "the failure to comply with maximum loan-to-value ratio requirements."

F. RMBS Market Dynamics

During the period 2005 to mid-2007, the supply and demand for RMBS increased significantly, and competition among RMBS sponsors was intense. To function at all, the RMBS market required cooperation between entities at all levels of the process. In particular, issuers of RMBS built and strengthened their relationships with originators, who supplied the loans being bundled and sold.

Participants in a securitization were often vertically integrated, meaning that participants like the sponsor, the depositor, and the underwriter, or some combination thereof, were often related or affiliated. Vertical integration meant that the senior individuals working on a particular RMBS at the sponsor, underwriter and depositor were often the same individuals.

II. The Seven At-Issue Securitizations

Defendants sold the GSEs seven certificates ("Certificates"),[16] which in turn were part of the seven separate Securitizations. A brief summary of the relevant facts and circumstances surrounding those Securitizations follows.

Each of the seven Securitizations was issued pursuant to one of three shelf registrations.[17] Each Securitization was described in a set of Offering Documents, consisting of the original Registration Statement, any Amended Registration Statements, a Prospectus, and a Prospectus Supplement. The representations made in the seven Prospectus Supplements, described in detail below, are at the heart of the Nomura Action. In total, three Registration Statements and four Amended Registration Statements were used to issue the seven Securitizations.

As the table below shows, Nomura acted as sponsor and depositor for all seven of the Certificates, and as the sole

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[16] Fannie Mae purchased one Certificate in a senior tranche of Securitization NAA 2005-AR6. Freddie Mac purchased Certificates in senior tranches of the six other Securitizations: NHELI 2006-FM1, NHELI 2006-HE3, NHELI 2006-FM2, NHELI 2007-1, NHELI 2007-2, and NHELI 2007-3.

[17] Shelf registrations are pre-approved Registration Statements that allow new securities to be issued upon the filing of a Prospectus Supplement. See 17 C.F.R. § 230.409, .415; FHFA v. UBS Americas, Inc. ("UBS I"), No. 11cv5201 (DLC), 2012 WL 2400263, at *2 (S.D.N.Y. June 26, 2012).

lead underwriter and seller for two of them. RBS was the sole lead underwriter for three of the Certificates and a co-lead underwriter for a fourth.

Securitization	Sponsor	Depositor	Lead Underwriter(s)
NAA 2005-AR6	NCCI	NAAC	Nomura Securities
NHELI 2006-FM1	NCCI	NHELI	Nomura Securities
NHELI 2006-HE3	NCCI	NHELI	RBS & Nomura Securities
NHELI 2006-FM2	NCCI	NHELI	RBS
NHELI 2007-1	NCCI	NHELI	RBS
NHELI 2007-2	NCCI	NHELI	RBS
NHELI 2007-3	NCCI	NHELI	Lehman Brothers Inc.

The Certificates were all offered by means of Prospectus Supplements. Each Supplement bore a "Supplement Date," included a "Cut-off Date," and was filed with the SEC on a "Filing Date." The Supplement Date is the date actually listed on the cover of the Prospectus Supplement; the Cut-off Date is the "date for establishing the composition of the asset pool" in a securitization, see 17 C.F.R. § 229.1103(a)(2); and the Filing Date is the date on which the Prospectus and Prospectus Supplement were actually filed with the SEC. The table below provides these dates.

Securitization	Cut-off Date	Supplement Date	Filing Date
NAA 2005-AR6	11/1/2005	11/29/2005	11/30/2005
NHELI 2006-FM1	1/1/2006	1/27/2006	1/31/2006
NHELI 2006-HE3	8/1/2006	8/29/2006	8/30/2006
NHELI 2006-FM2	10/1/2006	10/30/2006	10/31/2006
NHELI 2007-1	1/1/2007	1/29/2007	1/31/2007
NHELI 2007-2	1/1/2007	1/20/2007	2/1/2007
NHELI 2007-3	4/1/2007	4/27/2007	5/1/2007

A summary of the seven Certificates' relevant characteristics, including the Certificates' tranches and their primary SLG, is provided in the table below.[18]

[18] NAA 2005-AR6 differs in some minor, but meaningful ways from the other six Securitizations. For one thing, it produced the only Certificate purchased by Fannie Mae, and is the only Securitization whose depositor was NAAC. More important for purposes of this Opinion is that it was not subject to the enhanced disclosure requirements of Regulation AB, which became effective on January 1, 2006. Accordingly, some of the language in its Prospectus Supplement is different from that appearing in the other six. Where NAA 2005-AR6 differs in these or other ways, this Opinion will note such differences.

Securitization	Tranche	SLG	Loans in SLG	SLG Aggregate Principal Balance
NAA 2005-AR6	III-A-1	III	376	$79,889,908
NHELI 2006-FM1	I-A	1	2,532	$405,436,188
NHELI 2006-HE3	I-A-1	1	3,618	$586,249,148
NHELI 2006-FM2	I-A-1	1	3,891	$677,237,695
NHELI 2007-1	II-1-A	II-1	474	$108,349,253
NHELI 2007-2	I-A-1	1	3,001	$481,674,027
NHELI 2007-3	I-A-1	1	1,896	$334,386,584

Together, the Certificates had an original unpaid principal balance of approximately $2.05 billion, and the GSEs paid slightly more than the amount of the unpaid principal balance when purchasing them. A Freddie Mac trader located at Freddie Mac's headquarters in McLean, Virginia purchased six Certificates; a Fannie Mae trader located at its headquarters in Washington, D.C. purchased the NAA 2005-AR6 Certificate. The purchase prices paid by the GSEs are listed below.

Securitization	Purchase Price
NAA 2005-AR6	$65,979,707[19]
NHELI 2006-FM1	$301,591,187[20]
NHELI 2006-HE3	$441,739,000
NHELI 2006-FM2	$525,197,000
NHELI 2007-1	$100,548,000
NHELI 2007-2	$358,847,000
NHELI 2007-3	$245,105,000

[19] This amount includes $316,246 in accrued interest.

[20] This amount includes $41,187 in accrued interest.

A. Principal and Interest Payments

The GSEs still hold the seven Certificates and have continued to receive principal and interest payments on them. The coupon rates for six of the seven Certificates were tied to the London Interbank Offered Rate ("LIBOR") rate. Six of the Prospectus Supplements stated that "[t]he per annum pass-through rate on the . . . Certificate[] will equal the lesser of (i) the sum of One-Month LIBOR for that distribution date plus" one of two percentages "or (ii) the applicable Net Funds Cap." The exception was NAA 2005-AR6, which provided for an initial fixed interest rate.[21]

The amount of principal and interest on the Certificates received by the GSE from date of exchange through February 28, 2015, as stipulated to by the parties, is provided below.

[21] The Prospectus Supplement explained that "[t]he initial pass-through rate on the Class III-A-I Certificates is equal to approximately 6.04468% per annum. After the first distribution date, the per annum pass-through rate on the Class III-A-1 Certificates will equal the weighted average of the net mortgage rates of the Group III mortgage loans."

Securitization	Principal Payments Through 2/28/2015	Interest Payments Through 2/28/2015
NAA 2005-AR6	$42,801,327	$17,517,513
NHELI 2006-FM1	$282,411,183	$23,756,542
NHELI 2006-HE3	$331,937,382	$34,559,137
NHELI 2006-FM2	$346,402,921	$42,099,996
NHELI 2007-1	$53,271,881	8$8,701,219
NHELI 2007-2	$235,700,674	$29,010,757
NHELI 2007-3	$127,924,783	$19,350,587

B. Age of Supporting Loans

There were over 32,000 loans supporting the Seven Securitizations. Of these, 15,806 are in the primary SLGs supporting the seven Certificates. Most of the loans supporting the Certificates were originated months before their securitization.[22] The table below illustrates that the "time gap" between a loan's origination and a Securitization's filing date was over 90 days for almost 2/3 (68.2%) of the loans

[22] Graham explained that collateral typically stayed on Nomura's books for roughly the duration of Nomura's agreements with originators permitting it to return loans in early payment default, a period he recalls as "three to four months."

backing these seven Certificates.[23] For almost 60%, the gap was four months or more.

Securitization	Loan Count	0 - 30 days	31 to 60 days	61 to 90 days	91 to 120 days	121 to 150 days	151 to 180 days	Greater than 180 days
NAA 2005-AR6	325	0	29	226	57	0	13	0
NHELI 2006-FM1	2532	0	0	2532	0	0	0	0
NHELI 2006-FM2	3891	0	0	0	0	3891	0	0
NHELI 2006-HE3	3613	0	0	304	1064	538	1201	506
NHELI 2007-1	403	14	125	184	79	1	0	0
NHELI 2007-2	3001	0	1438	0	208	320	458	577
NHELI 2007-3	1914	0	0	35	18	952	61	848
Total:	15,679	14	1,592	3,281	1,426	5,702	1,733	1,931

C. The Certificates' Credit Enhancements

Each Certificate is in a senior tranche of its Securitization, and each Securitization had several credit enhancements designed to shield senior certificates from losses. Among other things, each of these Certificates was protected by from five to eleven subordinated tranches.[24]

For example, in NHELI 2006-FM1, Freddie Mac purchased a Certificate linked to the senior-most tranche, class I-A-1, which was supported by loans from SLG I. That tranche had an initial principal balance of approximately $428 million; the subordinated tranches had a total principal balance of

[23] The total number of loans displayed in the table is only 15,679 instead of the 15,806 underlying the seven Securitizations. Necessary information was unavailable for the remainder of the loans.

[24] One of the Securitizations -- NAA 2005-AR6 -- had a "super-senior" tranche from which the GSE Certificate was purchased.

approximately $220 million. All realized losses on Group I loans were to be allocated to the subordinated tranches, until their $220 million principal balance was reduced to zero. Only then would losses begin to affect the senior tranches. Holding a senior tranche Certificate also entitled the GSE to principal payments from a separate SLG: if payments from Group II were made in full on that SLG's associated certificates, any additional cash flow would go to the GSE's senior certificate.

The table below displays the number of tranches subordinate to the GSEs' Certificates for each Securitization, as well as the face value of those subordinate tranches. In each case, a subordinate tranche designated "Tranche X" represented the Certificate's overcollateralization.

Securitization	**Number of Subordinate Tranches**	**Face Value of Subordinate Tranches**
NAA 2005-AR6	6	$64,412,464
NHELI 2006-FM1	12[25]	$220,837,934
NHELI 2006-HE3	12	$264,970,098
NHELI 2006-FM2	12	$275,696,345
NHELI 2007-1	9	$43,208,528
NHELI 2007-2	11	$237,310,229
NHELI 2007-3	10	$305,662,765

[25] Two of these were "Class B," or "Non-Offered" Certificates, which were not "being publicly or otherwise offered by th[e] prospectus supplement." No distinction is made here between

III. Due Diligence

Nomura came late to the RMBS business. It made its first subprime purchase in the spring of 2005, at a time when activity in the RMBS market was already intense, and it exited the RMBS business in late 2007, at a time when the market was imploding. Nomura was an aggregator of mortgage loans that were originated by others. Nomura's Trading Desk purchased the approximately 16,000 loans that populated the seven SLGs backing the GSEs' Certificates from many different sellers. 122 of the loans were purchased individually through Nomura's loan-by-loan channel, and the rest were plucked from 194 trade pools acquired by Nomura ("Trade Pools"). Together, these 194 Pools held over 54,000 individual loans.

After it won a bid for a Trade Pool, but before it purchased the Pool, Nomura performed a due diligence review of loans in the Pool. The group designated to conduct due diligence was a small, isolated unit within Nomura that was inadequately integrated into the overall operations of the company. Nomura never created any written due diligence procedures or standards to guide the work of this unit. By and large the unit was beholden to the Trading Desk, which made many

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Offered and Non-Offered Certificates for purposes of describing each Supplement's credit enhancements.

of the key decisions that governed the operations of the due diligence unit. And, despite the mistaken assertions of top Nomura officials, the unit responsible for pre-acquisition due diligence had no role whatsoever in reviewing disclosures made in the Prospectus Supplements about the mortgage loans that backed the SLGs.

In conducting its pre-acquisition due diligence, Nomura repeatedly made choices intended to save money and to satisfy the sellers of the loans. Nomura routinely purchased and then securitized loans that had received "failing" credit and compliance grades from its due diligence vendors. It failed to subject thousands of the loans at issue here to genuine credit or valuation diligence, opting instead to use less expensive screening mechanisms. And once the loans were on Nomura's books -- with limited exceptions that are immaterial for present purposes -- Nomura performed no further diligence. Nomura neither performed credit nor valuation due diligence once it had determined which loans would populate the SLGs supporting its securitizations, nor did it consider the information gleaned from the credit and valuation due diligence that had been performed on any of those loans before Nomura purchased them. Nor did Nomura use crucial information learned through due diligence when composing its descriptions of loans in the Prospectus Supplements.

RBS's due diligence was no better. Despite serving as lead underwriter on three of the seven Securitizations and co-lead underwriter on a fourth, RBS relied almost exclusively on Nomura's pre-acquisition due diligence results for two of the Securitizations, and the diligence it performed on the loans in the other two Securitizations was perfunctory. This section describes these programs and their failures.

A. Nomura's Due Diligence

At the time that he was Chief Legal Officer ("CLO") for NHA and Nomura Securities, Findlay oversaw the creation of Nomura's due diligence program. But beyond attending some very large meetings with consultants at some point between 2002 and 2004, he remembers nothing about this. And in the period between its creation and its shuttering in 2007, no part of Nomura's due diligence program was ever reduced to writing. Nomura has no written manual or guidelines and no fixed policies to govern its review of loans at either purchase or securitization.

1. Bidding Process

Normura's website posted the terms or pricing matrix that Nomura applied when purchasing individual loans. Among the criteria used in the matrix were the loan's LTV ratio at various points compared to the loan amount, for instance, at five step increments between an LTV ratio of 80 and 95. Other criteria included the FICO score, DTI ratio, and owner-occupancy status.

According to the matrix, Nomura would pay more for a loan with a lower LTV ratio, a higher FICO score, a lower DTI ratio or that was owner-occupied. Nomura's matrix reflected its understanding of the models used by credit ratings agencies and how they would grade classes of loans in a securitization. It was Nomura's policy not to purchase loans with an LTV ratio over 100% or a DTI ratio over 55%.

The securitization process at Nomura began with the announcement by an originator or seller that it had a pool of loans for sale. The seller sent an email to potential buyers attaching a loan tape. Using the information on the pool sent by the seller, a collateral analyst at Nomura would stratify the data according to various traits, such as the percentage of loans in the pool that fell within different FICO score ranges, thereby creating what Nomura called "strats." The analyst would also load the loan tape data into a central database to track each individual loan on its journey through purchase and securitization. The Nomura database was called the Loan Management System ("LMS").

The loan tape data describing the characteristics of a loan that was entered into LMS was never altered, although it would be later augmented by servicing information if Nomura purchased the loan. Thus, the originator's description of the borrower's FICO score and DTI ratio, the LTV ratio for the property, and

the property's owner-occupancy status would not be changed even if Nomura might learn contrary information during pre-acquisition due diligence or while the loan was on its books.

Traders at Nomura then reviewed the strats, which gave them a rough snapshot of the loan pool, and made a decision whether to make a bid for the pool of loans. Through this process Nomura purchased loans in trade pools, which were classified as "mini-bulk" (balance of less than $25 million) or "bulk" (balance of more than $25 million) lots. Roughly 89% of the loans in the seven SLGs came from bulk Trade Pools.[26] With certain loan originators, the Trading Desk entered into agreements that capped the sample size of loans it could review during pre-acquisition due diligence. For example, when purchasing a Fremont Trade Pool, Nomura and Fremont agreed that Nomura would perform due diligence on a 25% sample.

2. The Diligence Group

After Nomura won a bid on a trade pool, it was the responsibility of the Diligence Group, also referred to as the Credit Group or Residential Credit Group,[27] to conduct due

[26] Of the 194 Trade Pools that supplied loans to the seven SLGs, 140 were mini-bulk pools, which contributed 1,561 loans to the SLGs, and the remaining 54 were bulk pools, which contributed 14,123 loans to the SLGs.

[27] For consistency, this Opinion uses the phrase "Diligence Group."

diligence on the loans. The Diligence Group coordinated due diligence on the basis of the loan tapes supplied by each originator; it never reviewed the originator's loan files.

The Diligence Group was small. For most of the relevant period, it consisted of just three people. From 2005 to mid-2006, Kohout was the head of the Diligence Group; in mid-2006, he was replaced by Spagna.[28] Throughout, the Group was supervised by Graham in his capacity as the head of the Transaction Management Group. Graham, in turn, was supervised by LaRocca. Kohout, Spagna, Graham and LaRocca all testified at trial; the deposition testimony of Hartnagel and Scampoli was received into evidence.

The Diligence Group was too small to do an effective job, a point that its first manager repeatedly made in writing and in conversation with his colleagues. The Diligence Group also lacked independence. It was the Trading Desk that made the important structural and methodological decisions. The Trading Desk dictated the size of any due diligence sampling and even, in some instances, which methods would be employed in choosing samples and which tests would be run on the samples. As early as April 2005, Kohout warned that the Trading Desk's decisions

[28] From 2005 to 2006, Hartnagel and Menachem "Mendy" Sabo were the only other members of the Group; in mid-2006, Hartnagel was replaced by Scampoli, a consultant brought in by Spagna.

resulted in "Credit's role in both the sample selection and management of risk on bulk transactions [being] diminished to the point of that of a non effective entity." The Trading Desk was seemingly oblivious to the very serious risks associated with some of its decisions. For example, it proposed that Nomura purchase loans whose files were missing crucial documents, such as final Form 1003 and HUD-1, and enter a side-letter agreement allowing the seller to produce the missing forms later. Kohout pointed out that this was an invitation to fraud.[29]

As was customary among securitizers, Nomura relied on vendors to perform most of its due diligence work. Nomura's vendors included Clayton, AMC, CoreLogic, and Hansen Quality ("Hansen"). Those vendors sent a continuous flow of voluminous reports to the Diligence Group. The Diligence Group was too leanly staffed to do any careful review of the data. Over and over again, it simply "waived in" and purchased loans its vendors had flagged as defective.

Three types of diligence are of particular importance to the issues in this case, and they are described in detail here. They are credit, compliance, and valuation due diligence. In

[29] Kohout left the conclusion to the imagination, writing, "[T]o re-create a Final 1003, which will be dated after closing....."

credit due diligence, the originator's loan files are reviewed to assess whether the loan was originated in compliance with the originator's written underwriting guidelines. Compliance due diligence determines whether the loan was issued in compliance with federal, state, and local laws and regulations. Valuation due diligence assesses the reasonableness of the original appraised value of the underlying property.[30]

3. Credit & Compliance Due Diligence

Nomura conducted its pre-acquisition credit and compliance due diligence in two ways. For single loan acquisitions and some mini-bulk pools, Nomura sent all of the loans to its vendors for credit and compliance review. For larger mini-bulk pools and all bulk pools, Nomura's Trading Desk would dictate a sample size for review. Accordingly, the credit and compliance review for the vast majority of the loans purchased by Nomura was conducted on a sample whose size was dictated by the Trading Desk.

[30] Nomura conducted its credit due diligence and compliance due diligence simultaneously using the same vendors and methodology. For purposes of this Opinion, they will be considered together. Two other kinds of diligence were also performed: data integrity diligence checked that the information in Nomura's central LMS database matched the description given by the originator in the loan file and the Prospectus Supplements, and collateral diligence checked the loan file to ensure that several documents critical to the transfer of title were not missing. These included the original note, mortgage, allonges, assignments, endorsements, and title insurance policies.

While Nomura witnesses testified that Nomura's Diligence Group could request permission to increase the size of the sample, Nomura presented no evidence of any instance in which such permission was granted. Indeed, the only evidence about a specific request revealed just the opposite. When the Diligence Group asked permission to increase a sample size for a pool of loans originated by Fremont, the Trading Desk refused. Fremont loans were the only loans underlying NHELI 2006-FM1 and NHELI 2006-FM2.

a. Sampling

Nomura generally sampled between 20% and 35% of bulk pool loans. Nomura typically used larger samples from bulk pools when it was buying loans for the first time from an originator or where the trade pool included unfamiliar loan products.[31]

When selecting the loans for a sample, Nomura did not use random sampling. This made it impossible to extrapolate to an entire pool the results from conducting due diligence on only a sample of the loans. Nor did Nomura, despite its claim at trial, use truly "adverse" sampling. Instead, at the insistence of the Trading Desk, the Diligence Group used S&P Financial Services LLC's LEVELS software to choose at least 90% of the

[31] For some of the bulk pools at issue here, Nomura subjected the entire pool or virtually the entire pool to credit and compliance due diligence.

loans in the sample. The LEVELS program relies solely on loan tape information in making its selection of a sample.[32] Kohout complained at the time, and to no avail, that using LEVELS did "not conform to what is generally deemed to be effective by industry standards." As Kohout explained at trial, using LEVELS made it impossible to select a sample based on a prediction of which loans were more likely to have "adverse" characteristics, such as a misstated LTV ratio or DTI ratio, an unreasonable "stated" income, or to find loans that deviated from the originator's underwriting guidelines.

As for the remaining 10% of the sample, however, the Diligence Group did take a stab at using adverse selection. A member of the Diligence Group would look at the loan tape for the trade pool and use his judgment to hand-pick up to 10% of the sample on the basis of characteristics such as high DTI ratios, borrowers' low FICO scores, and low documentation loans.

b. Instructions to Vendors

Clayton and AMC conducted credit and compliance review for Nomura using the originator's loan file, the originator's

[32] LEVELS was a collateral valuation model that estimated lifetime loss. It was based on historical mortgage performance data, updated with performance trends.

written underwriting guidelines,[33] and Nomura's standard bid stipulations or "bid stips." Bid stips are provided to the entity selling the loan pool and list the bidder's minimum requirements for the loans in the pool, such as a defined LTV ratio or FICO score. If a loan in the pool does not meet the bid stips, then the bidder can "kick" the loan out of the pool.

Nomura's standard bid stips for subprime loans were close to the rock bottom requirements in the underwriting guidelines of originators during the period 2005 to 2007, and imposed very little additional screening of the loans. For instance, Nomura's "bid stips" included no DTI ratio greater than 55%, no FICO score less than 500, and no LTV/CLTV ratio over 100%. These were identical to the minimum standards used during this time, as identified by FHFA's expert, by originators in issuing loans. Several of Nomura's other bid stips are immaterial to the issues here.[34] In a few other instances, Nomura's bid stips varied slightly from the origination industry's minimum standards. For instance, Nomura barred SISA, NINA, and No Doc loans from first-time homebuyers with an LTV/CLTV ratio over

[33] The vendors did not confirm that the guidelines were the ones used to underwrite the loan; they used the set of guidelines provided to them by Nomura or the originator.

[34] For example, Nomura refused to buy mortgage loans for log homes or loans "secured by properties in Fallon, NV . . . due to arsenic in the water."

95%; FHFA's expert, by contrast, identified a blanket 100% LTV ratio ceiling for such loans as the industry's minimum standard.[35]

While Clayton also gave its clients the opportunity to create "overlays" for the vendor to use in reviewing the loans, unlike most of its clients, Nomura refused to provide any credit overlays to Clayton. If Nomura had provided overlays, then Clayton would have flagged any non-compliant loans for closer review by Nomura. Nomura's failure to provide credit overlays was striking since Clayton repeatedly asked Nomura to do so, even escalating its requests to supervisors. On six different occasions over a two month period in the early summer of 2005, Clayton implored Nomura to send an overlay.

Not only did Nomura not provide Clayton with overlays to flag loans requiring more careful review, midway through 2006, Nomura told Clayton that it needed to relax its due diligence

[35] In at least one instance, Nomura's bid stips imposed higher standards than those identified by FHFA's expert as the industry's minimum standards: Nomura barred delinquent loans completely, while the minimum industry standards allowed for exceptions based on a specified number of months of missed payments. When it came to the "seasoning" of a borrower's ownership in the case of borrowers seeking to refinance, however, Nomura had a more relaxed approach than the industry's minimum standards: Nomura required only six months of seasoning on cash-out/refinance loans, while the industry's minimum required 12 months seasoning with certain exceptions. "Seasoning" refers to the aging of a mortgage expressed as elapsed time since origination.

process. Nomura explained that it was revamping its process to "increase approval rate, improve seller satisfaction with the due diligence process, and decrease efforts all around."[36]

Nomura never provided AMC with overlays either. It gave AMC no special instructions for the review of loan files.

c. Credit and Compliance Vendor Procedures

Clayton and AMC hired underwriters to perform the review of and assign a grade to each loan that Nomura sent to it. That review was severely restricted. With one possible exception,[37] the underwriters did not conduct any investigation of the credit quality of the loan beyond a comparison of the documents in the loan file to the originator's underwriting guidelines and Nomura's bid stips. For example, the underwriters did not confirm representations of owner occupancy or employment, investigate credit inquiries appearing on the credit report in the loan file, conduct further credit checks, consult public records, or perform a fraud review. Moreover, on occasion, when

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[36] The Court has reconsidered its admission of plaintiff's exhibit 1894, a Clayton document further describing the relaxation of Nomura standards in 2006. That document is stricken from the trial record.

[37] There was evidence that underwriters may have on occasion consulted online salary databases to assess the reasonableness of stated income and that at least Clayton also relied on default overlays. None of the parties suggested that either of these processes had any measurable impact on the grading of the loans.

underwriting guidelines were lengthy, Clayton provided its underwriters with a summary of critical components of the guidelines to speed review.[38]

For both credit and compliance, underwriters graded loans on a scale of "EV1" to "EV3." According to Clayton's underwriting manual, loans graded "EV1" for credit were fully compliant "with all specific loan program parameters," which included compliance with the loan originator's underwriting guidelines and Nomura's bid stips. Loans graded "EV2" had "some deviations," but those exceptions were judged to be either immaterial or offset by "sufficient compensating factors." Loans graded EV3 typically had "substantial deviations" with "insufficient compensating factors to offset the overall risk." Nonetheless, the vendor would list any positive aspects of the loan to bring them to the client's attention. According to Kohout, a final EV3 grade was "fatal."

d. Nomura's Review of Vendors' Results

While diligence was underway, Clayton and AMC sent Nomura a constant stream of reports, often on a daily basis. These arrived in the form of event status reports, which were

[38] Concerned as early as September 2005 with its profitability on Nomura projects, Clayton decided that "drastic changes" were in order. To accelerate the underwriting process, Clayton began preparing "hot point summaries," that is, quick-reference cheat-sheets that condensed originators' guidelines.

spreadsheets that listed loans and their corresponding grades; exception detail reports, which were omnibus spreadsheets containing summary data on loan defects; and individual asset summaries, which provided in the space of a few pages a description of a loan's characteristics, defects, and potential compensating factors. Nomura's three-man Diligence Group never possessed or reviewed any loan files, and indeed it would not have had time to look at them in any event; it relied solely on the summary documents supplied by its vendors.

The Diligence Group had one of two choices to make with respect to loans flagged as EV3 by a vendor: to override or "clear" the identified exceptions, in which case it would "waive" the loan into the pool, or to reject the loan, in which case the loan was supposed to be "kicked out" of the pool. When Nomura advised Clayton that it had waived the defect in a loan graded EV3, it did not provide Clayton with a reason for the waiver. In these situations, Clayton changed the grade from EV3 to EV2W.

Nomura's policy toward waiving in EV3 loans was lenient in the extreme. Over the course of 2006 and the first quarter of 2007, Clayton graded 38% of the Nomura loans it reviewed for credit and compliance as EV3. Nomura waived in 58% of those EV3-rated loans. Given the large number of loans graded EV3 by Nomura, and the high rate of Nomura waivers, all told, Nomura

overruled Clayton's grades and waived in 22% of all of the loans Clayton reviewed. The largest categories of waivers were in connection with EV3 grades assigned by Clayton for missing documents, unacceptable property types, and incomplete appraisals.

At trial, Nomura tried to explain these high waiver rates in several ways. It repeatedly argued that its client overlays had caused Clayton to flag many loans as EV3s that otherwise substantially complied with originators' guidelines. There was an insurmountable problem with this argument. Nomura never gave Clayton any credit overlays.[39]

Nor is Nomura's waiver rate explained by its bid stips. As already explained, those bid stipulations essentially reflected the rock bottom standards in originators' underwriting guidelines from that period; they did not impose materially more exacting standards. Tellingly, Nomura never provided any loan-by-loan analysis at trial of the loans flagged either EV3 or EV2W to support its suggestion that Nomura loans may have been assigned these grades even though they did not have substantial underwriting defects.

[39] Other Clayton clients did give Clayton these overlays. Because those overlays reflected a client's individualized standards for flagging a loan with an EV3 grade, it is dangerous to try to compare either the EV3 or the waiver rates among Clayton clients.

Finally, some of Nomura's witnesses testified that they waived in loans graded EV3 by vendors because of their individualized review of the loans. Among other things, Nomura provided originators with the opportunity to locate missing documents or to explain why there were sufficient compensating factors to override an underwriting defect. This was described as giving originators an opportunity "to tell their story and why they thought this was a good loan." Of course, depending on the nature of the defect and the character of the originator and borrower, this was an invitation for fraud. In any event, there were simply too many waivers to suggest an individualized, merits-based review of each and every waived-in EV3 loan.

But while the Nomura waiver rates were extremely high, so were the kick-out rates. Some of the Trade Pools that contributed loans to the seven SLGs had notably high kick-out rates. For example, the Silver State 66 pool, which supplied loans to NHELI 2007-2, had a kick-out rate of 29%, and the WMC SP01 pool, which supplied loans to NHELI 2007-3, had a kick-out rate of 41%. While one Nomura witness asserted that Nomura could increase the size of the sample or walk away from the trade altogether if a trade pool had a high kick-out rate based on something other than technical errors, Nomura provided no evidence of any occasion when it took either of those actions. In fact, the evidence showed that in at least one case, the

contrary was true. Nomura drew a sample of second-lien loans from a Trade Pool purchased from originator OwnIt that had "100% CLTV on just about everything." After discovering high rates of bankruptcies and delinquencies in that sample, Spagna insisted that "we need to upsize the due diligence" on an OwnIt pool designated for securitization. The sample size -- 25% -- was never upsized. Almost half of the loans in the NHELI 2007-2 SLG were originated by OwnIt.

The upshot of this process was that while many loans were kicked out of the Trade Pools, many others with identified defects were waived in. These numbers are all the more startling since the vendors' credit and compliance review did not involve, with one possible exception, any independent investigation of the loan. It was essentially restricted to a comparison of the loan file to originators' guidelines and Nomura's bid stipulations. From any point of view, the process could not have given Nomura comfort that the Trade Pools largely contained loans that complied, even generally, with originators' guidelines, or that the loans that they ultimately purchased did so.

During summation, Nomura chose to address its due diligence program only briefly.[40] Its counsel characterized Nomura as

[40] Nomura and FHFA both made affirmative offers of evidence at trial regarding Nomura's due diligence program. Nomura hoped

being in an "impossible" double bind. He argued that it cannot be true that Nomura's actions in kicking out some bad loans and in waiving-in other loans supported FHFA's negative characterization of Nomura's due diligence process. FHFA argued that the inferior quality of the process and the discovery of non-compliant loans during that process both tended to prove that the SLGs' loans did not conform to their originators' guidelines, even generally.

Nomura's confusion is hard to understand. There was no double bind for Nomura. For starters, it could have designed a different due diligence program. It could have instituted a rigorous due diligence program that examined with care a sample of loans, having used a sampling technique that would permit the results to be reliably extrapolated to the entire pool. But even without that approach, when its chosen due diligence program uncovered a disturbing quantity of non-compliant loans it could have kicked them out, increased its diligence with respect to any remaining loans, and, if necessary, chosen not to purchase the loan pool or to describe its loans accurately, including, if appropriate, as "scratch and dent" loans.

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that such evidence would tend to show that the loans in the SLGs complied with originators' guidelines; FHFA forecast the opposite.

e. Ignored Warning Signs

The reason for Nomura's lackluster due diligence program is not hard to find. Nomura was competing against other banks to buy these subprime and Alt-A loans and to securitize them. As its witnesses repeatedly described and as its documents illustrated, Nomura's goal was to work with the sellers of loans and to do what it could to foster a good relationship with them.

Given this attitude, it is unsurprising that even when there were specific warnings about the risk of working with an originator, those warnings fell on deaf ears. For example, in May 2005, Hartnagel described evidence of fraudulent loans and inadequate underwriting practices at Silver State. Far from limiting its exposure, Nomura continued to purchase and securitize large numbers of Silver State loans, which contributed 15.4% of the loans securitized into the NAA 2005-AR6 SLG in November 2005.

Similarly, in February 2006, the Diligence Group recommended to the Trading Desk that it remove The Mortgage Store, QuickLoan, and Alliance California, among other sellers, from Nomura's "buy/approved" list. One hundred percent of the loans in the The Mortgage Store pools were "repeatedly . . . originated outside of their guidelines." It had "extremely sloppy files"; and its guidelines were no more than "a flux suggestion." Despite these and similar warnings, Nomura

continued to buy loans from each of these originators and to securitize them. A few of their loans found their way into each of the seven SLGs backing the GSEs' Certificates, including the five that were securitized after this warning from the Diligence Group.

And in April 2006, Kohout and the Trading Desk exchanged emails about the serious property valuation problems with loans in a People's Choice pool. Nomura had at that point already rejected 90 of the originator's appraised property values, and People's Choice had not even attempted to defend 80 of the 90. Kohout concluded that there was "an inherent flaw" in the People's Choice "origination process." But both the Trading Desk and Kohout expressed concern that testing even more appraisals than was customary might eliminate Nomura from consideration when making future bids for People's Choice trade pools, something it did not care to risk. People's Choice originated 1,672 (46.2%) of the loans in the relevant SLG in NHELI 2006-HE3, which was issued in August.

There are many more disturbing examples from the files of Nomura reflecting its willingness to securitize defective loans. One more will suffice. In September 2006, Nomura withheld due diligence information from its co-lead underwriter RBS. As Nomura was preparing to send a report to RBS showing the results of AMC's due diligence review of loans that would be securitized

in NHELI 2006-FM2, Nomura discovered that there were 19 loans still rated as having material deviations. In an email with the subject line "HUGE FAVOR," Nomura's Spagna requested that AMC act "ASAP" and retroactively re-grade the 19 loans as client overrides since Nomura had decided to buy them "for whatever reason." Only after the grades had been altered and the report re-run, did Nomura forward the AMC results to RBS. In a conference call with RBS on that same deal, Spagna reported to a Nomura colleague that he "took the liberty to bullshit" RBS, adding "I think it worked." Spagna could not remember at trial precisely what he had discussed with RBS during that call.[41]

4. Valuation Due Diligence

In another part of its due diligence program, Nomura's vendors analyzed the collateral for the subprime and Alt-A loans. But, here too, Nomura's due diligence program was far from rigorous. Nomura contends that over 90% of the loans it purchased received valuation due diligence. But, in fact, Nomura's vendors performed valuation diligence on fewer than

[41] Spagna tried unsuccessfully at trial to explain away this email, describing it as an example of his habit of quoting movie lines. But a quotation generally comes in handy only when a particularly piquant line seems relevant to the situation at hand. See The Blues Brothers - Quotes, Internet Movie Database, http://www.imdb.com/title/tt0080455/quotes ("I took the liberty of bullshitting you, okay?") (last visited May 11, 2015).

half of the loans that later found their way into the SLGs for the Certificates.

a. Valuation Due Diligence Vendors

Nomura relied on two vendors, CoreLogic and Hansen, to perform its valuation due diligence. The loans would go to one of these two vendors, each of which used different methods. While Hansen performed valuation due diligence on almost all of the loans Nomura sent to it, CoreLogic did not.

Using the loan tapes provided by Nomura, Hansen ran the data for most of the loans submitted to it through its PREVIEW system, which contained an AVM. AVMs are computer programs that compute an appraisal value for a property based on a database of real estate transactions, taking into account factors like recent nearby sales of similar property.

Unlike Hansen, CoreLogic did not run an AVM for most of the loans that Nomura sent it for review. Instead, it used a less expensive, proprietary risk assessment program called HistoryPro to screen loans for further review.[42] HistoryPro assigned each loan an "F-Score" ranging from 0 to 25. Most Nomura loans sent to CoreLogic received an F-Score of 0 and most of those received

[42] A HistoryPro review of a loan cost $4, whereas upgrading to an AVM or Hansen PREVIEW was $14, or more than three times the cost.

no further review.[43] As a result, just over half (51.9%) of all loans in the seven SLGs at issue here received a HistoryPro score of 0 and received no valuation due diligence. Loans that HistoryPro scored between 1 and 9 were supposed to be run through CoreLogic's own AVM, but that did not always happen.[44] Loans that were scored 10 or higher were designated for the next stage of review, which was conducted by other Nomura vendors.

b. Nomura Reviews Results; Broker Price Opinions

Typically, if a vendor's AVM produced an estimated value for a property that was greater than Nomura's designated tolerance threshold -- 10% for subprime loans and 15% for Alt-A loans -- or if a loan had received a CoreLogic F-Score of 10 or higher, Nomura sent the loan to another third-party vendor for further review. That further review was a broker price opinion ("BPO") from a real estate broker who typically performed an

[43] When a loan with an F-Score of zero happened, for whatever reason, to receive further review, those results should have placed Nomura on notice that HistoryPro was not a reliable screening tool. The valuation diligence performed on such loans resulted, on occasion, in valuations for the property that exceeded Nomura's tolerance threshholds.

[44] For example, in the case of one set of 643 loans that Nomura sent to CoreLogic in August 2006, CoreLogic returned AVM values to Nomura for only 27% of the set. This included AVM values for 94% of the loans that received an F-Score of 1 to 9.

exterior inspection of that property (a "drive-by")[45] and compared the property to similar properties recently sold in the area. In order to receive an unbiased BPO review, the vendor did not provide the broker with the original appraisal value. With the BPO value in hand, Nomura's vendors would attempt to reconcile the BPO value with the original appraisal value and deliver that "reconciled" estimate to Nomura. This process could involve some "give and take" between the BPO vendor and Nomura. If the resulting "post-review" figure was within Nomura's tolerance thresholds, Nomura would generally buy the loan. If the post-review figure was outside the tolerance thresholds, Nomura gave the loan originator or seller an opportunity to justify the original appraisal value. If that justification was unpersuasive, the loan was supposed to be kicked out of the loan pool. Despite this, as defendants concede, 162 loans that received BPO review and exceeded tolerances were nonetheless included in the seven SLGs.

5. Reviews

Nomura received notice from two reviews that its due diligence procedures were faulty. In August 2006 -- after Nomura had issued three of the seven Securitizations and shortly after it changed the head of its Diligence Group -- Nomura hired

[45] Some BPOs were performed through inspection of photographs, not a drive-by.

IngletBlair, LLC ("IngletBlair") to audit its due diligence process. IngletBlair reviewed 189 loans for which Clayton or AMC had already performed credit and compliance review.[46] IngletBlair found that although 109 of the 189 had been graded "EV1" or "EV2" by the vendor, seven of these should have been graded EV3 and another 29 were lacking essential documentation.[47] The Diligence Group was on notice, in other words, that even the loans graded EV1 and EV2 might have fundamental underwriting defects. Nomura took no action to upgrade its due diligence procedures as a result of IngletBlair's findings.

In July 2007, shortly after Nomura had sponsored the last of the seven Securitizations, Nomura commissioned a post-closing credit and valuation fraud review on the loans underlying NHELI 2007-1. NEHLI 2007-1 had issued about six months earlier. The review focused on 104 loans that were in default, half of which came from just one originator: Silver State. The review found that almost 20% of these troubled loans exhibited a "high probability" of fraud.

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[46] Among the 189 audited loans were 39 mortgage loans included in the SLGs backing the GSEs' Certificates.

[47] At trial, Nomura suggested that the IngletBlair results may not have been instructive since the auditor was working from servicing files, which may have been incomplete. Whatever the limitations of the audit, Nomura did not point to any steps it took following the audit to address its conclusions.

6. Purchasing the Loans

After Nomura had completed its diligence review, it created a spreadsheet for the trade pool listing the loans that Nomura planned to purchase and those that it was kicking out. As discussed above, originators were given an opportunity to convince Nomura to purchase a loan despite its identified defects.

Once it made its final decision about which loans to purchase, Nomura updated its LMS database to identify the loans it had purchased. During the time Nomura owned the loans, it also continued using the LMS system to track basic information regarding the servicing of the loans, including such things as prepayments of mortgages and delinquency rates. The data for the Prospectus Supplements' Collateral Tables[48] was taken from the LMS database. Nomura did not, however, place any information obtained through its due diligence review into the LMS system. For instance, the fact that an AVM review or BPO produced a different appraisal value for a property than that reflected on the originator's loan tape was never added to the LMS system.

[48] As discussed below, the Collateral Tables are sets of tables with statistics in the Prospectus Supplements.

7. Selecting Loans for a Securitization

Nomura's Trading Desk bundled together loans from among those that Nomura had purchased and placed them into securitizations to sell to investors. The Trading Desk pulled together loans that were on Nomura's books based on collateral type, such as subprime or Alt-A, and then used a computer program to predict what rating the rating agencies would give each tranche of the Nomura-pooled loans.

The Trading Desk would then notify Nomura's Transaction Management Group, which would begin preparing marketing documents for the securitization. With the help of outside counsel, the Transaction Management Group drafted Offering Documents for the securitization, including its Prospectus Supplement. Despite speculation by a few Nomura witnesses at trial that the Diligence Group may have been consulted in some undefined way during the securitization process, the Diligence Group had no role whatsoever in the securitization process and did not review or approve the information included in the Prospectus Supplements.

Indeed, there would have been little to be gained by consulting anyone from the Diligence Group. After all, no diligence information about a particular loan was ever entered onto the LMS system. Nomura has shown no evidence of a separate system for tracking the due diligence done on each loan, and

therefore of no database that would permit it to assemble and review the due diligence results for each of the loans it selected for inclusion in an SLG.[49] And while there was data about the diligence performed on a particular trade pool, that information was of limited utility since a trade pool's due diligence could not be reliably extrapolated to the population of the pool, and the loans populating a single securitization could be, and routinely were, taken from many different trade pools. In sum, Nomura had no reliable way to extrapolate the results from its due diligence efforts to an SLG, made no effort to do so, and never even thought about doing so. Even if its pre-acquisition due diligence had been adequate, once the link between the trade pool and SLG was broken, there was no way Nomura could reasonably rely upon the results of that pre-acquisition due diligence in making representations in the Prospectus Supplements.

8. Data Integrity Due Diligence

Again, after taking loans from various trade pools and bundling them into a securitization, Nomura did not conduct additional credit or valuation due diligence. It did, however,

[49] Because Nomura made no such effort, it is unnecessary to address the limitations on inferences that could be fairly drawn from such a database.

check the data disclosed in the Supplements against the data stored in the LMS database.

In addition, Nomura retained Deloitte to compare, for a sample of the securitized loans, the data in the LMS system to the information in that loan's loan file.[50] In this data integrity review, known as an "agreed-upon procedures" ("AUP") review, Deloitte recalculated certain data points and then recalculated certain aggregate data figures that were disclosed in the Prospectus Supplements. These data points typically included FICO score, appraised value, owner-occupancy status, LTV ratio, and CLTV ratio. Deloitte's review, however, was limited to checking the integrity of the data in the Prospectus Supplement.[51] It did not perform an audit of the accuracy of the underlying data.

Deloitte's AUP reviews typically identified around ten percent of the loans in each sample with discrepant data or that were missing documentation necessary for review. Once Deloitte's review was complete, however, Nomura did not

[50] Deloitte did not select the sample; rather, Nomura provided the sample in the form of a computer-generated mortgage loan data file.

[51] Deloitte's AUP letters stated that Deliotte was "not requested to, and . . . did not, perform any procedures with respect to the preparation or verification of any of the information set forth on the Loan Documents."

extrapolate its findings regarding data errors in the sample to the securitization's SLG as a whole.

9. Obtaining the Credit Ratings

Nomura's Transaction Management Group was responsible for obtaining credit ratings from the three major rating agencies. The Transaction Management Group sent loan tapes with data drawn directly from LMS to the rating agencies for analysis. In other words, key data points, such as LTV ratios, owner-occupancy status, DTI ratios, and FICO scores, were those supplied by originators. Ratings agencies did not test the accuracy of the information on the loan tapes and relied on it as accurate.

In conducting their ratings analysis, the rating agencies incorporated loan tape data into their models and produced a rating for each tranche of the securitization. At times, a rating agency might indicate to Nomura that in order for a senior tranche to receive a AAA rating, subordinate tranches equal to a certain balance would need to be placed below it. Nomura was aware that Freddie Mac and Fannie Mae would purchase tranches with only a AAA rating, and Nomura would structure securitizations with AAA tranches so that the GSEs might be interested in purchasing a certificate.

B. RBS's Due Diligence

RBS served as the sole lead underwriter for three of the seven Securitizations and as the co-lead underwriter for a

fourth. Because RBS did not purchase these loans from the originators, its only opportunity for performing due diligence on the loans arose when it joined the securitization as an underwriter. But, RBS did not perform its own credit or valuation due diligence on NHELI 2006-HE3 or NHELI 2006-FM2, the first two Securitizations that RBS entered with Nomura.

1. NEHLI 2006-HE3 and NHELI 2006-FM2

With respect to NEHLI 2006-HE3, where RBS served as co-lead underwriter with Nomura Securities, Nomura sent RBS one page with summary statistics regarding some Trade Pool due diligence. This document included four lines of data from Nomura's pre-acquisition due diligence on Trade Pools for the two largest originators for the Securitization.[52] Judging that the summary statistics seemed to be "in-line with subprime loans," RBS's Diligence Group[53] asked Nomura for statistics for the loans, including "LTV, FICO, DTI, PPP [prepayment penalty], Property Types."[54] Nomura provided an "overall snapshot," which appears

[52] Nomura also provided RBS with a general description of its due diligence practices. But Nomura refused to give RBS complete access to Nomura's information about the loans. When RBS asked for a complete list of the originators for the loans, Nomura flatly refused to identify originators contributing fewer than 5% of the loans in the Securitization.

[53] As with Nomura, RBS's Diligence Group was also known by different names, including the "Credit Group." It is referred here to as the "Diligence Group."

[54] The one-page due diligence summary for the Trade Pools was just that, a summary. But it was also an unreliable summary.

to have been a spreadsheet with the LMS data that would be used to populate the Collateral Tables for the Prospectus Supplement, and ten minutes later Farrell indicated that it looked "ok." This was the closest that RBS ever got to an analysis of the loans in the Securitization's SLGs.

In its second transaction with Nomura, NHELI 2006-FM2, the SLGs were populated exclusively with loans from Fremont. Despite being the sole lead underwriter, and despite being aware of a "big spike" in repurchasing activity for Fremont loans (suggesting Fremont was originating a substantial number of defective loans), RBS performed no credit or valuation due diligence whatsoever on this Securitization.[55] Instead, RBS got spreadsheets from Nomura describing the pre-acquisition due diligence done on the two Trade Pools from which these loans were drawn. These documents included the results of AMC's

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It represented that AVMs had been performed on 100% of the loans in the Trade Pools purchased from the two largest originators. That is unlikely to be true, given the reliance on CoreLogic's HistoryPro to screen loans for submission to AVMs. In addition, the summary reflected that 90 loans had been kicked out of the People's Choice Pool for failing "property" due diligence, without revealing, as described above, that Nomura had significant concerns about the reliability of the entirety of the People's Choice origination practices when it came to property valuation.

[55] In August 2006, RBS was considering holding Fremont to its "published guidelines rather than guidelines plus exception." RBS would later refer to Fremont as "FraudMont" and "the king of EPDs" or early payment defaults.

expedited re-grading of nineteen loans that Nomura had purchased from Fremont "for whatever reason" despite being graded as non-compliant. Notably, this was also the Securitization on which the head of Nomura's Diligence Group "took the liberty to bullshit" RBS during a conference call between the sponsor and underwriters.

2. NHELI 2007-1 and NHELI 2007-2

For the two Securitizations upon which it actually did credit and valuation due diligence -- NHELI 2007-1 and NHELI 2007-2 -- RBS served as lead underwriter. The RBS diligence review for these two Securitizations resembled the Nomura pre-acquisition due diligence program in certain critical respects. Like Nomura, RBS had no written due diligence guidelines and provided no formal training program for its due diligence employees. It typically conducted due diligence on a sample of the loans, but had no reliable basis for extrapolating the results of the due diligence review to the entire population from which the sample was drawn, and never made any attempt to do so. Nor did RBS integrate its due diligence with the disclosures in the Prospectus Supplements. Its due diligence team had no role in reviewing the accuracy of representations in Prospectus Supplements and did not understand that its work was in any way connected to the representations that would be made in Prospectus Supplements. As was true for Nomura, there was no

one at RBS who acted to ensure that the representations in the Prospectus Supplements that are at issue in this case were truthful.

a. Sample Selection

The RBS Diligence Group was responsible for proposing samples on which to conduct due diligence. In making those proposals, it used what it termed adverse sampling,[56] and for a smaller number of loans, what it termed semi-random sampling. RBS gave greater scrutiny to loans when it was purchasing the loans and sponsoring the securitization than when it was operating solely as an underwriter in securitizations sponsored by another bank. When it served solely as an underwriter, RBS typically performed credit and compliance due diligence on a 5-10% sample and drive-by appraisals on a small random sample.

The Diligence Group had the ability to request an "upsize" of samples, but there is no evidence that such a request was ever made and approved. For example, Farrell did request permission in January 2007 from an RBS banker to select a due diligence sample of 25% of the loans from NHELI 2007-2 because the loans in the Securitization were "crap." But that upsizing

[56] One proposed adverse sample included all loans with an original balance of over $1 million, some of the loans with FICO scores of 520 or lower, all loans seasoned 12 months or more, all loans without a minimum DTI ratio requirement, and all "no doc" loans.

did not happen; only a 6% sample was taken. As an RBS banker explained, RBS "didn't own the pool."[57]

b. Due Diligence

Any due diligence review of the samples that was done was performed by RBS vendors and sent to the RBS Diligence Group. But that group was understaffed and performed only a cursory review of the reports. It chose to waive in virtually every loan flagged as having material defects.

With respect to NEHLI 2007-1, the time stamps on Clayton reports indicate that Farrell took just over an hour to waive in all but three of the thirty-three loans that Clayton graded EV3. Farrell has no recollection of this transaction. It appears Farrell reviewed the Clayton spreadsheet and quickly made his choices.[58] He even waived in loans that Clayton's spreadsheet flagged as missing documentation material to both credit and compliance.

[57] At trial, Farrell speculated that he may have been startled by the poor quality of the loans because he was more accustomed to Alt-A loans and not "used to" working with subprime loans. This explanation was not credible. Farrell had worked at Clayton from 2002 to 2006, when he joined RBS. This exchange occurred in January 2007, near the end of the wave of securitization of subprime loans.

[58] The Clayton spreadsheet identified two of the three loans that Farrell did not waive in as a $1 million loan missing material documentation and a loan with a zero balance. The third loan was the last in the list and may have simply been overlooked.

If Farrell had chosen to do an individualized assessment of the loans, he would not have had any loan files or originator guidelines to review. Instead, he would have relied on the Clayton-prepared individual asset summaries ("IAS") for a loan. These documents, running typically two to four pages, describe material features of a loan, its defects, and its potential compensating factors. As he demonstrated at trial, Farrell liked to work with a physical copy of the IAS and circle any compensating factors with pen in hand. Leaving aside whether Farrell would have immediately noticed the email and printed the documents IAS forthwith, whether he would have had the opportunity to work exclusively on this project during the hour, and whether it is even possible to individually review thirty-three IASs in an hour without working with an uncommon ferocious intensity, Farrell's testimony left no doubt that his wholesale waiver was not the result of careful consideration.[59]

With respect to NEHLI 2007-2, RBS's treatment of the vendor reports was much the same. All of the 50 loans designated EV3 by Clayton for credit deficiencies were waived in.

[59] Demonstrating at trial how quickly he could review an IAS for one of his waived-in loans, Farrell misidentified the amount of cash reserves and simply brushed off other material problems with the loan.

RBS also performed restricted valuation diligence. It commissioned "drive-by" appraisals on properties for a sample of loans for both of the Securitizations. For the nine such appraisals of properties whose loans appeared in the relevant SLG in NHELI 2007-1, eight had lower appraisal values than the originators' values, five had recalculated LTV/CLTV ratios that moved above 80%, and one had a recalculated LTV ratio of 116%. Despite these results, the originators' LTV ratios appeared in the Offering Documents.

For NHELI 2007-2, drive-by appraisals were performed on forty-four properties whose loans appeared in the relevant SLG. The results of the drive-by appraisals indicated that thirty-one of the forty-four properties were initially overvalued, nine had recalculated LTV/CLTV ratios that moved above 80%, and ten had recalculated LTV/CLTV ratios over 100%. Again, each of these loans was securitized, and no representations in the Supplements were changed.

3. Fraud Review

In 2007, RBS commissioned a fraud review on one of the four Securitizations, NHELI 2006-HE3. This was a Securitization for which RBS did no independent credit and valuation due diligence. In February 2007, about six months after the NHELI 2006-HE3 Securitization issued, RBS determined that its delinquency rate made it the "worst performing deal" on its books and targeted it

for a fraud review to support a "put back" of the loans, meaning a request that Nomura repurchase them. After reviewing a sample of 263 loans, RBS informed Nomura that 43 were fraudulent, including misrepresentations of income, indebtedness, and owner occupancy. Twenty-nine loans had "data discrepancies," including discrepancies between the loan file and loan tape on DTI ratio, FICO, and other loan or borrower characteristics. Four had both fraud and data discrepancies. Spagna recalled that Nomura eventually repurchased some, but not all of these loans. Nomura sponsored one more of the seven Securitizations after receiving this notice from RBS.

C. The Loan Pools for the Seven Securitizations

Since a decision in this case must be reached separately for each GSE Certificate, it is useful to look at the results of any due diligence performed on loans that found their way into the SLGs supporting the seven Certificates.[60] As would be

[60] It should be emphasized that Nomura did not have ready access to any of this analysis since it had no system for tracking due diligence loan by loan. The data presented here were compiled by FHFA's expert, Cipione, using all the due diligence documents produced by defendants and their vendors during discovery. Defendants' expert Mishol undertook a similar but less exhaustive project. Among other things, Mishol was not asked to compile information on client waivers of vendor findings of infirmity. In contrast to Cipione, Mishol was also unfamiliar with how to access, interpret, or explain information from the database compiled by his organization. Because of these and similar limitations, Cipione's data and testimony are more helpful.

expected from the preceding discussion, credit and valuation due diligence was done on only a portion of the loans in the SLGs and there is no basis to extrapolate those results to the remainder of the SLG. In any event, for whatever reason, loans that had been flagged for due diligence were frequently not actually reviewed. For those that were reviewed, many loans flagged by vendors as having material defects were waived in or found their way into the SLG without any record of a waiver. Accordingly, taken together with the other evidence described above, the results of the due diligence review give no assurance that materially defective loans were not securitized, and indeed show just the opposite.

Altogether, just under 40% of the loans in the SLGs received credit due diligence. The figures per SLG are as follows:

Securitization	Loans in SLG	SLG Loans Subject to Credit Due Diligence	Percentage of SLG Loans Subject to Credit Due Diligence
NAA 2005-AR6	376	252	67.02%
NHELI 2006-FM1	2,532	669	26.42%
NHELI 2006-HE3	3,618	1,967	54.37%
NHELI 2006-FM2	3,891	837	21.51%
NHELI 2007-1	474	335	70.68%
NHELI 2007-2	3,001	1,346	44.85%
NHELI 2007-3	1,914	756	39.50%
TOTAL	15,806	6,162	38.99%

Of those loans that received credit due diligence, roughly 73% were graded EV1 or its equivalent and roughly 18% were graded EV2 or its equivalent. Of the remaining, roughly 9%, two-thirds were waived in and assigned the grade EV2W and one-third were securitized as EV3s. The EV2W and EV3 figures, as a percentage of the diligenced loans, are as follows:

Securitization	EV2W Credit Grade (Count/Percentage)	EV3 Credit Grade (Count/Percentage)
NAA 2005-AR6	21 / 8.33%	6 / 2.38%
NHELI 2006-FM1	38 / 5.68%	0 / 0.00%
NHELI 2006-HE3	150 / 7.63%	59 / 3.00%
NHELI 2006-FM2	14 / 1.67%	18 / 2.15%
NHELI 2007-1	12 / 3.58%	38 / 11.34%
NHELI 2007-2	109 / 8.10%	33 / 2.45%
NHELI 2007-3	29 / 3.84%	14 / 1.85%
TOTAL	373 / 6.05%	168[61] / 2.73%

As for valuation due diligence, roughly 57% of the loans received no AVM review, no BPO, or had no "post-review value," referring to the value Nomura selected after the BPO reconciliation process. This was principally due to the fact that CoreLogic performed the bulk of the valuation due diligence for Nomura and it assigned an F-Score of "0" to almost 60% of the loans. The numbers per SLG are as follows:

[61] Defendants' expert Mishol found that 418 of all loans ultimately securitized had EV3 grades for credit and/or compliance.

Securitization	SLG Loans in DB[62]	Loans with No AVM, BPO, or Final Value	Percentage
NAA 2005-AR6	325	134	41.2%
NHELI 2006-FM1	2,532	1,604	63.3%
NHELI 2006-HE3	3,617	1,942	53.7%
NHELI 2006-FM2	3,891	2,433	62.5%
NHELI 2007-1	403	104	25.8%
NHELI 2007-2	3,001	1,603	53.4%
NHELI 2007-3	1,914	1,187	62.0%
TOTAL	15,683	9,007	57.4%

Nomura had set a 10% tolerance threshold for appraisals of properties supporting subprime mortgages. Over 38% of the subprime loans in five of the SLGs that were subjected to an AVM and had an AVM outside the 10% threshold, received no BPO review.[63] The figures per SLG are as follows:

[62] "DB" refers to the database that was created by Cipione to collect all of the information that could be located about the due diligence on the loans in the SLGs. As reflected on this table, the database or DB includes valuation information on 15,683 of the 15,806 loans in the SLGs.

[63] The other two Securitizations were backed by Alt-A mortgages, which were subject to a 15% tolerance threshold. The percentage of loans that were subjected to an AVM, whose appraisal was more than 15% higher than the AVM value, and that received no BPO for NAA 2005-AR6 was 21.4% (9); it was 15.4% (4) for NHELI 2007-1.

Securitization	AVM Values Below 10% Threshold	AVM Values Below 10% with No BPO	Percentage
NAA 2005-AR6	n/a	n/a	n/a
NHELI 2006-FM1	329	161	48.9%
NHELI 2006-HE3	470	178	37.9%
NHELI 2006-FM2	487	178	36.6%
NHELI 2007-1	n/a	n/a	n/a
NHELI 2007-2	344	115	33.4%
NHELI 2007-3	148	47	31.8%
TOTAL	1,178	679	38.2%

Taking the AVM values and BPO values obtained by Nomura from its vendors -- that is, the two independent valuation assessments available to Nomura before it determined its final values -- and using those values to recalculate the LTV ratios for just those loans within the SLGs, over 19% of the loans that received AVM or BPO values had LTV ratios greater than 100%. The numbers per SLG are as follows:

Securitization	Loans with AVM & BPO Values	AVM & BPO LTV Over 100	Percentage
NAA 2005-AR6	35	1	2.9%
NHELI 2006-FM1	170	29	17.1%
NHELI 2006-HE3	299	79	26.4%
NHELI 2006-FM2	348	41	11.8%
NHELI 2007-1	22	4	18.2%
NHELI 2007-2	264	70	26.5%
NHELI 2007-3	115	18	15.7%
TOTAL	1,253	242	19.3%

Each SLG also had loans with Nomura post-review values whose recalculated LTV ratios exceeded 100. The number per SLG are as follows:

Securitization	SLG Loans with Final Values	Final Value LTV Over 100	Percentage
NAA 2005-AR6	63	0	0.0%
NHELI 2006-FM1	303	8	2.6%
NHELI 2006-HE3	613	43	7.0%
NHELI 2006-FM2	626	26	4.2%
NHELI 2007-1	56	4	7.1%
NHELI 2007-2	452	46	10.2%
NHELI 2007-3	265	24	9.1%
TOTAL	2,378	151	6.3%

The results found in the database created by defendants' expert Mishol in this regard were less conservative: he found that of the 2,119 SLG loans with "final values," 211 -- or 10% -- had final value LTV ratios over 100.[64]

IV. The Offering Documents

Each of the seven Certificates was sold to the GSEs by means of two documents: a Prospectus and a Prospectus

[64] Notably, apart from a passing mention, Mishol's direct testimony does not discuss recalculated LTV ratios at all. Indeed, at trial, he was unable to explain how to calculate LTVs. He does discuss BPOs whose variations were outside tolerance; ultimately he found that 162 SLG loans had BPOs that fell outside tolerance thresholds.

Supplement.[65] These were the Offering Documents in which defendants represented the qualities of the Certificates and the underlying mortgage loans to investors; these are also the documents that FHFA alleges contain four categories of material falsehoods or misrepresentations. Generally, each Prospectus Supplement contains detailed disclosures regarding the nature of the loans in the SLGs underlying the offering, while the accompanying Prospectus contains descriptions, definitions, explanations and qualifications for the disclosures made in the Supplement. A more detailed discussion of the contents of the documents follows.

A. The Supplements' "Summary" Section

Each of the seven Prospectus Supplements begins in its first few pages with the instruction that investors "should rely only on the information contained in this document." Similarly, each Supplement states on its final page that potential investors "should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus."[66]

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[65] See FHFA v. Bank of Am. Corp., No. 11cv6195 (DLC), 2012 WL 6592251, at *5 (S.D.N.Y. Dec. 18, 2012).

[66] Six of the seven Prospectus documents similarly state on the third page that investors "should rely only on the information in this prospectus and the accompanying prospectus supplement." The exception is the Prospectus accompanying the Supplement for NAA 2005-AR6, which omits that directive.

After these introductory pages, the Supplements provide a "Summary" that offers "a very broad overview of the certificates offered by [the] prospectus supplement and the accompanying prospectus." Among the information included in this Summary are the date the Supplement was issued; the Cut-off Date for fixing the composition of loan pools in the Securitization; the identities of the depositor, the seller, and other key figures in the transaction; and the names of specific originators. The Summary section also states that the senior tranche certificates described in the Supplement -- including the seven Certificates at issue here -- "will not be offered unless they receive ratings at least as high as" AAA ratings or their equivalent from third-party rating agencies such as S&P and Moody's. They further explain that "[i]n general, ratings address credit risk" and that "[t]he ratings of each class of Offered Certificates will depend primarily on an assessment by the rating agencies of the related Mortgage Loans . . . and the subordination afforded by certain classes of certificates." The Summary section concludes with one or more pages that report summary statistics for various attributes of the loans in each SLG, as well as aggregate statistics for the Securitization as a whole.

B. Collateral Tables

Each Prospectus Supplement then supplies sets of tables with statistics ("Collateral Tables") that disclose the "Characteristics of the Mortgage Loans" in each of the SLGs supporting that Securitization. The Collateral Tables provide data on more than a score of features of the loans within an SLG. These features include LTV ratios and the owner-occupancy status for the loans within the SLG. Examples of two such tables, which are taken from the Supplement for NHELI 2006-FM2, are reproduced below.

Original Loan-to-Value Ratio of the Group I Mortgage Loans

Original Loan-to-Value Ratio (%)	Number of Mortgage Loans	Aggregate Remaining Principal Balance	% of Aggregate Remaining Principal Balance	Weighted Average Mortgage Rate (%)	Nonzero Weighted Average FICO	Weighted Average Original LTV (%)	Weighted Average Stated Remaining Term (Months)	Full/Alt Doc (%)
Less than or equal to 50.00	100	$ 15,620,836	2.31%	8.878%	585	40.49%	354	57.24%
50.01 - 55.00	40	7,755,893	1.15	8.143	609	53.08	355	65.88
55.01 - 60.00	76	14,401,288	2.13	8.806	577	57.66	355	48.05
60.01 - 65.00	122	24,549,828	3.62	8.978	576	63.55	355	47.30
65.01 - 70.00	157	32,313,906	4.77	8.828	579	69.12	355	49.30
70.01 - 75.00	212	44,141,324	6.52	8.734	577	74.06	355	54.88
75.01 - 80.00	1,531	324,418,693	47.90	8.134	633	79.85	356	51.15
80.01 - 85.00	221	48,119,274	7.11	8.291	607	84.65	355	73.49
85.01 - 90.00	387	78,315,654	11.56	8.535	619	89.70	355	79.10
90.01 - 95.00	127	23,093,603	3.41	8.608	630	94.67	354	76.62
95.01 - 100.00	918	64,507,394	9.53	10.734	650	99.90	350	53.87
Total/Weighted Average:	3,891	$ 677,237,695	100.00%	8.590%	620	80.58%	355	57.36%

Occupancy Status of the Group I Mortgage Loans

Occupancy Status	Number of Mortgage Loans	Aggregate Remaining Principal Balance	% of Aggregate Remaining Principal Balance	Weighted Average Mortgage Rate (%)	Nonzero Weighted Average FICO	Weighted Average Original LTV (%)	Weighted Average Stated Remaining Term (Months)	Full/Alt Doc (%)
Owner-Occupied	3,628	$ 630,190,865	93.05%	8.569%	619	80.72%	355	56.90%
Investor	247	43,162,888	6.37	8.932	635	78.51	355	64.63
2nd Home	16	3,883,941	0.57	8.099	637	80.99	355	49.95
Total/Weighted Average:	3,891	$ 677,237,695	100.00%	8.590%	620	80.58%	355	57.36%

As the tables demonstrate, Supplements disclose the principal balance and percentage of loans in the relevant SLG with LTV ratios below 50% and in five point increments up to 100%. In no case was there a disclosure of LTV ratios greater

than 100%. The Collateral Tables also provided the percentage the mortgage loans in the relevant SLG for residences that were "owner-occupied," an "investment," and a "second home."

The Supplements explicitly provide that the characteristics of the loans listed in the Collateral Tables, including LTV ratios and owner-occupancy status statistics, are correct as of each Supplement's "Cut-off Date."[67] The NHELI 2006-FM2 Supplement, for instance, states that "[a]s of the Cut-off Date, the Mortgage Loans will have the characteristics as set forth" in the Collateral Tables. The LTV ratio in the Collateral Tables is labelled, however, as the "Original Loan-to-Value Ratio." The Collateral Tables list not just the percentage of loans with these characteristics as of the "Cut-off Date," but also the "Cut-off Date Principal Balances" related to the characteristic. The Cut-off Date is, in each instance here, roughly a month before the Supplement Date for the RMBS. Each Securitization along with its corresponding Cut-off Date and Supplement Date is listed below.

[67] As explained above, the Cut-off Date refers to the "date for establishing the composition of the asset pool" in a Securitization. 17 C.F.R. § 229.1103(a)(2).

SECURITIZATION	CUT-OFF DATE	SUPPLEMENT DATE
NAA 2005-AR6	11/1/2005	11/29/2005
NHELI 2006-FM1	1/1/2006	1/27/2006
NHELI 2006-HE3	8/1/2006	8/29/2006
NHELI 2006-FM2	10/1/2006	10/30/2006
NHELI 2007-1	1/1/2007	1/29/2007
NHELI 2007-2	1/1/2007	1/30/2007
NHELI 2007-3	4/1/2007	4/27/2007

All seven of the Supplements explain that "[m]ortgage loans with higher loan-to-value ratios may present a greater risk of loss than mortgage loans with loan-to-value ratios of 80% or below." All seven indicate whether loans with LTV ratios above 80% were insured or not.

The Prospectus for each Securitization explains that for purposes of determining the LTV ratio, "[t]he 'Value' of a Mortgaged Property, other than for Refinance Loans, is generally the lesser of (a) the appraised value determined in an appraisal obtained by the originator at origination of that loan and (b) the sales price for that property." The Prospectus adds that "[u]nless otherwise specified in the prospectus supplement, the Value of the Mortgaged Property securing a Refinance Loan is the appraised value of the Mortgaged Property determined in an appraisal obtained at the time of origination of the Refinance Loan." Finally, according to the Prospectus, "[t]he value of a Mortgaged Property as of the date of initial issuance of the related series may be less than the Value at origination and

will fluctuate from time to time based upon changes in economic conditions and the real estate market."

C. Loans "Were Originated" Generally in Accordance with Guidelines.

The Prospectus Supplements also include representations that "[t]he Mortgage Loans . . . were originated generally in accordance with the underwriting criteria described in this section."[68] Those originators contributing more than 10% of the mortgage loans in an RMBS are identified by name, along with the percentage of the mortgage loans that they contributed. For example, the Supplement for NAA 2005-AR6 identifies Alliance Bancorp, Silver State, and Aegis Mortgage as the originators of approximately 21%, 12%, and 11%, respectively, of the loans within the Securitization by aggregate principal balance as of the Cut-off Date for the Prospectus Supplement.

The sections of each Prospectus Supplement addressed to underwriting describe both the process by which a borrower applies for a mortgage loan and the process through which the application is reviewed and approved. For example, the Prospectus Supplement for NAA 2005-AR6 describes the

[68] This language or its equivalent appears in six of the seven Prospectus Supplements. The seventh, NHELI 2006-FM1, includes only a detailed description of the underwriting guidelines used by Fremont, the sole originator for that RMBS.

information the borrower must supply to the loan's originator as follows:

> Generally, each borrower will have been required to complete an application designed to provide to the original lender pertinent credit information concerning the borrower. As part of the description of the borrower's financial condition, the borrower generally will have furnished certain information with respect to its assets, liabilities, income . . . , credit history, employment history and personal information, and furnished an authorization to apply for a credit report which summarizes the borrower's credit history with local merchants and lenders and any record of bankruptcy. The borrower may also have been required to authorize verifications of deposits at financial institutions where the borrower had demand or savings accounts.

The Supplements then explain that the originator, having received an application with the pertinent data and authorizations, proceeds to review the application. This analysis includes a determination that the borrower's income will be sufficient to carry the increased debt from the mortgage loan. The Prospectus Supplement for NAA 2005-AR6 explains in pertinent part:

> Based on the data provided in the application and certain verifications (if required), a determination is made by the original lender that the borrower's monthly income (if required to be stated) will be sufficient to enable the borrower to meet their monthly obligations on the mortgage loan and other expenses related to the property such as property taxes, utility costs, standard hazard insurance and other fixed obligations other than housing expenses. Generally, scheduled payments on a mortgage loan during the first year of its term plus taxes and insurance and all scheduled payments on obligations that extend beyond ten months equal no more than a

> specified percentage not in excess of 60% of the prospective borrower's gross income. The percentage applied varies on a case-by-case basis depending on a number of underwriting criteria, including, without limitation, the loan-to-value ratio of the mortgage loan.

The section of the Supplements addressed to the underwriting process used by loan originators also explains the process used to ensure that there is security for the issued loans, for instance by requiring some borrowers to obtain hazard or title insurance or because an appraisal has shown that the mortgaged property itself provides adequate security. For instance, the Supplement for NAA 2005-AR6 states:

> The adequacy of the Mortgaged Property as security for repayment of the related Mortgage Loan will generally have been determined by an appraisal in accordance with pre-established appraisal procedure standards for appraisals established by or acceptable to the originator. All appraisals conform to the Uniform Standards of Professional Appraisal Practice [USPAP] adopted by the Appraisal Standards Board of the Appraisal Foundation . . . .

Six of the Supplements disclosed that loans might have been originated under "modified standards," which relaxed certain documentation requirements:

> Certain of the Mortgage Loans have been originated under reduced documentation, no-documentation or no-ratio programs, which require less documentation and verification than do traditional full documentation programs. Generally, under a reduced documentation program, verification of either a borrower's income or assets, but not both, is undertaken by the originator. Under a no-ratio program, certain borrowers with acceptable compensating factors will not be required to provide any information regarding income and no

> other investigation regarding the borrower's income will be undertaken. Under a no-documentation program, no verification of a borrower's income or assets is undertaken by the originator. The underwriting for such Mortgage Loans may be based primarily or entirely on an appraisal of the Mortgage Property, the loan-to-value ratio at origination and/or the borrower's credit score.[69]

The Supplements' Collateral Tables disclose the proportion of loans originated with modified standards.

Six of the seven Supplements note that "certain exceptions to the underwriting standards" described would be "made in the event that compensating factors are demonstrated by a prospective borrower"; the seventh said substantially the same.[70] All but one of the Supplements also note that the underwriting standards for the loans were less stringent than those applied by the GSEs. For instance, the Supplement for NAA 2005-AR6 explains that the underwriting standards applicable to the loans

> typically differ from, and are, with respect to a substantial number of Mortgage Loans, generally less stringent than, the underwriting standards established by Fannie Mae or Freddie Mac primarily with respect to original principal balances, loan-to-value ratios, borrower income, credit score, required documentation,

[69] NHELI 2006-FM1 contains similar language in reference to Fremont, the sole originator for that Securitization. It notes that that originator's guidelines allow for "three documentation types, Full Documentation . . . , Easy Documentation . . . , and Stated Income."

[70] The Supplement for NHELI 2006-FM1 represented that the sole originator for that RMBS applied its guidelines "subject to various exceptions" and that it was "expected that a substantial portion of the mortgage loans may represent such underwriting exceptions."

> interest rates, borrower occupancy of the mortgaged property, and/or property types. To the extent the programs reflect underwriting standards different from those of Fannie Mae and Freddie Mac, the performance of the Mortgage Loans thereunder may reflect higher delinquency rates and/or credit losses.[71]

If specific originators contributed more than 20% of the loans in any RMBS, six of the Prospectus Supplements also described in considerable detail the underwriting guidelines of those originators.[72] For example, the Prospectus Supplement for NHELI 2006-HE3 devoted approximately seven pages to a description of the guidelines used at People's Choice, which had contributed 38.19% of loans to the Securitization by aggregate principal balance as of the Cut-off Date.

When an individual originator's guidelines are extensively described, that description also typically includes the statement that the loans were "generally" originated in accordance with those guidelines or otherwise states that the originator did not necessarily follow its guidelines for every loan. The Supplements for both Fremont-backed Securitizations -

[71] While the Supplement for NHELI 2006-FM1 did not contain this language, it, like all six others, warned that "[t]he underwriting standards applicable to the Mortgage Loans, which are described in this prospectus supplement . . . may or may not conform to Fannie Mae or Freddie Mac guidelines."

[72] The exception is NAA 2005-AR6. It was issued in November 2005; as noted, Regulation AB, which imposes the requirement that certain underwriters' guidelines be described, only became effective on January 1, 2006.

- NHELI 2006-FM1 and NHELI 2006-FM2 -- state, "All of the mortgage loans were originated or acquired by Fremont generally in accordance with the underwriting criteria described in this section. The following is a summary of the underwriting guidelines believed by the depositor to have been applied with some variation by Fremont." A few paragraphs later, the Supplements for NHELI 2006-FM1 and NHELI 2006-FM2 list compensating factors that may warrant exceptions on a case-by-case basis to the Fremont guidelines when the borrower does "not strictly qualify[] under the risk category guidelines" but is nonetheless "qualified to receive a loan." The two Supplements add that "[i]t is expected that a substantial portion of the mortgage loans may represent such underwriting exceptions."

Along these same lines, the Supplement for NHELI 2007-2 states that Ownit, which originated 42.38% of the loans in that Securitization, "provides loans to borrowers . . . in accordance with" the guidelines described, but that the guidelines were "designed to be used as a guide . . . [and] no single characteristic will approve or deny a loan." The Supplement for NHELI 2007-3 similarly represents that with respect to originator ResMAE a "substantial portion of the Mortgage Loans represent such underwriting exceptions" where compensating factors exist.

D. Risk Advisories

The Supplements also periodically provide advisories about the nature of the Securitization and its risks. Each, for example, contains the admonition to "consider carefully" or "carefully consider" the risk factors described in the Supplement.[73] Each also contains a disclosure that there may be changes in the characteristics of the loan pools. Each Supplement states that no substantial changes to any SLG are expected after the Cut-off Date, and the threshold in each is given as five percent. Five of the Supplements also state that notice will be given if any "material characteristic" meaningfully changes by five percent:

> If, as of the Closing Date, any material pool characteristic differs by 5% or more from the description in this prospectus supplement, revised disclosure will be provided either in a supplement or in a Current Report on Form 8-K.[74]

(Emphasis added.)

The Prospectus Supplements also contain various warnings to potential investors that poor performance of the underlying loans could cause losses. For example, each Supplement states that "[i]f substantial losses occur as a result of defaults and

[73] In fact, each Supplement except for NHELI 2006-HE3 contains this language on its first page.

[74] The two Supplements omitting this language are NAA 2005-AR6 and NHELI 2006-FM1.

delinquent payments [on the underlying loans], you may suffer losses." Five of the seven Supplements add that

> [i]n the event that the mortgaged properties fail to provide adequate security for the Mortgage Loans, and the protection provided by the subordination of certain classes is insufficient to cover any shortfall, you could lose a portion of the money you paid for your certificates.

The remaining two Supplements contain a slightly different version of this language, stating that investors "could lose all or a portion of the money you paid for your certificates." (Emphasis added.)[75]

Six of the seven Supplements further caution that variability in property prices for these non-prime loans may affect the Securitizations' performance:

> Investors should note that changes in the values of Mortgaged Properties may have a greater effect on the delinquency, foreclosure, bankruptcy and loss experience of the Mortgage Loans included in the Mortgage Pool than on mortgage loans originated in a more traditional manner. No assurance can be given that the values of the related Mortgaged Properties have remained or will remain at the levels in effect on the dates of origination of the related Mortgage Loans.

And each Supplement notes that, in certain specified states or regions that have "a significant concentration of properties underlying the Mortgage Loans," "economic conditions . . . may

[75] The two Supplements containing this version of the language are NHELI 2006-FM2 and NHELI 2006-HE3.

affect the ability of borrowers to repay their loans on time" and that "declines in the residential real estate market . . . may reduce the values of properties located in those" states or regions, "which would result in an increase in the related loan-to-value ratios."

The Supplement for NHELI 2007-3 contains a specific disclaimer regarding the loans originated by ResMAE, which contributed 77.6% of the loans to the relevant SLG, and which filed for bankruptcy shortly before the issuance of the Supplement:

> The Depositor is aware that the originators of approximately 79.04% of the Mortgage Loans, by aggregate principal balance as of the Cut-off Date, have filed for bankruptcy protection under the United States Bankruptcy Code. These originators include ResMAE Mortgage Corporation, which originated approximately 77.61% of the Mortgage Loans, by aggregate principal balance as of the Cut-off Date.
>
> Any originator whose financial condition was weak or deteriorating at the time of origination may have experienced personnel changes that adversely affected its ability to originate mortgage loans in accordance with its customary standards. It may also have experienced reduced management oversight or controls with respect to its underwriting standards. Accordingly, the rate of delinquencies and defaults on these Mortgage Loans may be higher than would otherwise be the case.

V. Sample Selection

As mentioned above, there are almost 16,000 loans in the seven SLGs supporting the GSEs' Certificates in the Nomura Action. The Nomura Action was one of the smallest among the

sixteen coordinated FHFA actions and FHFA requested approval early in this litigation to proceed to trial based on an analysis of a sample of the loans supporting the Securitizations. Having given the parties an opportunity to test FHFA's proposed sample selection procedures under Daubert standards, approval was given to FHFA to proceed to trial in the sixteen coordinated actions with an analysis of a representative sample drawn from the loans in each Certificate's SLG. See FHFA v. JPMorgan Chase & Co., No. 11cv6188 (DLC), 2012 WL 6000885, at *4-11 (S.D.N.Y. Dec. 3, 2012). A sample of 100 loans for each SLG permits results to be stated with a 95% confidence level, i.e., with maximum margins of error of +/- 10 percent. Id. at *5.[76] The 10% margin of error, however, only occurs if the percentage of the sample having a relevant characteristic is found to be precisely 50%. As findings deviate from that point, the margin of error narrows.

[76] FHFA's expert Cowan chose a 10% rather than a 5% margin of error as a reasonable compromise between statistical precision and practicality. To achieve a modest increase to a 5% margin of error would have required a sample size of over 400 loans per SLG. The production of loan files and their associated underwriting guidelines was an enormous undertaking in this litigation: The original sample size across the sixteen lawsuits was close to 50,000 loans, and increasing it by a multiple of four would have required the production of almost 200,000 loan files. Besides the expense and burden of a production of this size, it would almost certainly have required substantially more time to bring these cases to trial.

Defendants were provided with an opportunity to challenge the admissibility of Cowan's methodology to the extent it was further disclosed and to challenge the weight accorded to Cowan's testimony based on his sample selection. Id. at *9, *11. Their second Daubert motion regarding Cowan's statistical extrapolations was denied on February 13, 2015. FHFA v. Nomura Holding Am., Inc., No. 11cv6201 (DLC), 2015 WL 685231, at *2-3 (S.D.N.Y. Feb. 13, 2015).

Cowan selected the loans that composed the seven Samples, relying largely on the loan tapes. Using a technique known as stratification, Cowan used each loan's FICO score to sort each SLG's loan population into four strata, and then drew 25 loans at random from each stratum. Cowan tested his Samples against the corresponding SLGs on eleven separate metrics to ensure that they were adequately representative of the relevant loan populations.

Defendants argue that Cowan's sampling methodology is unreliable because it necessarily excluded loans from some originators. They contend that he should instead have performed his sampling originator-by-originator. Defendants have not shown that such an approach would have been either feasible or particularly informative. After all, the claims in this case are not organized by originator; they rely on defendants' representations regarding different characteristics of all the

loans within an SLG, such as LTV ratios and owner-occupancy status. In addition, many originators contributed only a handful of loans to a Securitization. Cowan's random sampling insured that originators contributing many loans -- and thus with a comparatively major influence on the quality of the SLG -- had many loans represented in the Sample; conversely, originators contributing few loans -- and thus with a comparatively minor influence on the quality of the SLG -- had few if any loans represented. Because FHFA aimed to assess the quality of the SLGs generally, Cowan's sampling was appropriate to that task.

For six of the seven Samples, the parties were able to find a sufficiently complete loan file for all or almost all of the Sample loans to permit a re-underwriting of the loan.[77] In the case of one SLG -- NAA 2005-AR6 -- Cowan was required to supplement his original Sample because many of the loan files could not be located for the originally designated 100 Sample loans.[78] Cowan conducted the same representativeness and

[77] Two Samples were evaluated in their entirety: those of NHELI 2006-FM1 and NHELI 2006-FM2. NHELI 2006-HE3, 2007-1, 2007-2, and 2007-3 had final Sample sizes of 99, 98, 98, and 97, respectively.

[78] The parties could not locate loan files for 53 of the original 100 Sample loans. Cowan selected another Sample of 96 loans for the SLG and the parties were able to locate enough loan files to permit re-underwriting of 131 loans for this SLG.

reliability checks on the augmented Sample. As noted, the NAA 2005-AR6 Sample ultimately included 131 loans that could be re-underwritten by experts.

While sufficiently complete loan files to permit re-underwriting were located for 723 of the 796 Sample loans, FHFA's appraisal expert Kilpatrick lacked sufficient information to assess the appraisals for 124 of the 796 Sample loans. The number of loans for which Kilpatrick analyzed the appraisals for each of the Samples is as follows:

SECURITIZATION	SLG	ORIGINAL SAMPLE SIZE	AVM ESTIMATE AVAILABLE
NAA 2005-AR6	III	196	129
NHELI 2006-FM1	1	100	94
NHELI 2006-HE3	1	100	88
NHELI 2006-FM2	1	100	95
NHELI 2007-1	II-1	100	92
NHELI 2007-2	1	100	88
NHELI 2007-3	1	100	86
TOTALS	-	796	672

After FHFA's re-underwriting and appraisal experts performed their analyses, Cowan extrapolated those experts' findings to the relevant SLG. Defendants challenged several of Cowan's extrapolations, arguing that the analyzed Samples were not representative of the corresponding SLGs' populations. FHFA has shown that the final Samples are sufficiently representative

to produce results from the sampling that may be reliably extrapolated to the entire SLG population.

With respect to FHFA's re-underwriting evidence, defendants challenge as unrepresentative only the Sample for the NAA 2005-AR6 SLG. This was the Sample that was expanded because so many of the files for the original Sample loans could not be located. Cowan ensured that both the initially selected loans and the supplemental loans were randomly selected and subjected to the same representativeness tests. To the extent that any bias might have been introduced into the final 2005-AR6 Sample, it was to make the expert's findings more conservative.[79] Indeed, Hunter found the material breach rates for NAA 2005-AR6 to be the lowest of the seven Securitizations.

With respect to FHFA's appraisal evidence, defendants challenge Cowan's extrapolations for four of the seven SLGs.[80] For these four Samples, defendants argue that the Sample used by Kilpatrick may have been too incomplete to provide a reliable basis for an extrapolation to the entire SLG. Defendants argued

[79] Although those loans whose files could no longer be located, or whose files were so incomplete that re-underwriting could not proceed, were more likely than not loans that suffered from significant underwriting defects, Cowan's extrapolation made no such assumption. Instead, he assumed that they were missing at random.

[80] Defendants argued that Kilpatrick's appraisal results could not be extrapolated for NAA 2005-AR6, NHELI 2006-HE3, NHELI 2007-2, and NHELI 2007-3.

that loans not included in Kilpatrick's final Samples might all share a common characteristic and that, by their omission, the Samples might be biased in some way. But a comparison of the LTV ratios recorded in the loan tape data with the Sample loans' LTV ratios demonstrates that the final Samples' LTV ratios for each SLG were entirely representative of the LTV ratios on the loan tapes. Since these sets of Samples were being used to create an LTV ratio with an appraisal value in the denominator, this was a complete rebuttal to defendants' suggestion that the Samples were somehow biased.

Finally, it is telling that defendants presented no evidence that a bias actually existed in the Samples that were used for the re-underwriting or for the appraisals. For instance, defendants' statistics expert Barnett did not conduct any representativeness tests at all or apply any established methodology for correcting bias and present those results.[81] Instead, defendants relied solely on their efforts to undermine the reliability of FHFA's expert's methodology. They did not, however, succeed in showing that either the sampling or the extrapolation methodologies employed by Cowan were anything but sound and firmly established in the field of statistics. Like

[81] Barnett did offer representativeness test results on behalf of defendants in other FHFA coordinated actions, but not here.

many of FHFA's experts, Cowan was an impressive expert who applied his considerable skills to the challenges of this case with integrity and rigor.

VI. Appraisals

One of the categories of misrepresentations alleged by FHFA pertains to LTV ratios. These ratios were reported in the Collateral Tables of the Prospectus Supplements and are also a component of any analysis of whether the originators complied with their underwriting guidelines in issuing the mortgage loans. LTV ratios are calculated in the Supplements by dividing the amount of the residential mortgage loan by the value of the property that collateralized the loan, which is defined in each Prospectus as the lower of the sales price or the appraised value.

According to federal regulations governing appraisal standards for federally related transactions, "[a]ppraisal means a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion as to the market value of an adequately described property as of a specific date[], supported by the presentation and analysis of relevant market information." 12 C.F.R. § 225.62(a). According to the same regulation:

> Market value means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the

> buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:
>
> (1) Buyer and seller are typically motivated;
>
> (2) Both parties are well informed or well advised, and acting in what they consider their own best interests;
>
> (3) A reasonable time is allowed for exposure in the open market;
>
> (4) Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
>
> (5) The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Id. § 225.62(g). Even though these regulations did not govern the appraisals at issue here, the parties relied on these and similar standards when describing the requirements for an appraisal.[82]

As will be explained in more detail below, to establish a misrepresentation with respect to the LTV ratios set forth in the Prospectus Supplements, FHFA bore the burden of establishing both that the original value derived from an appraisal (and

[82] Defendants moved into evidence the Interagency Appraisal and Evaluation Guidelines appearing at 75 Fed. Reg. 77,450 (Dec. 10, 2010).

hence an LTV ratio based on that appraisal) was inflated (objective falsity), and that the appraiser did not believe the original appraised value to be accurate (subjective falsity). The Court finds that FHFA carried this burden with respect to at least 184 of the 672 Sample loans, which is approximately 27% of the Sample and, with extrapolation, 27% of the SLG population.

First, there was strong evidence that a significant percentage of the original appraisals for the Sample properties did not reflect the actual values of the properties. To the extent they could be measured, the original appraisals for the Sample properties had an upward bias of 8.92%, on average. There were more than three times as many inflated appraisals as understated appraisals. This means that the original appraisals systematically overvalued the properties, and that the overvaluation was not due to random chance. The average inflation bias per SLG ranged from over 5% to over 15%.

Of the 672 Sample loans, FHFA proved that at least 208 of their appraisals (or approximately 31%) were materially inflated (using an inflation threshold of 15.1%), and that for at least 184 of these inflated appraisals (or approximately 27% of the 672), the appraisals were non-credible. The table below shows the breakdown for each of the seven SLGs. The final column reflects non-credible appraisals. "Credibility" is a term of art in the appraisal industry, as further discussed below.

Securitization (SLG)	Number of Sample Loans in Securitization	Number of Sample Appraisals Inflated by at Least 15.1%	Non-Credible Appraisals Inflated by at Least 15.1%
NAA 2005-AR6 (3)	129	27 (21%)	25 (19%)
NHELI 2006-FM1 (1)	94	29 (31%)	26 (28%)
NHELI 2006-HE3 (1)	88	30 (34%)	27 (31%)
NHELI 2006-FM2 (1)	95	38 (40%)	34 (36%)
NHELI 2007-1 (2)	92	19 (21%)	17 (18%)
NHELI 2007-2 (1)	88	37 (42%)	31 (35%)
NHELI 2007-3 (1)	86	28 (33%)	24 (28%)
Total	**672**	**208 (31%)**	**184 (27%)**

The Court finds that a showing of an appraisal's non-credibility is strong circumstantial evidence that at the time the appraiser prepared the appraisal she did not believe in the value reflected therein. That strong circumstantial evidence has been buttressed by other evidence, also described below.

As discussed above, the Offering Documents highlighted the percentage of the underlying loan pools that had LTV ratios at or below 80%. It was well understood at the time that LTV ratios over 80% signaled a substantial increase in risk. An LTV ratio over 100% indicates that the property was "underwater" at the time of its sale. The Supplements overrepresented the number of loans with LTV ratios below 80%, underrepresented the number of loans with LTV ratios over 80%, and falsely represented that none of the loans had LTV ratios over 100%.

As set forth in the table below, extrapolating the impact of the inflated and non-credible appraisals to each SLG,

substantially more loans had LTV ratios above 80% and above 100% than originally represented in the Offering Documents.

SLG	Less than 80 LTV		Between 80 and 100 LTV		Over 100 LTV	
	Original	Extrapolated	Original	Extrapolated	Original	Extrapolated
NAA 2005-AR6 (3)	100.0%	82.2%	0.0%	8.5%	0.0%	9.3%
NHELI 2006-FM1 (1)	79.8%	61.7%	20.2%	28.7%	0.0%	9.6%
NHELI 2006-FM2 (1)	80.0%	62.1%	20.0%	25.3%	0.0%	12.6%
NHELI 2006-HE3 (1)	62.5%	46.6%	37.5%	36.4%	0.0%	17.0%
NHELI 2007-1 (2)	89.1%	73.9%	10.9%	16.3%	0.0%	9.8%
NHELI 2007-2 (1)	61.4%	50.0%	38.6%	29.5%	0.0%	20.5%
NHELI 2007-3 (1)	66.3%	51.2%	33.7%	33.7%	0.0%	15.1%
Total	**78.6%**	**62.5%**	**21.4%**	**24.4%**	**0.0%**	**13.1%**

The extrapolations[83] indicate that over 13% of the loans were underwater, compared to the 0% reported in the Offering

[83] The Court adopts Cowan's extrapolations, which were based on Kilpatrick's findings, also adopted by the Court, as discussed below. Cowan used a classical estimator, which is, as its name suggests, a "classical" and uncontroversial statistical technique used to estimate the value of a binary variable in a larger population. Essentially, the classical estimator takes the proportion of a certain value in a representative random sample and applies that proportion to the population. For example, assuming a population of 100 loans and a representative sample of 10 loans, if 9 (9/10) of the appraisals in the sample were non-credible, it can be confidently stated that 90 (90/100) of the appraisals in the population are non-credible. As Cowan used the classical estimator to show the relevance of the non-credibility findings at a population level, the table above shows both the applicable percentage for the Sample and the extrapolation to the population. Moreover, the 13.1% figure represents the lowest estimate of non-credible appraisals creating underwater loans, because Cowan presumed that all appraisals not tested for credibility were in fact credible. Defendants' expert Barnett attempted to call Cowan's extrapolation methodology into doubt, but on cross-examination his argument was shown to rest on demonstrably false assumptions.

Documents. There is also a dramatic shift in the LTV range below 80%. The Offering Documents, on average, reported roughly 79% in this range, while Kilpatrick's analysis shows that the number plummets to roughly 63%. This was due to the increases in the numbers of loans with LTV ratios over both 80% and 100%. The swings for NAA 2005-AR6 and NHELI 2006-FM1 are particularly stark in the range between 80% and 100%.

To prove both the extent to which appraisals were inflated and the extent to which appraisers subjectively disbelieved the figures they rendered, FHFA relied principally on Kilpatrick, whose findings the Court substantially adopts here, as described in more detail below. Kilpatrick's testimony was corroborated in several ways by other trial evidence. After Kilpatrick's evidence and defendants' criticisms of it are discussed, that additional evidence is summarized.

A. Kilpatrick

Kilpatrick concluded that he had sufficient information to evaluate the original appraisals for 672 of the 796 Sample properties.[84] Using his proprietary Greenfield AVM, or "GAVM," Kilpatrick concluded that 208 of the 672 appraisals were

[84] Kilpatrick did not have sufficient information to assess the accuracy of the original appraised values for 124 properties. For example, original appraisals were missing for about two-thirds of those properties. In addition, Kilpatrick required enough data regarding comparable properties to run his proprietary automated valuation model.

inflated by at least 15.1%. In other words, the original appraised value of each of those 208 properties was at least 15.1% higher than the value of the property at the time of the original appraisal as estimated by the GAVM. Kilpatrick's choice of the 15.1% threshold is notable: The Appraisal Institute, a professional organization of appraisers, at one point used a 10% threshold as a gating mechanism for reviewing discrepancies between appraisals, and Kilpatrick adopted a figure a full 5.1 percentage points above that.[85]

Kilpatrick further evaluated 205 of the 208 inflated appraisals with his credibility assessment model ("CAM") to determine whether the original appraisals were "credible." That an appraisal is non-credible is, in at least this case, circumstantial evidence that the appraiser did not believe her appraised value for the property to be accurate. Kilpatrick concluded that, at a conservative credibility threshold, 184 of the 205 original appraisals were non-credible.

1. Greenfield AVM

In the first stage of his analysis, Kilpatrick used the GAVM to identify inflated appraisals. As explained above, an AVM is a computer program that employs statistical models to

[85] Nomura itself used a 10% AVM gating mechanism for subprime loans to designate those appraisals that should be subjected to further review.

ascertain estimates of the market value of real property. AVMs draw from a larger pool of comparable property sales than traditional appraisal methods by culling information from databases and analyzing many sales observations. AVMs are commonly used as screening tools to identify appraisals that warrant closer review. Indeed, defendants' due diligence vendors used AVMs in screening the appraisals of some of the properties in the Trade Pools to target appraisals for further investigation. Defendants' AVM expert, Kennedy, explained that "an AVM can be used as a sorting tool to get to a group of properties that you want to take a more in-depth look at."

a. The Mechanics of the Greenfield AVM

Kilpatrick designed and built the method and code for the Greenfield AVM. The Greenfield AVM consists of two valuation sub-models, which are separately run and whose results are compared to arrive at a single final value.[86] Using a standard regression technique, the sub-models compare the actual sales price of comparables against up to six hedonic characteristics[87]:

[86] The two sub-models are an ordinary least squares log-linear regression model ("OLS sub-model") and a log-linear OLS sub-model with an additional trend surface component ("OLSXY sub-model").

[87] Hedonic characteristics are property characteristics determinative of value. Cf. In re Elec. Books Antitrust Litig., No. 11md2293 (DLC), 2014 WL 1282293, at *9 n.15 (S.D.N.Y. Mar. 28, 2014) ("A hedonic pricing model -- 'hedonic' from the Greek

tax assessed value ("TAV"), bathrooms, year built, lot size, square footage, and time adjustments, and in the case of one of the sub-models, additional spatial variables.[88] The GAVM limits the sales observation data to one year prior to the appraisal date of the Sample property and the geographically closest sales that are within the same county as the Sample property. Kilpatrick used a minimum of 100 and a maximum of 2,000 comparables for each Sample property. Before running his models, Kilpatrick filtered certain data from his vast dataset.[89] One of these filters was criticized by defendants and is discussed below.

b. Confirming the Accuracy of the Greenfield AVM

The GAVM served as a reliable gating mechanism to identify a set of materially inflated appraisals. Its reliability as a

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meaning pleasure, as the method relates to consumers' desires -- measures the effect of various product attributes on price.").

[88] Kilpatrick acquired the data for his Greenfield AVM from CoreLogic, on which defendants relied in performing their own due diligence work.

[89] The filters eliminated sales where required data (such as date or location) were missing, sales for properties other than single-family residences or condominiums, sales before 2003 or after 2007, and sales coded as non-arm's length, or non-grant deed, transactions. Where there were more than 2,000 comparables, Kilpatrick limited the total number of comparables to the 2,000 geographically closest. He would not run the GAVM with fewer than 100 comparables.

screening tool and its accuracy were confirmed through a series of tests.

In one test, Kilpatrick compared the GAVM estimated values with the actual sales prices of subject properties. Focusing on the middle 90% of the subject sales (in other words, excluding the 5% of the subject sales at the low tail of the distribution and the 5% of the subject sales at the high tail of the distribution), the GAVM predicted the sales price to within 1.26% on average.[90]

In another series of tests, Kilpatrick compared the performance of four commercially available AVMs used by defendants' expert Kennedy to the performance of the Greenfield AVM, again using the middle 90% of the subject sales. The Greenfield AVM was conservative and predicted slightly higher

[90] Kilpatrick concluded that the 5% of the sales properties at each of the tail ends of the distribution reflects "sales transactions that were not the result of arm's length sales or are otherwise the product of biased or other non-market value transactions." Kilpatrick reached this conclusion in part based on his analysis of the performance of the Greenfield AVM on sale property transactions in other cases in this coordinated litigation involving similar types of sale properties from the same timeframe. For example, the GAVM predicted the middle 90% of sales prices of the Goldman Sachs Sample loan sales transactions to within -1.9% on average with a 15% forecast standard deviation ("FSD"), the Ally Sample sales transactions to within 0.9% on average with a 14% FSD, and the HSBC Sample sales transactions to within -2.3% with a 14% FSD. The FSD is the average difference between the GAVM prediction and the actual sales price, where the difference is squared to avoid offsetting positive and negative differences.

market values than each of the four commercial AVMs used by Kennedy.

Moreover, when applied to all of the Sample loans' appraisals, each of the four commercial AVMs predicted higher average inflation of the original appraisals than the GAVM predicted. The four commercially available AVMs reported average appraisal errors exceeding 10%, as compared to the more conservative 8.92% calculated by the Greenfield AVM. That comparison is reflected in the following chart[91] submitted by Kilpatrick:

Appraisal Error: (Appraisal - AVM) / AVM	Greenfield AVM	Collateral Analytics AVM	Real Info AVM	DataQuick CMV-P AVM	DataQuick CMV-AE AVM
Properties Valued	672	662	496	669	670
Average Appraisal Error	8.92%	10.14%	12.30%	10.24%	12.62%
Median Appraisal Error	6.28%	5.88%	7.99%	5.99%	6.27%
Standard Deviation of Appraisal Error	23%	26%	22%	21%	36%

The median appraisal error was essentially consistent across all five AVMs, between 5.88% and 7.99%, with the Greenfield AVM calculating a median appraisal error of 6.28%.

The defendants did not ask their expert Kennedy to defend the credibility of the 208 appraisals identified by the GAVM as suspect. Of the 208 appraisals that the GAVM found to be at

[91] None of the four commercial AVMs was able to produce an AVM value for each of the 672 subject properties. But three of them, as reflected in the chart, produced values for almost all of the properties.

least 15.1% inflated, Kennedy had results from at least one of the four commercial AVMs for 181 of them. For 180 of the 181, the commercial AVMs that evaluated them also estimated values that were lower than the original appraised values.[92] During cross-examination, defendants' expert Hedden was forced to concede that if evaluated on the standard chart produced by his company to display the performance of AVMs along a number of metrics, the GAVM would approach the range of the chart marked "excellent."

c. Defendants' Criticisms of the GAVM

i. Daubert Challenge

On December 5, 2014, defendants moved pursuant to Fed. R. Evid. 403, 702, and Daubert v. Merrell Dow Pharm., 509 U.S. 579 (1993), to exclude Kilpatrick's testimony. The motion was granted in part, excluding Kilpatrick's opinions regarding the subjective beliefs of appraisers. FHFA v. Nomura Holding Am., Inc. ("Kilpatrick Opinion"), No. 11cv6201 (DLC), 2015 WL 353929, at *6 (S.D.N.Y. Jan. 28, 2015). The Opinion noted that defendants' attacks on the reliability of the GAVM and CAM methodologies went only to the weight, not the admissibility, of

[92] Measured by various metrics, the commercial AVMs supported the GAVM's appraisal values. For instance, for 24 of the 53 appraisals evaluated by three of the four commercial AVMs (or 45%), at least two of the commercial AVMs agreed with the GAVM.

the proffered testimony. Id. at *4. The trial evidence has confirmed that finding.

At trial, defendants renewed their Daubert motion directed to the reliability of Kilpatrick's methods. As explained below, none of defendants' multilayered attacks on the GAVM (or the CAM) succeeds in showing that Kilpatrick's tools for analyzing appraisal inflation and the credibility of the original appraisals were unsound. Kilpatrick's testimony "both rest[ed] on a reliable foundation and [wa]s relevant to the task at hand." Daubert, 509 U.S. at 597. When subjected to close examination at trial, his tools were shown to be conservative, careful instruments that were well-designed to ferret out appraisal bias and to be of assistance to the finder of fact in making assessments about appraisals. At heart, the ultimate test for the Greenfield AVM is whether it succeeded in isolating a subset of inflated appraisals for more in-depth analysis. It did, and none of defendants' criticisms contends otherwise. In fact, Nomura's own AVM results (from Nomura's limited valuation diligence) found average appraisal error in the Nomura loans at essentially the same rate as did the GAVM.

Defendants note that the Greenfield AVM was developed recently and has not been made available to the appraisal industry. It has, therefore, not survived the test of time or independent testing. At base, the GAVM meets the Daubert

standard even though it has not been peer reviewed. There are several commercial AVM products that are widely used, and across many metrics the Greenfield AVM outperforms each of them. In fact, across the metrics of average and median sales error, the Greenfield AVM was more conservative than the other commercial AVMs, as it predicted slightly higher market values.

In response to a question from the Court, Kilpatrick explained that he did not use a commercially available AVM for his work in this case because he knew that, at the end of the day, he would have to testify and would be called upon to explain his valuation process: He wanted to use a valuation model that he understood and would be able to explain under oath. In fact, Kilpatrick explained that he reads USPAP Standard Rule 6 to oblige an appraiser to be familiar with an AVM's inputs, filters, calibration, and with the statistical characteristics of its outputs. Kilpatrick explained that he would not have been able to speak to any of those topics with regard to the commercial, "black box" AVMs. By contrast, Kilpatrick developed the GAVM himself and used its underlying hedonic and automated valuation models throughout his academic and professional careers.

Defendants offered many attacks against the mechanics of the GAVM, the most significant of which are addressed below. None of their arguments or evidence, however, succeeded in

showing that the GAVM was an unreliable screening tool. The GAVM performed reliably as a gating mechanism for sending suspect appraisals on for closer review under the CAM, and those aspects of its design and performance criticized by defendants do not ultimately impact its ability to perform that basic function. The closer review under the CAM confirmed that it had performed as intended, indeed admirably. In the overwhelming majority of cases, the inflated appraisals flagged by the GAVM were indefensible and provide strong circumstantial evidence of impropriety by the appraisers who performed them.

ii. Variable Omission

Defendants assert that the Greenfield AVM suffers from omitted variable bias. When important variables are omitted from a regression analysis, the analysis loses its predictive value. See, e.g., Freeland v. AT & T Corp., 238 F.R.D. 130, 145 (S.D.N.Y. 2006) (noting effect of omitting variable from regression analysis). Defendants' experts, Hausman and Isakson, identified several variables including views, swimming pools, school quality, access to public transportation, number of bedrooms, garage size, and lot size, which they asserted had been improperly omitted.

This argument was not persuasive. It is true that "[f]ailure to include a major explanatory variable that is correlated with the variable of interest in a regression model

may cause an included variable to be credited with an effect that actually is caused by the excluded variable." Federal Judicial Center, Reference Manual on Scientific Evidence 314 (3d ed. 2011). But, as significantly, "[p]erforming a multiple regression analysis requires selecting only some of the multitude of characteristics that are possible trial predictors because including too many variables can preclude measurement of the characteristics that are valid predictors." Leandra Lederman, Which Cases Go to Trial?: An Empirical Study of Predictors of Failure to Settle, 49 Case W. Res. L. Rev. 315, 327 n.49 (1999).

Defendants' expert incorrectly identified lot size as an omitted variable. As explained above, lot size is already one of the hedonic characteristics used by the Greenfield AVM. Defendants also failed to show that adding the number of bedrooms as a variable would have appreciably altered the estimated values produced by the GAVM. The square footage of the home, a characteristic used by the Greenfield AVM, serves as a proxy for the number of bedrooms and effectively captures the value associated with the number of bedrooms. Tellingly, defense expert Hausman testified that the effect of treating the number of bedrooms as a required variable increased the GAVM predicted value by only approximately 0.6% on average. Finally, Kilpatrick used TAV as a proxy variable for environmental

features such as the view from a property, swimming pools, school quality, and access to public transportation. There was no showing by defendants that these intangibles could be or are variables typically used in AVMs or that the use of TAV in connection with 100 to 2,000 comparables in close proximity to the subject property was not an acceptable proxy for these features.

iii. Negative Coefficients

Defendants' expert Isakson claimed that the GAVM often produces regression coefficients for its housing characteristic variables that violate implicit price theory, because in some regressions the sub-models have coefficients that are less than zero for key housing characteristics. This would appear to be inconsistent with a characteristic that represents a feature of a house that buyers desire, such as extra bathrooms. The four variables to which Isakson pointed are year built, living area, lot size, and number of bathrooms.

Kilpatrick explained, however, that a coefficient for a variable might be negative in a given case to counterbalance an exaggerated TAV coefficient. Kilpatrick offered the following persuasive example: A local tax assessor might say that each additional bathroom beyond the first one in a house adds $1,000 in value. Kilpatrick's data, however, might show that each additional bathroom actually adds only $800 in value. In that

scenario, the coefficient for the number-of-bathrooms variable would be negative to reflect the marginal adjustment.

iv. Inclusion of TAV as a Variable

Defendants vigorously attack the GAVM's use of TAV as a variable. Among other things, as they point out, there is no uniform system employed by local jurisdictions for tax assessments, some jurisdictions do not update TAVs frequently, and some jurisdictions base TAVs only on an external review of the property. Moreover, the GAVM included TAV data that post-dated the original appraisal that the GAVM was evaluating.

The TAV served as a proxy variable for hard-to-measure aspects of property value, such as the view and the general upkeep and condition of the house and property. Kilpatrick was able to allay the specific concern about TAV data post-dating the original appraisal by filtering the data to exclude any house rebuilt after 2009 and by testing for "regime shifts" in tax assessment that may be linked to rebuilding that occurred before 2009 by correlating TAV to sales prices of the comparables within one year prior to the time of the original appraisal.

Tellingly, defendants conducted no robust test to affirmatively show that TAV was not an appropriate variable. In contrast, Kilpatrick conducted statistical analyses on each and every TAV data point to determine the degree to which it was

correlated with actual sales prices.[93] Moreover, as defendants themselves admit, commercial AVMs utilize TAV and federal government guidelines recognize that they may properly do so, so long as the TAV exhibits that a "valid correlation exists between the tax assessment data and the market value." Interagency Appraisal and Evaluation Guidelines, 75 Fed. Reg. 77,450, 77,469 (Dec. 10, 2010).[94] Indeed, Isakson admitted that TAV data is "good source of data."

v. CV Filter

Defendants levy criticism against Kilpatrick's use of one of his several data filters, the Cross-Validation Filter ("CV Filter"). The CV Filter turned the GAVM sub-models on each of the 100 to 2,000 comparables, using all of the remaining comparables in the same county to estimate the value of the comparable under review. If the log of the predicted value of

[93] Defendants intended to undermine Kilpatrick by eliciting that he did not undertake certain activities mentioned in federal guidelines for using a TAV to develop an evaluation. But those guidelines are not applicable to Kilpatrick's work in this case. The guidelines provide guidance to regulators of the mortgage lending process, and that guidance might "flow through" to real estate appraisals performed on collateral for loans from regulated institutions.

[94] A Fannie Mae document on AVMs introduced by defendants at trial also contemplates the use of TAVs in AVMs, as it says that "AVMs are statistically-based computer programs that use real estate information such as comparable sales, property characteristics, tax assessments, and price trends to provide an estimate of value for a specific property." (Emphasis added.)

the comparable property under review deviated from the log of the actual sales price by at least 25%, Kilpatrick excluded that comparable from his dataset before running his regression models on the subject property. In Kilpatrick's judgment, the deviation reflected that the sales price for that comparable was "not consistent with the hedonic characteristics reported in the available data."

Isakson makes several criticisms of the use of the CV Filter. But, again, defendants have done nothing to convince the Court that the GAVM's use of the CV filter biased it to reach more aggressive results. As explained by Kilpatrick, the CV Filter is a type of well-recognized leave-one-out statistic, routinely used to eliminate outliers in econometrics. Defendants' econometrics expert, Hausman, did not argue that as a matter of principle the use of such a filter was improper here. Additionally, Kilpatrick consistently used the CV Filter without alteration throughout the duration of the various proceedings in these coordinated actions.

vi. GAVM's Performance Vis-à-vis Four Commercial AVMs

Responding to the evidence that the GAVM performed well when compared to the four commercial AVMs on which defendants' experts had relied, defendants sought to undermine that comparison with expert testimony. To do so, however, their

expert presented misleading testimony. He chose to use a faulty dataset and omitted a key comparator on which he had previously relied but which undermined his thesis. When the correct dataset is used, and all reliable measurements are considered, the evidence shows that the GAVM performs well as a gating mechanism and produces, if anything, conservative results.

Defendants' expert purported to compare the GAVM with four commercial AMVs and to determine that the GAVM was the poorest-performing AVM across six of eight metrics.[95] His analysis and reliability were undermined when it was revealed during cross-examination that his comparison figures included a miscoded sale,[96] as had been already been pointed out to him over three months earlier during his deposition.[97] When that error is eliminated, the results of the comparison of the AVMs change substantially on certain metrics.[98]

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[95] The eight metrics for measuring predictive accuracy included mean percentage error, mean absolute error, and standard deviation of error.

[96] The miscoded sale was easy to spot. The GAVM produced a value of $1,349,877, while the sales amount was $194,440. Kilpatrick discovered that the data used by the GAVM related to a group of single-occupancy units, not a single property.

[97] The miscoding error had been presented to the expert at his deposition on November 5, 2014. He ignored the error and presented his original study as part of his direct testimony on February 20, 2015.

[98] Removing the miscoded loan dropped the mean absolute error rate for the GAVM from 17% to 15.1%, and reduced the standard deviation from 39.8% to 20.7%. These updated figures were

Moreover, whereas in the expert's earlier work in this case he presented "median error" as a relatively reliable measure of predicative error, and as one that "provide[s] clear definition to overall performance above/below the benchmark value," he omitted that metric when constructing his comparisons for this trial. It turns out that the median error of the GAVM when it was used to value the same properties as the other four AVMs was the lowest of the five. While the expert had performed that head-to-head comparison in charts that he had created before trial, he chose not to submit that comparison as part of his direct testimony.[99]

Considering all of the expert testimony, and the several ways in which one may compare AVM performance, FHFA succeeded in showing that the GAVM was a reliable AVM and that it performed well when compared to commercially available AVMs. Indeed, the

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comfortably in keeping with the figures for the four commercial AVMs along these metrics.

[99] In fact, the expert acknowledged that mean absolute error rate, a metric that he did include in his table and one along which the GAVM was reportedly outperformed by the commercial AVMs, is slightly less precise than the median error rate. Not only was the mean absolute error rate that was presented in the expert's table exaggerated on account of including the miscoded loan, but during cross-examination he acknowledged that the table does not reflect head-to-head comparisons, as each of the AVMs was valuing a somewhat different set of properties, and that a head-to-head comparison tightens up the mean absolute error differentials between the five AVMs.

GAVM presented a more conservative assessment of appraisal inflation.

vii. Attacks on AVMs Generally

In another attempt to undermine the soundness of the GAVM, defendants argued that AVMs generally are unreliable. Defendants introduced a document setting out Fannie Mae's current position on using AVMs as a substitute for an appraiser's individual inspection and appraisal of a property. This argument is largely a red herring. FHFA has not relied, and the Court does not rely, solely on the GAVM to assess the original appraisals of the Sample properties that it contends have inflated appraisal values. Kilpatrick did an intensive review of each of those properties using his CAM methodology before making his final assessment of the reliability of their original appraisal values. In any event, Fannie Mae's cautionary language does not suggest that the GAVM fails as a reliable gating mechanism here.

Fannie Mae's document states, "At present[100] . . . we believe AVMs have generally not evolved sufficiently to fully

[100] Fannie Mae's assessment expressly leaves open the possibility that in the future AVMs may have a larger role in the origination process. Properly constructed and applied AVMs would have at least one advantage over individual appraisals; they would not be subject to pressure from property owners, brokers, and originators, and their results could be confirmed by purchasers of mortgages without the expense associated with an appraisal review or BPO.

replace traditional appraisals and human judgment for the origination of first lien mortgages." (Emphasis added.) The document goes on to report:

> AVMs have three principal limitations:
>
> • First, they are dependent upon the accuracy, comprehensiveness, and timeliness of the data they use. Data issues can include incomplete public records, insufficient sales of properties with comparable features within a specified geographic area, and a lag between the time when the market data are current and the AVM uses the data to generate an estimate of value.
>
> • Second, AVMs cannot be used to determine the physical condition and relative marketability of a property.
>
> • Third, AVMs can never fully incorporate the breadth of knowledge and judgment of a skilled appraiser.[101]

Fannie Mae's document, however, also acknowledges the "strengths" of AVMS relative to traditional real estate appraisals. Those strengths are "speed, reduced costs, consistency, and objectivity. . . . [A]n AVM can significantly reduce the time it takes to obtain an estimate of value and

[101] Freddie Mac also takes the view that its own AVM should not serve as "a replacement" for an appraisal. With regard to the first limitation identified by Fannie Mae, as Kilpatrick explained, this limitation can be tested, as he did with his Greenfield AVM. With regard to the second, Kilpatrick noted that AVMs can be used to test the extent to which physical condition and marketability have an impact on sales price, if the AVM uses a good proxy variable for physical condition and marketability, like TAV. And with regard to the third limitation, Kilpatrick testified that an AVM can inform the opinion of a skilled appraiser.

reduce the costs associated with the traditional appraisal process."

Moreover, as discussed above, defendants' own expert, Kennedy, noted the virtues of using an AVM as a sorting tool. And Kennedy was even quoted in a 2007 article in the Magazine of Real Estate Finance as saying that "[t]here is going to be a backlash against traditional appraisal processes because of inherent biases as this meltdown continues forward. This will probably mean more volume for AVMs because of its [sic] unbiased nature."

viii. Statistical Errors

Finally, defense expert Hausman offered several statistical attacks on the calculations Kilpatrick made using the GAVM results, including that Kilpatrick used an unreliable level of statistical significance in comparing the original appraised value to the Greenfield AVM value, and that Kilpatrick erred in the method he used to transform a natural logarithm of the sales price into a predicted value in dollar terms.

At the end of the day, however, it is unnecessary to confront with specificity Hausman's criticisms. Hausman acknowledged that his academic work has not focused on AVMs, that he has never constructed an AVM, that he is not a participant in the AVM industry, and that his testimony was not based on a comparison of the GAVM to any other AVM, including

the four commercial AVMs discussed by the other experts for defendants. Nor does his statistical critique relate to the core functionality of the GAVM as used in this litigation. The GAVM was used in the first instance to identify those properties whose appraisals deserved closer review, and it is to that review that the Opinion turns next. If it had not performed that first task well, its AVM values would not have been used to recalculate LTV ratios.

To sum up, the Greenfield AVM succeeded in identifying a subset of the 672 appraisals that deserved further review. While defendants have mounted a vigorous attack against the Greenfield AVM, there is no evidence that any AVM currently used in the field would have performed better when assessed with the rigor applied by the impressive array of experts assembled by defendants. It is telling that defendants themselves have historically relied upon AVMs to identify a set of appraisals deserving further scrutiny. FHFA has shown that Kilpatrick's AVM has performed at least as reliably as those on which defendants and others in business typically rely in making important decisions.

2. The CAM

There were 208 properties in the Sample whose original appraised values were at least 15.1% higher than the value estimated by the Greenfield AVM. These 208 original appraisals

were directed to the CAM, which Kilpatrick created to evaluate the degree to which the original appraisals were "credible," which is a term of art under the USPAP. The CAM is a deterministic scoring methodology designed to evaluate the degree, if any, to which the appraisals deviated from USPAP and what Kilpatrick describes as applicable appraisal standards and practices. Because Kilpatrick did not have sufficient information to do his CAM evaluation for three of the 208 properties, 205 appraisals were evaluated with the CAM. Kilpatrick concluded that 184 of the 205 properties had appraisals that were not only inflated, but also non-credible. The Court adopts Kilpatrick's assessment. Coupled with other evidence explored below, these findings of non-credibility under the CAM present sufficient circumstantial evidence of bias to permit a determination that the appraisers produced appraisals that they knew did not accurately describe the value of these properties.

a. USPAP

Appraisals are based on a comprehensive set of prescribed procedures performed by licensed and certified appraisers. The procedures are developed and monitored by the Appraisal Institute and are contained in its Code of Professional Ethics ("Code of Ethics") and in the USPAP. Although not in effect during the time period at issue in this action, under current

law, as enacted by the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), Pub. L. No. 111-203, 124 Stat. 1376 (2010), "appropriate standards for the performance of real estate appraisals . . . shall require, at a minimum -- that such appraisals shall be subject to appropriate review[102] for compliance with the Uniform Standards of Professional Appraisal Practice." 12 U.S.C. § 3339(3).

Even during the relevant time period, USPAP constituted the generally accepted professional appraisal industry standards. USPAP first went into effect in 1989 and has been revised regularly since that time. The appraisals at issue here were performed between 2003 and 2006, and Kilpatrick relied principally on the 2005 USPAP, in particular its Standards 1 and 2, as representing the recognized industry standards during the relevant timeframe.

USPAP Standard 1 is entitled "Real Property Appraisal, Development," and provides: "In developing a real property appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem, and

[102] USPAP recognizes an appraisal review as a process whereby a reviewer develops an opinion as to the completeness, accuracy, adequacy, relevance, and reasonableness of the reviewed work. In other words, an appraisal review is the process by which an independent professional passes judgment on certain specific elements in another appraiser's appraisal report.

correctly complete research and analysis necessary to produce a credible appraisal." The Rules accompanying Standard 1 refer to credible appraisals and the credibility of the appraisal results. Appraisal Found., Uniform Standards of Professional Appraisal Practice and Advisory Opinions 17-22 (2006 ed.).

USPAP Standard 2 is entitled "Real Property Appraisal, Reporting," and provides: "In reporting the results of a real property appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading." The Rules accompanying Standard 2 dictate what an appraisal report must contain in order not to be "misleading." Id. at 23-31.

The 2006 USPAP defined the term "credible" as "worthy of belief." Its comment explains that "[c]redible assignment results require support, by relevant evidence and logic, to the degree necessary for the intended use." The definition was added to the 2006 USPAP because the concept of credibility is "central" to USPAP. As the Appraisal Standards Board explained in its published answers to the "most common questions" about the changes it made to the 2006 USPAP, the term "credible" had been a central concept in USPAP prior to 2006, and the definition added to the USPAP in 2006 "is not really different from common usage." Appraisal Found., 2006 USPAP and Scope of Work 2, available at http://www.ncua.gov/Legal/Documents/

Regulatory%20Alerts/RA2006-04Encl2.pdf; see also Appraisal Inst., The Dictionary of Real Estate Appraisal 49 (5th ed. 2010).

b. The CAM Questions

Kilpatrick attempted to distill the USPAP's requirements and the appraisal industry's standards into a series of thirty-one questions, which were designed to evaluate whether an appraisal complied with the fundamental requirements of USPAP and other standards of practice applicable at the time the original appraisals were performed. Because of the quantity of appraisal reviews that had to be conducted over the breadth of this coordinated litigation, the distillation of pertinent appraisal requirements into a series of concrete, pointed questions made sense. It permitted Kilpatrick's team to gather relevant data for many different properties using uniform standards and permitted Kilpatrick to supervise and review that work effectively. There is no suggestion that Kilpatrick failed to supervise and review that work with care.[103]

Kilpatrick's thirty-one CAM questions pertain to five general topics: reporting, transaction history, analysis, market trends, and comparables. The questions essentially track the

[103] Defendants in these coordinated actions deposed Kilpatrick for forty-eight hours. Nomura called to the stand four experts to address Kilpatrick's work alone.

information that appraisers are required to include on the URAR, one of the most common forms used for real estate appraisals, which has sections devoted to the subject property, sales contract, neighborhood, site, improvements, appraiser's approach, and any additional information. The thirty-one CAM questions are anodyne and factual. For instance, the first question is: Are the legal address and parcel ID sufficient to identify the subject?

c. Gathering CAM Answers

To obtain answers to the CAM questions, Kilpatrick relied principally on his staff at Greenfield and on research provided by licensed appraisers associated with two appraisal firms who worked in the vicinity of the Sample properties. Kilpatrick instituted quality-control checks and appended the collected data to files for each of the examined properties.

The researchers were provided the first page of the original appraisal report. The first page provides identifying information about the subject property and neighborhood, but it does not include the actual analysis or opinion of value. The researchers were directed to gather from local Multiple Listing Services ("MLS") real estate data regarding the nearest nine comparable sales, in terms of time and distance, to the original appraisal. Appraisals typically use information regarding three or four comparables. The Greenfield staff gathered additional

data from both the original appraisal reports and loan files, and from public sources, such as tax assessment data, maps, and aerial and street-level photographs.

d. CAM Scoring

Kilpatrick applied a score to each of the thirty-one CAM questions when answered in the negative. Kilpatrick chose scores that he believed reflected the importance of the question to an appraisal's credibility and the degree to which a negative response evidenced a deviation "from appraisal standards, guidance, and practice." For instance, Kilpatrick identified six questions to which a negative answer amounted to a substantial major error under USPAP Rule 1-1(b),[104] and thus gave greater weight to negative responses to those questions. Specifically, they received a score of over 8; by comparison, negative answers to most questions received scores between 2 and 6.

Even though Kilpatrick believed that a negative answer to any one of these six questions, standing alone, could raise serious questions about the credibility of the appraisal, he set a credibility threshold above that point. After performing a

[104] USPAP Standards Rule 1-1(b) provides, "In developing a real property appraisal, an appraiser must not commit a substantial error of omission or commission that significantly affects an appraisal."

number of calculations, and choosing to be conservative, Kilpatrick selected a credibility threshold of 20.[105]

e. Kilpatrick's Conclusions from the CAM Study

Setting the threshold at 20, Kilpatrick concluded that 184 of the 205 appraisals failed. For the sake of argument, Kilpatrick also accepted all of defendants' expert Hedden's specific criticisms of the CAM findings for individual property appraisals (discussed below). When he did so, there was very little difference in his findings. Kilpatrick initially testified that accepting Hedden's specific complaints moved only twelve appraisals from over the twenty-point threshold to under it. The Court's own findings in this regard are detailed below.

[105] Kilpatrick defined the threshold of credibility as the mean CAM score of the six major error questions added to the mean CAM score of the other twenty-five questions. This worked out to a threshold of 14.13. In other words, according to Kilpatrick, any appraisal evincing a CAM score greater than 14.13 contains a sufficient magnitude and frequency of errors to render the appraisal not credible. To be conservative, however, Kilpatrick added the average score of the six major error questions to twice the average of the remaining questions, as this sum would constitute the score from a series of violations of no less than three questions: one of the major error questions and two of the other questions. This approach was indeed conservative, as the USPAP contemplates that a series of individually insignificant errors can become significant in the aggregate. See USPAP Standards Rule 1-1(c) ("In developing a real property appraisal, an appraiser must not render appraisal services in a careless or negligent manner, such as by making a series of errors that, although individually might not significantly affect the results of an appraisal, in the aggregate affects the credibility of those results.").

As reported in the table presented at the outset of this section of the Opinion, looking just at the universe of appraisals deemed non-credible by the CAM, and recalculating their LTV ratios by using the lesser of the original appraised value, the GAVM estimated value, or the sales price in the denominator of the ratio, there was a sizeable shift in those ratios. There was a significant migration of the recalculated ratios to LTV ranges above 80% and above 100%.

Defendants, through Hausman and Isakson, contend that Kilpatrick's method of populating the LTV denominator -- taking the lesser of the Greenfield AVM value, the original appraised value, or the sales price of the property -- reflects an error known in econometrics as censoring. Hausman suggests that the preferred course would have been the use of only the Greenfield AVM value in the denominator. This would result in a balancing out of any negative and positive errors in the Greenfield AVM values.

But Kilpatrick's approach, taking the lesser value, is standard industry practice, and is similar to the formula described in each Prospectus as the basis for their reported LTV ratios. As explained in those documents, the denominator was generally the lesser of the sales price or the original appraised value.

f. Defendants' Critiques of the CAM and its Results

Defendants made a limited effort to defend the 184 original appraisals identified by the GAVM and CAM as inflated and non-credible. They offered virtually no affirmative evidence to suggest that these were defensible appraisals. For instance, they did not conduct appraisal reviews, a traditional tool used in the appraisal industry to review the reliability of original appraisals. Nor did they elect to perform anything like the comprehensive CAM analysis, which brought together a wealth of data about each of the subject properties and their comparables. Defendants chose instead to launch a general attack on the validity of the CAM, and to take issue with CAM findings in the case of 114 of the 184 properties. They principally relied on a single expert and four testifying appraisers to cast doubt on the reliability of Kilpatrick's CAM analysis. None of these efforts was successful.[106] This Opinion first explains why the

[106] As noted above, at trial defendants renewed their Daubert motion directed to the reliability of Kilpatrick's methods. Like the GAVM, Kilpatrick's CAM passes Daubert muster even in the absence of peer review. FHFA was faced with the novel task of proving that thousands of appraisals across sixteen lawsuits were rendered by appraisers who did not subjectively believe in the values they were reporting. Such a task calls out for expert modeling, and, while defendants argue about Kilpatrick's CAM scoring threshold, the weight he assigns various questions, and his application of the CAM to specific appraisals, defendants did not show that the CAM as a model is unreliable under Daubert.

testimony given by defendants' expert failed to undermine the CAM, and then addresses the testimony provided by the four appraisers.

i. The Failure of Hedden's Project

There were several problems with the testimony of defendants' appraisal expert Hedden. One was his lack of engagement with the assignment. Another is the very limited scope of the testimony that he provided. And a third is the standard that he applied. Each of these was fatal to him providing helpful, much less persuasive, testimony.

In contrast to Kilpatrick's hands-on engagement with his work in this case, Hedden did not devote the time or care necessary to this assignment to provide reliable opinions. It appears that one of Hedden's colleagues at FTI was responsible for organizing the work that was performed on this project and for supervising the FTI employees who worked on this engagement. That colleague was the person who chose which of Kilpatrick's CAM analyses would be subjected to fieldwork. That colleague decided to study only 40 of the 184. Given this lack of involvement, it was not surprising that Hedden had difficulty answering many of the very legitimate questions posed at trial and had to admit that he had not examined critical documents.

The second overarching failure with Hedden's testimony was its limited scope. Hedden did not offer any testimony to defend

even one of the 184 appraisals. Instead, he limited his testimony to a generalized critique of the CAM and, although Hedden's team at FTI evaluated every single one of Kilpatrick's 1,428 CAM findings, Hedden's trial testimony addresses findings relating to only 114 of the 184 appraisals deemed non-credible by the CAM. That meant that Hedden made no specific criticism of the CAM results in the case of 70 of the 184 appraisals.

Moreover, many of the loans "discussed" in Hedden's direct testimony simply appear in one or more of three tables in his affidavit that list the appraisals that failed Questions 29, 30, and 31 by what Hedden deemed to be insubstantial margins. Notably, only one of these questions, Question 29, is one of the six "major error" questions. These three questions read:

> (29) Was the average price per square foot ("PPSF") of the comps in the appraisal report less than or equal to the average PPSF of the comps available in the market at the time of the appraisal?
>
> (30) Was the average site square footage ("SSF") of the comps used in the appraisal report less than or equal to the average SSF of the comps available in the market at the time of the appraisal?
>
> (31) Was the average gross living area ("GLA") of the comps used in the appraisal report less than or equal to the average GLA of the comps available in the market at the time of the appraisal?

These questions provided relatively easy fodder for Hedden's attacks: Because they ask whether one average number is less than or equal to another average number, Hedden, through his

tables, could simply point out that even very small differences in the numbers could cause an appraisal to fail a particular CAM question.

To assist in his critique of the 184 appraisals, Hedden's colleague at FTI retained the services of iMortgage Services ("iMS") to answer a limited set of questions concerning the original appraisals for just 40 of the 184 inflated appraisals.[107] Presumably, Hedden's colleague chose the 40 original appraisals that he considered most defensible, although his absence from trial provided no opportunity to explore his selection criteria. It is therefore telling that Hedden ultimately chose to criticize the CAM findings in the case of only 33 of these 40. The iMS reports in connection with 7 of the 40 original appraisals apparently provided no ammunition to criticize the CAM results.

Even in those instances in which Hedden relied on information developed from the iMS reports, that work was far less illuminating than the detailed and rigorous reports returned by Kilpatrick's researchers. iMS represented that it

[107] On the eve of trial, FHFA filed a Daubert motion to exclude the expert testimony of Hedden, arguing that he served as the mouthpiece for anonymous appraisers engaged by iMS. The Court denied that motion from the bench during the final pretrial conference, leaving it to FHFA to cross-examine Hedden on his process.

hired licensed appraisers to fill in responses to roughly eight questions.[108] The iMS Reports tend to be about two to three pages and contain very limited instructions. In contrast, the researchers who gathered the data for the CAM were given a four-and-a-half page set of instructions and completed reports that ran around eight pages on average. In undertaking a comparison, the iMS Reports did not impress. Kilpatrick's researchers completed signed, detailed, rigorous forms that are easy to understand and analyze and that transparently provide the information supporting the CAM findings. By contrast, the iMS Reports offer anonymous, undetailed, generalized comments, which do not appear to be guided by any comprehensive set of instructions.[109]

Hedden and defendants argue that Hedden limited his discussion of the CAM results to 114 of the 184 appraisals for the sake of brevity. This rings hollow. No page limitations were placed on witnesses' trial affidavits and defendants had every incentive to mount the most comprehensive attack possible

[108] While the researchers used by Kilpatrick's team were each identified by name to defendants, the iMS researchers remained anonymous. FHFA had no means, therefore, to check whether they were appraisers with valid licenses in the jurisdictions in which they were working or their own disciplinary records.

[109] Examples of the iMS reports and the reports completed by Kilpatrick's researchers were submitted to the Court during pretrial motion practice.

against the CAM. There is a far more likely explanation for Hedden's limited testimony: He in fact found very little that he could say in defense of the 184 appraisals and in criticism of the CAM findings. This conclusion is supported by the very structure of Hedden's testimony. In no instance does Hedden present a holistic examination of a property, its original appraisal, and the CAM results. Instead, he makes scattershot arguments about particular aspects of the CAM and refers to a portion of a CAM report about an appraisal to support his theme.

The decisions regarding the credibility of the 184 appraisals, and the states of mind of their appraisers, must be made on each appraisal and for each appraiser, even if that is not the approach taken by defendants. Therefore, to review Hedden's analysis with care, the Court pulled together from every portion of Hedden's testimony, including from each of his three tables, the comments he made about each original appraisal and its CAM analysis. At the Court's request, FHFA provided the Court binders containing each of the 205 appraisals reviewed by the CAM. The Court went through each appraisal, one by one, and evaluated Hedden's criticisms, if any, of Kilpatrick's CAM finding for that appraisal. In only a handful of instances did the Court have any doubt about the substance of Kilpatrick's findings. Were the Court to perform its own extrapolation, it would use at least 180 of Kilpatrick's 184, dropping at most

four as a result of Hedden's criticisms. But a maximum of a four-appraisal disparity is too small to make a material difference in the Court's findings.

In performing the above-described analysis, the Court did not consider itself bound by Kilpatrick's twenty-point threshold. If Hedden successfully challenged the application of the CAM analysis to a particular appraisal when that appraisal was examined holistically, the Court would omit that appraisal from its finding of non-credibility, even if adopting Hedden's criticism did not move the CAM score below the twenty-point threshold.[110]

[110] As a further check, the Court began with Kilpatrick's spreadsheet -- moved into evidence by FHFA -- that lists the score each appraisal received for each CAM question. If Hedden's testimony mentioned a loan's appraisal in connection with his criticism of a particular CAM question, the Court subtracted from that loan's final CAM score the number of points that had been awarded based on its failing that particular CAM question. After conducting this additional project, CAM scores moved from above Kilpatrick's twenty-point threshold to below it for only 9 of the 184 non-credible appraisals.

In keeping with their strategy throughout the trial, defendants sought to prevent the Court from evaluating the evidence on a loan-by-loan basis. As already mentioned, the organization of Hedden's testimony did not readily lend itself to such an evaluation, and defendants objected (successfully) when FHFA propounded a table that listed by loan number all 184 non-credible appraisals and displayed how the CAM scores would change if Hedden's criticisms were adopted. In short, the excluded table performed the analysis that the Court independently undertook.

As they did elsewhere in this case, defendants aimed to present the Court with a single choice: adopt Kilpatrick or adopt Hedden. If confined to defendants' choice, the Court would unhesitatingly adopt Kilpatrick over Hedden. Kilpatrick's work was far more rigorous and complete and his testimony was far more credible. But, as noted, the Court also found that its own loan-by-loan analysis confirmed Kilpatrick's analysis in the overwhelming majority of appraisals even after each of Hedden's criticisms regarding an appraisal was examined with care.

Finally, the value of Hedden's testimony was severely undercut by his testimony that it is the job of an appraiser to start with a presumption that the sales price is the right price and to try to find comparables to support that presumption. Operating from such a presumption runs a serious risk that the appraised value will not be legitimate. Indeed, the practice of backing into the sales number may explain why, as noted below, so many of the appraisals for the purchase money mortgages in the Sample were identical to the sales price and why upon careful examination they appear to be inflated appraisals. As is discussed further below, some of defendants' own witnesses rejected Hedden's notion that an appraiser should begin with a presumption in favor of the sales price; they bemoaned the practice of backing into the sales price as a systemic problem in the industry.

ii. Field and Desk Reviews Are Preferable.

Hedden attacked the CAM as unnecessary since, according to him, there are well-accepted alternative methods for evaluating appraisals, specifically field and desk reviews.[111] It suffices to note that the availability of alternative methods for reviewing appraisals does not, standing alone, render the CAM inadequate. Using a single witness who supervised closely a uniform examination of roughly 200 appraisals under a single set of standards is helpful to a fact-finder if those standards are appropriate to the task.

iii. The CAM Is Not Derived from USPAP.

On direct, Hedden argued that "none" of the thirty-one CAM questions "are based on USPAP requirements." He also pointed out that the CAM has been neither peer reviewed nor validated by others in the industry. Following his cross-examination, however, Hedden abandoned the argument that the CAM is not derived from the USPAP. He admitted that "generally speaking . . . the nature of the [CAM] questions . . . do go the credibility of an appraisal," and are generally sourced from the URAR. On cross-examination he was marched through many of the

[111] Defendants could have but did not conduct field or desk reviews of the 205 appraisals that Kilpatrick evaluated with the CAM.

fields on the URAR form to illustrate that they are directly reflected in the CAM questions.

The CAM is sufficiently tethered to the USPAP and the principles that guide appraisals and appraisal reviews to be useful here. Kilpatrick explained in detail the bases for his formulation of the thirty-one questions, and those explanations were successful in supporting the use of the CAM as a means of measuring the reliability of scores of appraisals.

iv. The CAM Weightings Are Flawed and the Threshold of Twenty is "Frivolous."

Hedden maintained at trial that the CAM was too rigid and mechanistic. He contended that the weightings and scores of the CAM are illogical for two principal reasons. First, according to Hedden, the design and application of the CAM's scoring methodology fail to differentiate between minor and major errors, such as the degree to which an appraiser errs in reporting comparable sales transaction data. But this appears to be mainly a theoretical problem; Hedden identifies only two such errors, pointing to instances where an original appraiser misreported a comparable sales price by less than 1%.

Second, according to Hedden, because several CAM questions are interrelated, the CAM may fail an appraisal on multiple questions, even though the reason for those failures depends on the same data. This double counting could inflate the number of

appraisals found to be non-credible. As is the case with many of Hedden's criticisms, the force of this one is dampened by the fact that even when it is accepted, an immaterial number of Kilpatrick's evaluations are affected. In other words, double counting was not a real issue in Kilpatrick's actual results. In conducting its review of the 184 appraisals that Kilpatrick says failed the CAM, the Court was on the lookout for errant double counting.

Beyond these problems, Hedden contends that the threshold of twenty for a non-credible appraisal is frivolous. He points out that the maximum negative score, 186.11, is far above 20. Hedden notes that USPAP does not impose any rigid threshold and says that there is no uniform, one-size-fits-all approach to appraisal review.

As explained above, however, Kilpatrick has justified his use of the twenty-point threshold, as it corresponds to a negative response to no less than a minimum of three questions of the CAM: one of the major error questions and two of the other questions. And, as is also explained above, setting the bar at this level is conservative under the USPAP, which would consider one major error in the appraisal to be problematic. Moreover, as has been noted, the Court did not consider itself bound by Kilpatrick's twenty-point threshold when it pulled together each of Hedden's analyses and examined them on a loan-

by-loan basis. It is also worth observing, that many of the appraisals were so error-ridden that their CAM score was far above 20. Indeed, the mean score among the 205 appraisals was 43.67 with a median of 44.12. The vast majority of the appraisals that scored more than 20 scored more than 30, and more than half of the appraisals that scored more than 20 scored more than 40.

Moreover, had defendants thought that closely and carefully looking at the CAM scoring would be helpful to their cause, they would have done so through Hedden. They did not. Hedden admitted that his direct testimony did not offer any specific opinions regarding what might be inappropriate about the aspects, categories, and priorities used in Kilpatrick's scoring methodology. Moreover, at the time of his deposition, Hedden did not understand how the CAM questions were scored, had not studied the CAM's code, and did not understand the types of limitations or buffers that were placed on the questions' scores.

v. Errors in Application

Hedden's team also identified errors in the application of the CAM questions. Hedden lists four types of errors: mathematical errors in calculating percentage thresholds; mathematical errors in determining whether a number is within a particular range; overlooking accurate information; and faulting

an appraisal for not containing information required by the CAM in instances where the requisite information does not exist.

As noted above, Kilpatrick's results and conclusions do not materially change even accepting all of Hedden's specific criticisms of the CAM findings. The majority of Hedden's criticisms are directed at just three questions -- Questions 29, 30, and 31 -- only the first of which is graded "8" under CAM. Questions 30 and 31 were graded 5.015 and 4.64, respectively.

Even when a specific attack made by Hedden was well taken -- and the Court examined each of them -- they only made a difference on the margin for any particular appraisal. Hedden acknowledged during his cross-examination that throwing out the findings he specifically challenged in his direct testimony moved the CAM score from above to below the twenty-point threshold in just a small number of the 184 appraisals. Hedden's individual complaints are ultimately of little importance since the appraisals were so deeply flawed and error-ridden.

3. Futile Attempts to Discredit Kilpatrick

In addition to the criticisms of Kilpatrick discussed above, during cross-examination defendants spent a surprising amount of time eliciting testimony about some of Kilpatrick's past mistakes. To render his expert opinions in these coordinated actions, Kilpatrick endeavored to become a certified

appraiser in all fifty states. As part of certain states' applications that he signed under oath, Kilpatrick answered "no" to questions about whether he had ever been charged with a criminal offense and certified that he had never had a civil judgment entered against him, when, in fact, he has faced civil judgments and a criminal charge in the past. The civil judgments grew out of events from the 1980s, and the criminal charge arose in connection with a payment dispute from twenty-five years ago between Kilpatrick, who was building houses at the time, and one of his subcontractors.

Kilpatrick has taken steps to remedy false answers on any applications he submitted, including writing letters to each state on whose application he made a false statement. Kilpatrick seemed genuinely remorseful for not having disclosed in the first instance details of his past that he wishes to forget. The Court found this entire line of cross-examination to be unhelpful in determining whether the 184 appraisals are credible as measured by USPAP and in determining the weight to give to Kilpatrick's expert testimony -- specifically, to his GAVM methodology and his CAM findings.

B. Petition

The CAM findings were not the only circumstantial evidence of subjective falsity offered by FHFA. The above-mentioned 2007 petition sent to Congress by approximately 11,000 appraisers

complained of perceived pressure to produce inflated appraisals and represented their belief that great damage was being done to the economy and homeowners. The petition is an extraordinary document. Eleven thousand citizens were willing to affix their signatures to a document to bring a problem in their very profession to the attention of their national legislature. The reputational risk of signing such a document was enormous. Of the 11,000 signatories, there were 33 appraisers who had conducted 35 of the appraisals on the Sample properties. Of the 35 appraisals, 11 were subjected to the CAM methodology and 10 of the 11 were determined by Kilpatrick to be non-credible.[112]

Notably, Hedden had been aware of the petition when it was circulated in 2007 and reported that he was not surprised when he learned of its existence, because pressure from interested parties is simply "part of what appraisers are faced with on a regular basis." Indeed, Hedden commented that the signatories "were right to have gone to Washington to say there is pressure out here and it's not a good thing." That being said, Hedden like every other appraiser at trial testified that he had "yet to find any real evidence" of people having "actually succumbed

[112] Also confirming the prevalence of feelings of pressure in the industry was the 2007 National Appraisal Survey that identified beliefs about industry valuation pressure and its effect on the outcome of property values.

to the pressure." The 184 appraisals are evidence to the contrary.

Defendants' expert Kennedy also testified that it was general knowledge in the field that pressure was exerted on appraisers to inflate their appraisals during the time period relevant to this case. In fact, pressure on appraisers was discussed at conferences at which Kennedy spoke, and, as noted above, in 2007 he was quoted in the Magazine of Real Estate Finance as saying that "[t]here is going to be a backlash against traditional appraisal processes because of inherent biases as this meltdown continues forward."

C. Appraisers Used Sales Amounts for Subject Properties as Predetermined Values for Establishing the Appraisal Value.

The widespread phenomenon of shifting appraisal values up to at least match sales prices functions as further confirmatory evidence of pervasive pressure in the industry leading to bad faith appraisals. According to the USPAP itself, "accepting an assignment with the price in an agreement of sale, option, or listing or a sale price in a settled transaction as a predetermined value in the assignment violates USPAP." Where an appraiser is performing an appraisal in connection with a sales transaction in which a property is being purchased (as opposed to the refinancing of an existing loan), although the appraiser is required to receive and analyze the sales contract, the

appraiser is expected to perform his or her own objective assessment of the true market value of the property and should not "back into" a sales number.

Despite that principle, the appraised value exactly matched the sales price for 97 of the 306 (or 32%) purchase-money mortgages in the Sample. This high proportion of appraisals matching perfectly with the predetermined sales amount is confirmatory circumstantial evidence that appraisers failed to provide truly independent valuations, which supports the inference that the appraisers did not subjectively believe the appraisals when making them.

D. Defendants' Four Appraiser Witnesses

In an effort to diminish the probative value of FHFA's appraisal evidence, defendants called four appraisers. The idea, presumably, was to show that, although the CAM labeled these appraisals "non-credible," the appraisals were defensible and the appraisers honestly believed in the appraised values at the time they were rendered. This project largely backfired. Taken together, the testimony from the four appraisers actually had the effect of confirming the reliability of the CAM and the evidence that the appraisers who performed the 184 appraisals did not actually believe in the valuation work reflected in their reports. Thus, their uniform testimony that they stood behind their appraisals counted for little.

Two of the four witnesses did not actually conduct the appraisals; their role was to review the work of less experienced appraisers. Schall is the owner of Island Preferred Inc. Appraisal and Marketing Solutions, located in New York.[113] Defendants called him to testify despite the facts that he had not performed the appraisal that seemed to be at issue and that the appraisal turned out not to be among the 184 found wanting under the CAM. Schall had supervised a trainee who conducted the appraisal, but did not visit the property, nor did he catch a significant error made by the apprentice in describing one of the comparables. Moreover, other properties with much lower sales prices could have been selected as the comparables but were not.

Like Schall, it turned out that Clagett, from Berlin, Maryland, did not perform the original appraisal at issue.[114] Instead, he had simply completed a one-page review of the original appraisal, without ever performing an interior

[113] Schall had been contacted by defendants at least three times, beginning in the summer of 2014, before offering to testify in this action. When defendants first contacted him, they were looking for the trainee who had actually performed the appraisal.

[114] Also similar to Schall, when defendants first contacted Clagett, they thought that he had personally performed the appraisal.

inspection himself. The review was basically a checklist and did not purport to be an independent opinion of value.

The two witnesses who actually performed the appraisals at issue were from Florida. Morris is from Homestead, Florida and performed one of the 184 appraisals that failed the CAM. She explained that the contract price for the property was $310,000, but that she offered a lower appraised value -- $305,000. The GAVM estimated the value of the property at the relevant time as $217,952.

Platt, from Melbourne, Florida, also completed one of the 184 appraisals that failed the CAM analysis. Platt appraised the property at $170,000, whereas the GAVM estimated the value at $93,314.[115] Multiple problems with Platt's appraisal were explored at trial. The first series of issues had to do with his description of the subject property itself. He listed the property as having sold for $12,500 on June 6, 2006, when in fact the property had sold on that date for $50,000, or four times the amount listed by Platt. According to Platt's report, the subject property then sold for $70,000 on June 9, 2006, three days after having sold for $50,000, but nothing in Platt's appraisal report reflected any evaluation of whether that sale

[115] Because this was a refinance and not a purchase-money loan, there was no relevant sales price.

was evidence of "flipping." Then, as of September 7, 2006, just three months later and at a time when Platt admitted the market had stabilized, Platt appraised the subject property at $170,000, or nearly 2.5 times what it had sold for approximately three months earlier. Platt's report indicated that the jump from $70,000 to $170,000 was attributable to a complete renovation, but admitted that no permits had been filed in connection with the alleged renovation. Cross-examination cast serious doubt as well on the integrity of Platt's choice of comparables.

The appraiser witnesses confirmed the existence of pressure on appraisers in the period at issue to reach predetermined values of properties. Schall identified three of the signatories on the petition as appraisers who had once been associated with his company; he admitted that both he and his staff "experienced pressure to provide predetermined appraisal values." For his part, Platt had been trained by an appraiser who signed the petition. At the time that Platt performed the appraisal here, he worked for a company at which 90% of the appraisal work was conducted for mortgage lenders and financial institutions. Morris testified to having experienced, throughout her whole career, pressure to provide predetermined value opinions to avoid being blacklisted. Morris added, however, that adoption of the Home Valuation Code of Conduct,

described above, helped reduce this pressure. When questioned by defense counsel, however, Morris backtracked and explained that the pressure was "not very extensive at all." Not altogether surprisingly, each of the witnesses who described this pervasive pressure to deliver a predetermined appraisal figure, adamantly denied that he or she had ever succumbed to that pressure or knew anyone who had.

The credibility of their work as appraisers and their testimony as witnesses was undercut by other exaggerations. They performed hundreds of appraisals apiece each year during the housing boom, but assured the Court that they never took shortcuts and in fact spent many hours on each and every appraisal. Clagett reported that he performed more than 700 appraisals each year in the period of 2005 to 2008, and took about five to six hours on each of them. Platt performed about 300 to 400 appraisals each year in 2005 and 2006, taking a minimum of four to five hours to perform each one despite the fact that he was also working fulltime as a fireman. For the period of 2004 through 2008, Morris conducted approximately 600 appraisals per year, which is about 12 per week. To justify those numbers, Morris claimed to have worked long hours seven days a week.

Finally, it is worth noting that Morris provided testimony that directly contradicted defendants' expert Hedden's

characterization of the function of an appraisal. Morris readily agreed that "it is important for an appraiser to reach an independent valuation of the subject property," that an appraiser is not meant to start with the presumption that the sales price is the price at which she should arrive, and that it would be improper for an appraiser to simply "back into" the sales price. Confronted with Advisory Opinion 19 of the 2006 edition of USPAP, Morris finally agreed that USPAP itself provides that "accepting an assignment with the . . . sale price in a settled transaction as a predetermined value in the assignment violates USPAP." Similarly, Morris agreed with the following statement from the Appraisal Institute: "We take offense with the notion that an appraisal is only good if it happens to come in at the sales price. That mentality helped cause the mortgage meltdown to being with. The fact that the value reflected in the appraisal does not match the sales price is not the fault of the appraisal but a result of the market today."

E. Defendants' Due Diligence

As explained above, during the securitization process defendants performed valuation diligence on some of the properties by running an AVM and/or using a BPO. As noted, defendants' expert Mishol found that 10% of all the loans in the SLGs that were actually tested through a full valuation review

had a final LTV ratio of more than 100%. Although this figure cannot be extrapolated, it provides further confirmatory evidence of the Court's findings with respect to appraisal defects.

Yet even when defendants arrived, following those processes, at a "reconciled value" different from the original appraised value, defendants never entered such values in the LMS system, and never relied on such values in creating disclosures for the Prospectus Supplements. The Prospectus Supplements informed investors that the LTV ratios were calculated using "the lesser of (a) the appraised value determined in an appraisal obtained by the originator at origination of that loan and (b) the sales price for that property." To avoid relying on a number they had reason to believe was false, defendants could have also included the reconciled value as a third option if it was lower than either the original appraised value or the sales price. They chose not to do so.

* * *

In sum, FHFA proved that 184 appraisals did not accurately reflect the value of the appraised property and that the appraisers who conducted them did not subjectively believe in the values they rendered. The appraisal evidence showed a substantial increase in the number of LTV ratios appearing above

both 80% and 100% compared to the figures disclosed in the Collateral Tables of the seven Prospectus Supplements.

VII. Underwriting Guidelines

A second category of misrepresentations alleged by FHFA concerns representations regarding the origination and underwriting of the loans within the SLGs backing the Certificates. FHFA established that the originators deviated significantly from their own underwriting guidelines when approving the loans in the SLGs, and that those deviations were not offset by factors that compensated for the deviations. For this reason, the representations in the Supplements regarding underwriting were false.

The deviations FHFA established were not trivial. They went to the heart of the underwriting process. Because of these deviations, originators had no adequate basis to find, for far too many of the borrowers, that the borrower was credit-worthy, had the ability and desire to make the mortgage payments, or that the collateral for the loan was adequate, among other things. The loan files and other documents demonstrate just the opposite. Borrowers misrepresented their income, credit history and assets, and their relationship to the property, or originators ignored obvious red flags that, when investigated, would have led to a denial or modification of the loan.

Measured conservatively, the deviations from originators' guidelines made anywhere from 45% to 59% of the loans in each SLG materially defective, with underwriting defects that substantially increased the credit risk of the loan. The table below shows, by Securitization, the Court's conclusions regarding the proportion of materially defective loans in each of Cowan's Samples.[116]

SECURITIZATION	SAMPLE SIZE	NUMBER MATERIALLY DEFECTIVE	PERCENTAGE MATERIALLY DEFECTIVE
NAA 2005-AR6	131	61	47%
NHELI 2006-FM1	100	59	59%
NHELI 2006-HE3	99	50	55%
NHELI 2006-FM2	100	53	53%
NHELI 2007-1	98	46	47%
NHELI 2007-2	98	49	50%
NHELI 2007-3	97	44	45%
TOTAL	723[117]	362	50%

The principal trial evidence from which these conclusions and data are drawn are the loan files for the 723 Sample loans,

[116] Using the classical estimator, the proportions of materially defective loans represented in these results may be extrapolated to the population at large. Thus, the percentages in the table above represent not only the proportion of materially defective loans in the Samples, but the proportion of materially defective loans in each SLG, as well.

[117] As noted above, re-underwriting analysis could not be performed on every loan in the Sample.

associated documents, and the parties' expert analyses.[118] The conclusions drawn from the analysis of that evidence are confirmed by other trial evidence. For example, and as already described, defendants' own due diligence reviews found material flaws with loans that found their way into these SLGs, and with other loans coming from the same Trade Pools.

After a description of the process that FHFA's expert used to conduct his analysis of the loans, defendants' principal critiques of that process will be discussed. Then, the process the Court used to arrive at the calculations described above will be explained.

Before embarking on these descriptions of the evidence and process, however, it is important to observe that defendants' response to Hunter mirrors their response to Kilpatrick. Defendants have not presented affirmative evidence that the originators of the loans actually complied with their own underwriting guidelines when originating loans, or with even the more summary descriptions of the underwriting process contained in the Prospectus Supplements. They did not identify their own sample of loans drawn from the SLGs and have an underwriting expert assess the originators' compliance with underwriting

[118] Because of an objection from defendants, certain additional documentation that would have further explained Hunter's analysis of the loan files was not received into evidence.

guidelines; and they did not have their own expert re-underwrite FHFA's Sample loans.[119] Instead, they relied, as they are entitled to do, on an attack on FHFA's evidence. It is, of course, FHFA's burden to show that the loans at issue here were not originated generally in accordance with applicable guidelines. As the following discussion demonstrates, it carried that burden.

A. Hunter's Re-Underwriting Review

Hunter conducted a forensic re-underwriting review of 723 of the 796 Sample loans. The number 723 includes either 100 or close to 100 of the Sample loans for six of the seven SLGs, and 131 Sample loans for the relevant SLG in NAA 2005-AR6.[120]

In his review, Hunter compared the loan file for each loan to the originator's guidelines and, in some instances, to minimum industry standards ("Minimum Standards") that Hunter distilled from the many guidelines he examined and from his

[119] While defendants' expert characterized his teams as "re-underwriters" and he purported at the very end of his testimony to have "re-underwritten" the loans at issue, he did not perform that task. He restricted himself to simply reviewing the defects identified by FHFA's expert and searching for compensating factors. He did not identify any separate defects, rely on materials which would ordinarily be a part of a re-underwriting review, or do any comprehensive comparison of a loan to an originator's guidelines.

[120] The reasons and process for choosing the 131 Sample loans for NAA 2005-AR6, and the implications of that choice for extrapolating results from the review of the Sample loans, have already been discussed.

professional experience. Hunter's review was holistic, taking into account both the ways in which a loan application did not meet an originator's underwriting guidelines and any factors that might excuse or compensate for that failure. Even when there was no documentation in the loan file that reflected compensating factors considered by the originator, Hunter made his own examination and would not enter a finding of a defect where he determined that adequate compensating factors existed. After completing each review, Hunter determined the impact of any identified underwriting defects on the credit risk of the loan, ultimately identifying a subgroup of 482 loans that were, in his judgment, materially defective.

Where FHFA and defendants stipulated that a set of documents was the best representation of a Sample loan file, Hunter used that file for his review. Where there was no stipulation, Hunter pursued a re-underwriting review if the file contained at least 100 pages and a significant number of seven core documents.[121] In the case of 73 of the Sample loans, Hunter

[121] The seven documents were the borrower's signed final loan application, a credit report, a completed appraisal report, a completed, final HUD-1 Settlement Statement, TIL disclosure, executed promissory note, and mortgage or deed of trust.

did not have sufficient material to conduct the re-underwriting.[122]

Where the parties did not stipulate to an applicable set of underwriting guidelines, Hunter attempted to use originators' guidelines that were dated between 30 to 90 days prior to the closing of the loan. In the case of 37 loans, the originators' relevant guidelines were unavailable, and Hunter relied exclusively on the Minimum Standards to re-underwrite the loan. On occasion, Hunter used the Minimum Standards to supplement an originator's guidelines. In total, Hunter used the Minimum Standards in re-underwriting 180 of the 723 loans; only 240 of Hunter's 1,998 defect findings are premised on the Minimum Standards.

Hunter's 59 Minimum Standards were the most lenient standards employed for subprime and Alt-A loans between 2002 and 2007.[123] The Minimum Standards include, for example, the requirements that a property's LTV/CLTV ratio not exceed 100%, that a borrower's DTI ratio not exceed 55%, and that a subprime

[122] The overwhelming majority of the 73 Loans were from NAA 2005-AR6.

[123] To confirm that these standards were indeed minimal industry standards, Hunter compared them to the guideline requirements of New Century, WMC, Countrywide, and Long Beach, who were responsible for originating large volumes of subprime and Alt-A loans during the relevant period and were generally known to have had very lenient origination requirements.

borrower's FICO score not exceed 500. Even when Hunter found that a loan failed to comply with a Minimum Standard, Hunter looked for compensating factors that could offset the failure. As Hunter pointed out, and as many of defendants' witnesses conceded, however, certain defects -- such as LTV ratios over 100% and borrower fraud -- were not curable, and no compensating factor could offset them.

Hunter concluded that 87% of the 723 Sample loans that he examined had at least one guideline defect, and almost 66% had an increased credit risk because of the defects.[124] In many cases, originators failed to investigate critical information. For example, for many of the 723 Sample loans, following up on recent credit inquiries for the borrower that appeared in the loan file's credit reports revealed information that would have been available to the originator that increased a borrower's credit risk. More generally, many of the loan files had "red flags" regarding potential misrepresentations of income, employment, debt obligations, housing history, or occupancy status. Virtually all of these red flags, upon investigation, revealed information that rendered the loan materially defective.

[124] Some of these defects were based on LTV ratios as determined by Kilpatrick's GAVM. As described below, the Court did not adopt these findings wholesale.

B. Forester's Audit of Hunter's Work

Defendants' principal attack on Hunter's findings came in the form of expert testimony from Forester. Based on his teams' audit of Hunter's findings,[125] Forester testified that "at most" 40, or 5.5%, of the 723 Sample loans had substantial underwriting defects. For the remainder of the loans, Forester concluded that a reasonable underwriter at the time of origination "could have found" that the loans satisfied the originators' underwriting guidelines. In so concluding, Forester was careful not to opine that sufficient evidence exists to find that those loans were indeed underwritten generally in compliance with the originators' underwriting guidelines.

Forester made several critical choices that weakened the value of his testimony. The most prominent of these errors was his choice to ignore available documentation outside the loan file because such documentation was not in the loan file. Forester took this position even when the documents demonstrated that the borrower had lied to the originator and a diligent originator could have uncovered the deceit.

[125] In contrast to Hunter's hands-on engagement with this re-underwriting process, Forester relied heavily on his research teams to examine loan files and to provide the critique of Hunter's findings.

A second major flaw is related to the first. Forester presumes that the originator investigated all red flags appearing in the loan files. This is true even when such an investigation should have prevented the loan from issuing because the investigation would have disclosed that the borrower was not being truthful, had substantial additional debt, was not going to occupy the home despite representing that it would be her primary residence, or was not currently living in the home she was seeking to refinance as her purported primary residence.

Forester's presumption that the originator must have investigated the red flags in the loan file, even when there is no evidence that the originator did so, rests on defendants' assertion that the passage of time has made it difficult to locate a complete loan file. It is certainly true that the collection of loan files in 2012 and 2013 for loans originated between 2005 and 2007 has proven to be challenging. Even when it was the practice to image loan files and store them electronically, pages may be missing. Handwritten notes made at the time of origination on the back of a document before the document was imaged could also be missing. But Forester essentially presumed that all originators were diligent even when there is overwhelming evidence to the contrary.

This approach fails to grapple with two critical points. Underwriting guidelines required that red flags be investigated

and that exceptions to underwriting criteria be documented. Documentation was critical so that supervisors and each of the units within an originator, including its auditors, could examine the file and determine what had been done. Documentation was also critical because these loans were originated to be sold, and the file would be leaving the originator's offices. It is, therefore, improbable in the extreme -- and untenable to presume -- that every originator diligently followed up on all red flags and merely failed to document its efforts. Moreover, Forester's presumption fails to survive Hunter's careful analysis showing not just the existence of red flags, but also the existence of material information that would have been available to the originator if those red flags had been investigated and that would have led in the ordinary course to the loan being issued (if at all) on different terms.

A third overarching problem with Forester's analysis relates to missing underwriting guidelines. Although it is undisputed that every originator had written underwriting guidelines, Forester refused to offer any substantive critique of Hunter's findings emanating from his use of the Minimum Standards. Instead, Forester automatically "cleared" all associated defects. For similar reasons, Forester cleared defects associated with some loans underwritten under Nomura's

own guidelines.[126] In other words, Forester assumed that such loans were properly underwritten, regardless of how suspect or risky the loans appear.

Another overarching problem is that Forester (as was also true for Hedden's testimony regarding appraisals) did not make a holistic evaluation of each loan. It is not uncommon for a loan with one serious defect to have several serious defects, reflecting a wholesale abandonment of any genuine underwriting effort. Thus, considered in the context of Hunter's entire analysis of a defective loan, many of Forester's complaints become essentially irrelevant.

C. Defendants' Objections to Hunter's Re-underwriting

Defendants have made many objections to Hunter's analysis. The five most important of those objections are addressed below.

[126] For some loans originated under Nomura's own underwriting guidelines, Forester stated that "the applicable guidelines for the subject loan have not been identified" and therefore "plaintiff's analysis of this loan is not meaningful nor can a reliable conclusion be reached that the loan was inconsistent with guidelines." This is all the stranger when, in Forester's Dashboard Reports, Forester's claim is juxtaposed with Hunter's chapter-and-verse citation of Nomura guidelines. In response to the Court's question, Forester explained that these conclusions resulted from defendants' failure to supply him with the applicable Nomura guidelines. Similarly, many of his team's findings note that "Plaintiff did not cite any guidelines" even where Hunter explicitly stated that "the Lender's guidelines" were relied upon for that finding, and the specific guideline is identified in one of Hunter's previous findings.

1. Hunter Applied the Originator's Guidelines Too Strictly.

Defendants argue that Hunter applied the originators' guidelines too strictly. Defendants assert that, in doing so, Hunter improperly substituted his own judgment for the judgment of the originators, who were applying the "customs and practice" of their industry in the "real world" as it existed in 2005 to 2007. Defendants point to the emphasis in certain originator's guidelines that loans should be originated using a "common-sense approach," that brokers should originate "loans that make sense," and that the objective of underwriting should be evaluation of "the borrower's overall credit and capacity."

Defendants are wrong for many reasons. First, they mischaracterize Hunter's methodology: Hunter did not "nitpick"; rather, he consistently applied the originators' guidelines as written. And "common sense" is, in virtually every instance, on Hunter's side when one examines a specific loan. Repeatedly, the borrower lacks "overall credit and capacity," there are so many red flags or deficiencies that common sense counsels against origination, or there are defects that cannot be cured, such as a borrower's misrepresentation of income or debt. It is also no criticism of Hunter to say that he was stricter in applying an originator's guidelines than the originator itself where the originator ignored its guidelines. Tellingly, if

defendants believed that a more flexible re-underwriting approach would have been tenable and productive for them, they had the opportunity to conduct such a review and present their findings.

2. Minimum Standards

Defendants object to Hunter's reliance on Minimum Standards in his re-underwriting. But it is undisputed, even if they cannot now be located, that each of the originators had written underwriting guidelines at the time that they issued the loans. Underwriting guidelines gave structure to the inquiries conducted by many individual underwriters in the many offices of an originator and allowed originators to sell mortgage loans in pools with a single set of representations about the quality of the underwriting process and the loans' characteristics.

Where an originator's guidelines had not been located by the parties, or where an originator's located guidelines assumed (in Hunter's view) that a particular step in the underwriting process had been taken, Hunter relied on the Minimum Standards. With perhaps a single exception,[127] the evidence at trial showed that Hunter succeeded in distilling the rock bottom requirements

[127] One of Hunter's Minimum Standards provides that "[t]he property's CLTV ratio may not exceed 90% for an investment property." Defendants pointed to one set of Fremont guidelines that permitted non-owner-occupied properties to have CLTV ratios of up to 100%.

for qualifying subprime and Alt-A loans during the period at issue here.

The confirmation of the existence of the 59 Minimum Standards came from every conceivable source, including from defendants' trial witnesses, defendants' business records, and the many origination guidelines received into evidence and relied upon by the trial witnesses, including the guidelines from the ten originators that contributed the largest number of loans to the SLGs. Forester himself admitted there are steps that should "always be performed" by originating underwriters. He represented that in those cases where no guidelines were available, he had nonetheless undertaken to determine whether an LTV ratio or DTI ratio was reasonable based on his understanding of what constituted a "minimal level of guidelines" and his "broad experience." While Forester misdescribed his work for defendants, in giving this testimony he confirmed the obvious: minimal underwriting standards existed and their content is known.

For example, in February 2006, Nomura's due diligence unit identified subprime originators' "common Mortgage Underwriting criteria" as including DTI ratio over 55%, FICO scores over 500, and LTV ratios less than 100%. These same criteria showed up in Nomura's 2006 bid stipulations. At trial, the head of a Nomura

unit confirmed the existence of every Minimum Standard on which he was questioned, which was dozens.

At trial, defendants largely confined their attack on the 59 Minimum Standards to just three. Defendants focused most of their attention on the Minimum Standard that provides that a borrower's DTI ratio may not exceed 55%. Nomura's bid stipulations required exactly that, as did the guidelines of many originators. Five of the Prospectus Supplements explain, however, that some originators permitted on a case-by-case basis DTI ratios of up to 60%.[128] This is not inconsistent with Hunter's Minimum Standard. A DTI ratio Minimum Standard of 55% was sufficient for loan approval; it did not require an originator to find compensating factors on a loan by loan basis to approve a higher DTI ratio.

A second Minimum Standard on which defendants focused requires an underwriter to examine "payment shock," which is defined as existing when a borrower's new payment obligation will exceed "150 percent of the borrower's current housing

[128] The passage reads, "Generally, scheduled payments on a mortgage loan during the first year of its term plus taxes and insurance and all scheduled payments on obligations that extend beyond ten months equal no more than a specified percentage not in excess of 60% of the prospective borrower's gross income. The percentage applied varies on a case-by-case basis depending on a number of underwriting criteria, including, without limitation, the loan-to-value ratio of the mortgage loan."

expense." Some originators' guidelines, however, permitted payment shock of up to 200%, while others included nothing on the issue at all. But the guidelines permitting a 200% payment shock did so only when compensating factors existed. In any event, Hunter used the Minimum Standard regarding payment shock as a red flag to trigger a close examination for compensating factors.

Finally, defendants were critical of the Minimum Standard that a "lender must investigate whether the borrower sought (and/or obtained) credit that was not listed on the borrower's origination credit report," and that such "investigation include an inquiry into any credit inquiries within 90 days preceding the loan application." (Emphasis added.) But, it was a universally acknowledged requirement in the relevant period that originators had to obtain a borrower's credit report before issuing a subprime or Alt-A loan, examine it, and investigate red flags. Defense counsel admitted as much at summation. Boiled down to its essence, the parties' disagreement was limited to whether originators had to examine every credit inquiry made close to the time a borrower applied for the mortgage loan, since some of those inquiries may reflect no more than a borrower shopping for the best mortgage rate.[129]

[129] One set of originator guidelines required underwriters to investigate credit inquiries, but added that such inquires

3. Using BLS Data to Assess Reasonableness of Income

Many of the loans within the SLGs were "stated income" loans. This fact was so significant to investors that the Prospectus Supplements presented data regarding the proportion of such loans in the SLGs. Defendants contend that Hunter should not have rejected the stated income as unreasonable for 75 such loans. They principally complain that in doing so Hunter relied on historical data from the U.S. Bureau of Labor Statistics ("BLS"), which the originators did not use.

If a mortgage loan was issued pursuant to a stated-income program, then the borrower did not have to provide documentation, such as tax returns or pay stubs, to verify her report of income. But that did not relieve originators of their obligation to assess whether the borrower was credit-worthy and capable of repaying the loan. Therefore, originators' guidelines required underwriters to verify the reasonableness of the stated income by, for instance, verifying employment.

During the period between 2005 and 2007, there were some online tools with local wage data for certain occupations that were available to originators. Those databases contain only current data, however, and do not permit a search to be conducted in 2015 to confirm wage rates eight to ten years ago.

"around the date of the loan application" generally did not require an explanation.

Accordingly, as part of his examination of the reasonableness of stated income, Hunter relied on historical BLS data.

BLS data is collected by the federal government based on survey responses from employers. The reported statistics come from a large sample collected over three years; data from the previous three years are combined annually to estimate salaries for the previous year. BLS data are extremely granular: They provide by percentile the salaries for a vast number of specific occupations in various industries, and the salaries are available on a national, regional, state, or county-wide basis. The BLS statistics do not reflect salary ranges above $187,200 and do not include categories of earnings other than wages, such as bonuses and tips. As defendants point out, the Commissioner of the BLS has stated that BLS data is not a tool for establishing "prevailing wages" -- the average salaries actually paid to workers in a given occupation and region -- and cannot identify any particular employer's wage rates.[130]

Defendants overstate Hunter's reliance on BLS data. To assess the reasonableness of borrowers' income, Hunter examined all of the information in the loan file about a borrower's

[130] Promoting the Accuracy and Accountability of the Davis-Bacon Act: Hearing Before the Subcomm. on Workforce Protections, H. Comm. on Educ. and the Workforce, 113th Cong. 9-11 (2013) (statement of Erica L. Groshen, Commissioner, Bureau of Labor Statistics).

education, employment, and duration of employment, and reviewed the borrower's assets, liabilities, and disposable income.[131] He also looked for any information in the loan file reflecting that the originator had verified the employment or income. Thus, Hunter's consultation of historical BLS data was only one step among many. And Hunter was conservative in using BLS data, comparing borrowers' stated income only to the 90th percentile of income recorded by the BLS, the highest available figure. Even then, Hunter did not typically find a credit risk where the loan file included information indicating that the income reported was accurate. Hunter's reliance on BLS data was entirely reasonable in the circumstances.

4. Owner Occupancy

One of the alleged misrepresentations on which FHFA relied in filing this action was the representation in the Prospectus Supplements that a reported percentage of the properties were owner occupied as of the Cut-off Date. Defendants assert that, for several reasons, the Court should ignore Hunter's analysis of borrowers' occupancy status.

It is universally recognized that owner occupancy is a critical factor in assessing credit risk. Mortgage lenders and

[131] This accords with Forester's own description of a wholly proper evaluation of income reasonableness when the evaluation is limited to an examination of data in the loan file.

investors understand that borrowers have a greater incentive to make their mortgage payments when the failure to do so risks the loss of the family home. Thus, originators offer loans for borrowers that are or will be using the property as their primary residence on different terms than borrowers who own or seek to own the property as a second home or as an investment. For example, an originator might have a lower LTV/CLTV ceiling for investment properties. Accordingly, a borrower's statement that she is living in the home she seeks to refinance or that she intends to live in the home she is buying with the mortgage money are important representations and originators may not ignore red flags indicating that a borrower is misrepresenting owner-occupancy status.

Defendants do not take issue with any of these observations. They did attempt at trial, however, to demonstrate that Hunter misidentified five of forty-two loans as loans reflecting owner-occupancy misrepresentations. In fact, defendants succeeded in raising serious questions about only one of the five.

Defendants have a second, more theoretical complaint about Hunter's analysis of owner occupancy. For those mortgages that were being used to buy a primary residence (as opposed to refinance one), defendants contend that everyone, including investors, understood that the data in the Collateral Tables

referred to nothing more than a borrower's "intent" to occupy the property at the time a loan is originated. There are two observations to be made about this.

First, defendants do not indicate how many of the forty-two loans with identified owner-occupancy defects were "purchase-money" loans. Most of the examples they used at trial in examining Hunter were refinancing loans. As defendants admitted at trial, originators should have verified that borrowers were actually occupying the properties they were seeking to refinance as their purported primary residence.

Second, defendants are wrong about the import of the representation in the Prospectus Supplements. As previously explained, the Supplements represent owner-occupancy status as of the Cut-off Date. FHFA v. Nomura Holding Am., Inc. ("Owner-Occupancy Opinion"), No. 11cv6201 (DLC), 2015 WL 394072, at *3-4 (S.D.N.Y. Jan. 29, 2015). The Supplements do not represent only a borrower's intention at the time the borrower applied for the mortgage. Id. At the time of securitization, this statement of fact is made by those issuing and underwriting the securitization. Id. Defendants do not dispute that originators had an obligation to chase down any red flags indicating that a borrower was not going to use a property as her primary

residence.[132] In context, investors were entitled to understand that originators and securitizers had confirmed that the loan was for an owner-occupied property.

Finally, Forester argues that the evidence that originators chased down all the red flags and confirmed occupancy status may simply be missing from the loan file. A determination of whether red flags regarding occupancy status existed and whether they were investigated may be made only on a loan by loan basis, and this the Court has done.

5. Post-Origination Documents

Defendants object to Hunter's consultation of documents that were not in existence at the time of loan origination. Defendants calculate that Hunter's reliance on such documents "affected" 289 loans. It was entirely appropriate for Hunter to rely on post-origination evidence when making a finding of an underwriting defect.

Broadly speaking, there are two kinds of post-origination evidence at issue here. One kind is documents generated in the present containing the very same information that an originator could have been obtained or generated back in 2005 to 2007. A

[132] The availability of accurate information about residency at the time of securitization would be relevant to a due diligence defense, but it is not relevant to a finding that a representation in the Supplements was untrue as of the Cut-off Date.

credit report is an example of such a document; a report generated in 2015 contains entries dating back years that would have been seen in a credit report printed out then.

With respect to this category of documents, defendants emphasize that at least some of the post-origination documents contain disclaimers regarding accuracy. For example, the LexisNexis Accurint reports -- which Hunter uses for 15 loans -- compile data from third party sources and contain the following disclaimer:

> The Public Records and commercially available data sources used on reports have errors. Data is sometimes entered poorly, processed incorrectly and is generally not free from defect. This system should not be relied upon as definitively accurate. Before relying on any data this system supplies, it should be independently verified.

Such stock disclaimers, however, do not render these reports devoid of evidentiary value or make them inadmissible. Indeed, defendants themselves routinely rely on such reports. Forester also relies on such reports in conducting post-origination loan reviews as part of his ordinary business.

A second kind of post-origination evidence is information that came into existence after the origination and securitization of the loan and that would not have been available to even the most diligent underwriter. For example, a 2014 bankruptcy filing may contain a list of residences and be compelling evidence that the borrower never occupied the

property for which the mortgage loan was issued. Defendants contend that the Prospectus Supplements only referred to an originator's process of adhering to its underwriting guidelines and did not assure investors that the loans actually met the criteria within those guidelines. Accordingly, they argue, a statement cannot be shown to be false based on evidence unavailable to the originator.

It was entirely appropriate for FHFA to rely on such post-origination evidence. As previously explained in addressing a Daubert motion, FHFA has the burden to prove the falsity of the representations it has placed in issue in this case and may rely on post-origination evidence to do so.

> In representing that the loans were originated in accordance with their Originators' guidelines, the Prospectus Supplements represent that the loans within each SLG did in fact meet the criteria set forth in their Originators' guidelines. That is a representation of fact. It provided assurance to investors that the loans were of a certain quality. In making this representation in the Offering Documents, the defendants assured investors that they had conducted a sufficient examination to confirm its accuracy and understood that they would be held strictly liable if the representation were false, absent recourse to an applicable statutory defense.

Hunter Opinion, --- F. Supp. 3d ---, 2015 WL 568788, at *10. If defendants had been able to present an affirmative defense of due diligence at trial, then the historical unavailability of

the information would be relevant.[133] Thus, none of the five principal objections made by defendants to Hunter's work undermines the probative force of that work.

6. Originator Deposition Testimony

In an attempt to cast doubt on Hunter's analysis, defendants also offered, through current and former employees, the deposition testimony of four originators regarding their underwriting practices. They are Fremont, Quicken, Wells Fargo, and WMC.[134] This testimony does not undercut Hunter's analysis or, as discussed below, the Court's own conclusions about the loans at issue.

Three originators were only minor contributors of loans to the relevant SLGs. When the record of Nomura's own due diligence performed on the originators' Trade Pools is examined, there is no reason to believe that these loans were any more free of defective underwriting than the other loans in the SLGs. Wells Fargo, for example, contributed only 8 loans to the NHELI 2007-2 SLG. None of these received credit and compliance due diligence, and of the two that received valuation due diligence,

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[133] The term "due diligence" is used in this Opinion to refer to the affirmative defense of reasonable care under Section 12 of the Securities Act. 15 U.S.C. § 77l(a)(2).

[134] The fifth deponent testified only to ResMAE's document retention policies. As discussed below, the Court largely disregarded purported defects based on the absence of key documents from the loan files offered in evidence at trial.

one original appraisal was deemed unreliable. WMC contributed 148 of the loans in the NHELI 2007-3 SLG. WMC's sole Trade Pool had a kick-out rate of approximately one-third. Quicken contributed 129 loans to the SLGs in NHELI 2006-HE3 and NHELI 2007-2. Almost half of the Quicken loans subjected to credit and compliance due diligence by Nomura were waived in by Nomura after an initial finding of credit defects. Confirming Quicken's poor underwriting practices, Hunter found numerous serious defects in those Quicken loans that were sampled. Under these circumstances, it is impossible to credit Quicken's assertion that "overall we had a very low defect rate."

The remaining originator is Fremont, which is the sole originator for NHELI 2006-FM1 and NHELI 2006-FM2. The Fremont deponent was not an underwriter but a securitization structurer working in the capital markets group. His sanguine descriptions of Fremont's quality-control processes are starkly contradicted by the results of not only FHFA's re-underwriting review of the Fremont SLGs, but by defendants' own experience with Fremont. RBS came to call Fremont "Fraudmont." A post-facto review ordered by RBS found that 45% of the examined Fremont loans showed signs of fraud. And Nomura's examination of the Fremont Trade Pools for NHELI 2006-FM2 yielded kick-out rates of 17% and 21%, respectively, far above what it considered the norm.

D. The Court's Review

As just described, defendants made a strategic choice to present a series of discrete attacks on Hunter's methodology. They sought to so thoroughly undermine confidence in Hunter's re-underwriting program that it could be rejected wholesale. By the time of summation defendants made their position explicit. They argued that the Court should reject Hunter's analysis in its entirety because he had not sufficiently disaggregated his findings. According to defendants, only an expert can make a judgment about whether there was increased credit risk as a result of defects in loan origination. That, they say, is a task that may not be performed by the fact finder.

If limited to the stark choice between Hunter's expert testimony and Forester's, the Court would unhesitatingly accept Hunter's. Hunter engaged in a careful loan by loan analysis. His methodology was essentially sound. He was an impressive witness, with intimate familiarity with the task he had undertaken and the reasons for his decisions. He responded forthrightly to defense counsel during cross examination. In contrast, Forester was not as well-informed about the files at issue here or even all aspects of his teams' work. Many of his critiques of Hunter's analysis failed because Forester imposed too narrow a scope on his assignment. Finally, because Forester did not take a holistic approach and examine loan-by-loan the

credit risk associated with all re-underwriting defects, his potshots at Hunter's methodology made it impossible to evaluate their actual impact on the material defect rates for an SLG.

But there is no need to limit artificially a fact finder's review of record evidence. A defective loan could have so many separate underwriting defects that it would still be materially defective even if one or more of Forester's arguments was compelling. The Court's review of the record evidence has confirmed that Hunter's analysis was essentially sound.

Informed by the testimony given by both Hunter and Forester and other trial evidence, the Court reviewed each of Forester's Dashboard Reports for the 482 loans that Hunter determined was materially defective. A Dashboard Report, which Forester's teams created for each loan, consists of a cover page describing significant characteristics of the loan and several additional pages in which Hunter's detailed findings -- reproduced verbatim in the Dashboard from the spreadsheet Hunter created -- are juxtaposed with the detailed responses from Forester's teams. The Dashboard Reports also list all potential compensating factors identified by Forester and his teams. These documents -- along with the original loan files and underwriting guidelines -- were available for the Court's loan-by-loan, defect-by-defect review.

Each Dashboard Report was reviewed, and the merit of each of the experts' arguments about the compliance or non-compliance of each loan with the originator's underwriting guidelines was assessed. The Court made several assumptions, however, in performing this review. First, only the 184 loans that Kilpatrick concluded failed the CAM were considered to have appraisal defects, as opposed to the larger number identified by Hunter as defective based on the GAVM. Second, Hunter's findings that loan files were missing "key documents" were ignored.[135] Third, to the extent that Hunter relied on a finding that the originator had failed to follow through on credit inquiries that appeared in the loan file's credit report, and those credit inquiries were clustered around the loan application date, the defect finding was also ignored. Finally, any references to loan tape defects were ignored.

During the loan-by-loan analysis, the Court was alert to any assertion in the Dashboard Reports that Hunter had made

[135] This was a conservative assumption. There was a great deal of evidence from defendants' due diligence reviews that key documents were missing from loan files at the time they were being reviewed by defendants, and defendants just waived them in anyway or allowed an originator to "locate" the missing documents. But, with the passage of time, it is difficult to know how many documents were never part of the file and how many have simply been lost.

calculation errors,[136] misread or misapplied guidelines, or relied on only minor deviations from guidelines. To the extent that Hunter relied on a post-origination document that defendants challenged because it typically bore a disclaimer of reliability, Hunter's use of the information from the document was evaluated in the context of that loan's overall condition. It should be noted, however, that the vast majority of credit reports that drove Hunter's analysis were those that were found in the original loan file and that the originator had the opportunity to inspect and act upon.

When the Court's review was complete, the Court was able to confirm, as reported in the beginning of this section of the Opinion, Hunter's findings of material credit risk due to deviations from originators' guidelines for approximately 50% of the loans in the SLGs. For 44 of these loans, the material defects confirmed by the Court were violations of Minimum Standards. Of these 44, Hunter relied exclusively on his Minimum Standards in the case of just 13. For the rest, Hunter used the Minimum Standards to supplement an originator's located guidelines. Hunter's findings of a material failure to comply with Minimum Standards were entirely appropriate in each of

[136] Notably, some of the Dashboard Reports' recalculations identified a more serious deviation from guidelines than Hunter had found.

these instances, and defendants' Dashboard Reports identified no compensating factors that could have permitted a reasonable originator to find the borrower credit-worthy.

Similarly, defendants' complaints about owner-occupancy defects proved to be largely irrelevant. Hunter's owner-occupancy defect finding was a decisive factor for only two of the loans supporting the Court's findings. While valid owner-occupancy defects were present in other loans, those findings by Hunter were just one of several serious problems with the loan that contributed to its risk. The breakdown by SLG of all owner-occupancy defects as found by the Court was as follows:

SECURITIZATION	SAMPLE SIZE	NUMBER WITH OWNER-OCCUPANCY DEFECT	PERCENTAGE WITH OWNER-OCCUPANCY DEFECTS
NAA 2005-AR6	131	0	0.00%
NHELI 2006-FM1	100	3	3.00%
NHELI 2006-FM2	100	3	3.00%
NHELI 2006-HE3	99	1	1.01%
NHELI 2007-1	98	0	0.00%
NHELI 2007-2	98	1	1.02%
NHELI 2007-3	97	3	3.09%
TOTAL	723	11	1.52%

Moreover, in over 63% of these loans with owner-occupancy defects, the borrower was refinancing an existing loan for what she represented was her primary residence; the issue of the borrower's "intent" was simply not in play.

The contention by defendants during summation that the Court should not examine their Dashboard Reports to ascertain the extent to which their generalized, thematic attacks on Hunter's work had any impact on Hunter's evaluation of credit risk of a particular loan is not surprising.[137] That examination showed that those attacks actually had little impact on Hunter's work.

* * *

Whether one accepts Hunter's conclusion that 66% of the Sample loans had underwriting defects that materially affected credit risk, or the Court's more conservative, confirmatory review that indicated that at least 45% per SLG did, the only possible conclusion is this: The Certificates sold to the GSEs were supported by loans for which the underwriting process had failed. Guidelines were systematically disregarded. These

[137] Defendants had submitted the Dashboard Reports electronically to the Court with their other trial exhibits on February 20. Defense counsel used Forester's findings extensively in their cross-examination of Hunter. On March 23, following the completion of Hunter's testimony, the Court requested a set of the Dashboard Reports in hard copy and advised the parties that it would be reviewing them individually. Defendants delivered them on March 25. On April 2, the parties delivered a hard drive containing the loan files and guidelines for the 482 loans organized in a more accessible fashion. By the time of their April 9 summation, at which defendants apparently objected to the Court's review of the Dashboard Reports, that review was close to complete. Any objection by defendants was therefore not only without merit but untimely.

loans could not be accurately described as having been "originated generally in accordance" with originators' guidelines.

VIII. Credit Ratings

FHFA also alleges misrepresentations regarding the credit ratings of the Certificates. FHFA has shown falsity on this claim as well.

According to FHFA, the AAA or equivalent credit ratings assigned by the rating agencies were inflated and did not in fact apply to each Securitization's collateral, since defendants provided the rating agencies incorrect data regarding the loan population. As this Court has previously remarked, FHFA's claim "is not that the ratings themselves were false. [Instead,] FHFA challenges representations in the Offering Materials that the reported credit rating related to the actual loan collateral for the securitization." FHFA v. Merrill Lynch & Co., 903 F. Supp. 2d 274, 276 n.2 (S.D.N.Y. 2012).

As noted above, Nomura provided rating agencies with pre-closing loan tapes created from Nomura's LMS database, which reported data for each loan, including characteristics such as FICO score, DTI ratio, LTV/CLTV ratio, loan purpose, property type, interest rate, owner-occupancy status, documentation program, and presence of mortgage insurance. The ratings and loss estimates generated by the rating agencies' models were

extremely sensitive to the data on these loan tapes; if incorrect data were used -- data reflecting more favorable loan characteristics -- these models would require less credit support than should have been required of a securitization. Defendants had an economic incentive to maximize the size of the AAA rated tranche in any particular offering. Consequently, the observed AAA subordination levels were near the AAA/AA margin.[138]

FHFA's allegation regarding credit ratings is largely derivative of its claims with respect to LTV ratios and guideline compliance. FHFA v. Ally Fin. Inc., No. 11cv7010 (DLC), 2012 WL 6616061, at *1 n.2 (S.D.N.Y. Dec. 19, 2012). As a result, the Court's findings above with respect to those categories of misrepresentations greatly impact its findings here. The number of misreported LTV ratios per SLG ranged from 18% to 36%. Many of these misrepresented LTV ratios moved the ratio into a range between 80% and 100% or even above 100%. Similarly, the Court's findings of a rate of 45% or higher material underwriting defects in each SLG cast serious doubt on the accuracy of the loan tape data provided to the rating agencies regarding such critical data points as the DTI ratio, among other things.

[138] Defendants' expert Riddiough acknowledged that the subordination of the AAA certificates was only 1.3% to 5.1% that of the AA certificates.

Moreover, the Deloitte AUP reviews put defendants on notice that around 10% of the loans in each sample that Deloitte reviewed had discrepant loan tape data or were missing documentation necessary for the review. Hunter also performed a pre-closing loan tape review, comparing the information in the loan file against the information contained in the pre-closing loan tapes. He found that of 723 total loans reviewed, 321 (or 44%) had pre-closing loan tape defects and substantially increased credit risk. The breakdown per SLG ranged from 36% to 52%.

With this much inaccuracy in the loan tapes, FHFA has easily shown that the Prospectus Supplements misrepresented that the reported credit ratings related to the actual loan collateral for the Securitizations. As discussed next, those misrepresentations were material.

IX. Materiality

The representations in the Prospectus Supplements regarding both the LTV ratios for the loans within an SLG and the extent to which those loans were originated in compliance with underwriting guidelines, were each false and materially so. The Supplements contained utterly misleading descriptions of the quality and nature of the loans supporting the GSEs' Certificates. The LTV ratios for 18% or more of the loans within the relevant SLG were misrepresented in each of the seven

Prospectus Supplements. The compliance with underwriting guidelines for 45% or more of the loans within the relevant SLG was misrepresented in each of the seven Prospectus Supplements. Because, as explained above, the data on the loan tapes reporting LTV and DTI ratios, among other data points, was significantly misstated, the credit rating agencies received materially false information that had a direct impact on their assignment of credit ratings to each of the Certificates, causing the Prospectus Supplements to make material misrepresentations about credit ratings as well. But while FHFA succeeded in showing that each of these three sets of misrepresentations was material, it has not shown that the misrepresentations regarding owner occupancy were material.

The standard for assessing materiality in connection with these claims can be found in the Offering Documents. All seven Prospectus Supplements provided that "[t]he characteristics of the loans included in a trust fund will not vary by more than five percent (by total principal balance as of the Cut-off Date) from the characteristics of the loans that are described in the prospectus supplement."[139] (Emphasis added.) In other words,

[139] Similarly, five of the Prospectus Supplements (all but NAA 2005-AR6 and NHELI 2006-FM1) provide that "[i]f, as of the Closing Date, any material pool characteristic differs by 5% or more from the description in this prospectus supplement, revised

the Offering Documents themselves contemplate that if 5% or more of the collateral was other than as represented, this would be viewed as important by investors. As confirmed by defendants' materiality expert, this was a common threshold in PLS Offering Materials during the period between 2005 and 2007.

There is no real dispute that the 5% materiality threshold has been exceeded here. Defendants' own witnesses confirmed misstatements at or above the 5% threshold. Forester essentially conceded that Hunter's findings of material underwriting defects appeared appropriate for slightly more than 5% of the loans in the Sample, and, according to defendants' data, used by Mishol, 10% of all the loans in the SLGs that were actually tested through a full valuation review had a final LTV ratio of more than 100%.

Reasonable investors in the PLS market during the period 2005 to 2007 considered a broad range of information prior to purchase. But an essential component of any analysis was the characteristics of the collateral, as described by sponsors and underwriters in the Offering Documents. Among the key

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disclosure will be provided either in a supplement or in a Current Report on Form 8-K." (Emphasis added.)

characteristics were LTV ratios and compliance with underwriting guidelines.[140]

A. LTV Ratios

It is not disputed that LTV ratios were critical to PLS investors in evaluating the risk profile of a loan. In fact, as Nomura's LaRocca explained, information like LTV ratios was included in the Offering Documents because investors and rating agencies requested that specific information from Nomura. The most important LTV thresholds were the 80% and 100% thresholds. Nomura witnesses testified that Nomura would not buy or securitize loans with LTV ratios greater than 100%; they understood that RMBS investors during the 2005 to 2007 period found such loans unacceptable. Similarly, loans with an 80% or higher LTV ratio presented a greater risk of loss than loans with lower LTV ratios; reflecting that increased risk, borrowers were required to obtain mortgage insurance. Here, the Offering Documents not only misstated LTV ratios, they made dramatic misrepresentations regarding the number of loans with ratios above 80% and above 100%.

Investors were not the only parties relying on LTV disclosures. The credit rating agencies used these same

[140] Other important characteristics were owner-occupancy status, documentation type, loan product type (i.e., adjustable-rate or fixed rate), the geographic dispersion of the loans, the borrowers' FICO scores, originator identity, and lien position.

statistics to assess credit risk and determine the minimum levels of required subordination for AAA ratings.

Schwert's regression analysis confirmed the significance of LTV data to the structural subordination of RMBS. Schwert's model demonstrated the intuitive proposition that if the underlying collateral is riskier, one needs to provide more protection to structure a AAA rated security.[141] Had the LTV characteristics been accurately reported to the credit rating agencies, the Certificates would have needed greater credit enhancement and subordination to be issued, if at all, with a AAA rating.

B. Compliance with Underwriting Guidelines

As defendants' witnesses also acknowledged, whether loans were actually underwritten in compliance with guidelines was extremely significant to investors. Compliance with underwriting guidelines ensures, among other things, an accurate calculation of the borrower's DTI ratio, which is a critical data point in the evaluation of a loan's risk profile. As defendants' expert Vandell admitted, the very purpose of loan origination guidelines is to control the risk of default in an appropriate fashion. Forester, for his part, conceded that there is a higher likelihood of default for loans that do not

[141] Schwert's analysis understates the problem as it could not account for, among other things, LTV ratios in excess of 100%.

meet guidelines unless sufficient and appropriate compensating factors are present.

Not surprisingly, rating agencies require representations about guideline compliance to ensure that the loans supporting a securitization are legitimate and qualified. According to credit rating company witnesses, the representation that the loans were originated in accordance with guidelines was and still is standard in the industry.

C. Credit Ratings

In deciding whether to purchase a PLS, the credit rating of a certificate is highly important to investors. Investment-grade securities such as those at issue here are predominantly held by investors that tend to be averse to the risk of portfolio losses. Indeed, many institutional investors have internal investment requirements that prohibit them from investing in securities that are not rated investment-grade. A Freddie Mac policy required that PLS be rated by at least two of four named rating agencies as AAA. Fannie Mae had a similar policy, providing that PLS must have a minimum rating of AAA by at least one of S&P or Moody's.

During summations, defendants noted that the relevant question on materiality is not whether particular attributes, such as LTV ratios, are material, but rather whether the difference between the actual disclosures about those attributes

and what FHFA alleges should have been disclosed is material. In other words, the question is whether the "delta" -- the difference between what was reported and what was true -- would have been viewed by a reasonable investor as having significantly altered the total mix of information made available. In this case, there was overwhelming evidence of materiality when viewed as the delta between the representations and the facts established at trial.

X. Rise and Fall of the Home Mortgage Market and Its Effect on Losses in the GSEs' RMBS Portfolios

Defendants offered at trial a loss causation defense. They argued, in essence, that any losses experienced by the Certificates were caused by market factors and not by any misrepresentations in the Offering Documents.[142] During summations, defendants referred to "the overwhelming showing" that the losses on the Certificates were caused not by any alleged misstatements "but by macroeconomic factors, most importantly the decline in housing prices." Defendants went on to say that "[t]here is a mass of evidence from Freddie and Fannie themselves" supporting defendants' loss causation position. Defendants pointed, for example, to a Fannie Mae 10-K

[142] That the Prospectus Supplements themselves include warnings, discussed above, about "economic conditions" and "declines in the residential real estate market" is of limited probative value to the question of whether the cause of the losses at issue here can be disentangled from the misrepresentations.

for 2011, which states that "[a] substantial portion of [Fannie's] fair value losses and write-downs related to our investments in private-label mortgage-related securities backed by Alt-A and subprime mortgage loans [is] due to the decline in home prices and the weak economy." Notably, concluded defendants, no other factors were mentioned.

To support the defense, defendants offered evidence regarding the rise and decline in housing prices and other economic conditions at the beginning of this century, and it is to that chapter of American history that this Opinion now turns. The evidence at trial, including expert testimony, as well as common sense drive a single conclusion. Shoddy origination practices that are at the heart of this lawsuit were part and parcel of the story of the housing bubble and the economic collapse that followed when that bubble burst. While that history is complex, and there were several contributing factors to the decline in housing prices and the recession, it is impossible to disentangle the origination practices that are at the heart of the misrepresentations at issue here from these events. Shoddily underwritten loans were more likely to default, which contributed to the collapse of the housing market, which in turn led to the default of even more shoddily underwritten loans. Thus, the origination and securitization of these defective loans not only contributed to the collapse of

the housing market, the very macroeconomic factor that defendants say caused the losses, but once that collapse started, improperly underwritten loans were hit hardest and drove the collapse even further. The evidence at trial confirms the obvious: Badly written loans perform badly. In short, defendants could not propound a cause unrelated to the alleged misrepresentations.

A. Growth in the U.S. Housing Market: Late 1990s Through Early 2006

From the closing years of the twentieth century until early 2006 or so, there was extraordinary growth in the number of homebuyers and issued mortgages and in housing construction. These phenomena were intertwined with historically low interest rates, an increase in the use of adjustable-rate mortgages ("ARM") and other mortgage products, low unemployment, and government policies encouraging homeownership. With high employment rates and low interest rates, the pool of eligible borrowers increased, and they purchased homes.

During this same period, there was a relaxation of underwriting standards for residential mortgages. Among other things, lenders issued loans to borrowers with lower credit scores and without the down payment or documentation traditionally required. Reflecting these changes, the volume of subprime lending increased dramatically. During the period 2003

to 2005 alone, the number of subprime loans nearly doubled, from 1.1 million to 1.9 million. By 2005, subprime loans represented 20% of all new mortgage loans.

Because lending cannot exist without access to capital, the growth of the subprime mortgage market cannot be explained without recognizing the critical role that the securitization of these mortgage loans played in that process. The securitization of residential mortgage loans increased dramatically beginning in the mid-1990s. With every sale of a securitization, more money became available to securitizers, then to originators, and ultimately to borrowers. By 2003, 68% of new mortgage originations were securitized. This phenomenon was even more critical to the growth of the subprime mortgage market. In 2002, the volume of PLS securitizations had surpassed $400 billion for the first time, with less than half of this amount supported by prime mortgages. In 2001, roughly 50% of subprime mortgage loans had been securitized, but by 2005 and 2006, more than 80% of subprime mortgage loans were securitized.

The total dollar amount of outstanding PLS grew from just over $1 trillion in the first quarter of 2004 to almost $3 trillion in the second quarter of 2007. At its peak, PLS represented $2.8 trillion in outstanding RMBS.

Beginning in 2004, Freddie Mac and Fannie Mae significantly increased their own purchases of PLS. From 2003 through 2007,

the two GSEs purchased more than $593 billion of subprime and Alt-A PLS. The total volume of subprime PLS during these years was close to $1.7 trillion.

The increased demand for homes led to a boom in the construction of new houses. And, during these years, housing prices soared. From January 2000 to May 2006, average home prices rose by 125%.

B. The Bubble Bursts

But these trends did not continue: The housing bubble burst. Beginning in mid-2004, the Federal Reserve began steadily increasing the targeted federal funds rate and over time mortgage interest rates rose. By mid-2006, many potential buyers could no longer afford homes. And, at least in some areas of the country, housing construction outstripped demand. By early 2006, the increase in housing prices stalled. After peaking in April 2006, housing prices began a decline and ultimately fell sharply. From April 2007 through May 2009, house prices in the United States fell by nearly 33%.

No one can forget the recession that followed and lasted one-and-a-half years, from December 2007 to June 2009, making it the longest recession since the Great Depression. GDP contracted by approximately 4.3%. Unemployment rose from 4.4% in May 2007 to 10% in the fourth quarter of 2009. Some of the headline-making events during this period were the run on Bear

Stearns, which led to a government-organized rescue attempt in March 2008, and the collapse of Lehman Brothers on September 15, 2008.

These historic events, however, had roots in the contraction of the housing market, and in particular in investors' loss of confidence in the credit quality of the mortgage loans that served as collateral for their investments. On May 4, 2007, UBS shut down its internal hedge fund Dillon Read after it suffered approximately $125 million in subprime-related losses. That same month, Moody's put 62 tranches of 21 U.S. subprime deals on review for a possible downgrade. On June 7, 2007, Bear Stearns Asset Management informed investors that it was suspending redemptions from a leveraged fund that had invested in collateralized debt obligations backed by subprime loans. In June, S&P and Moody's downgraded over 100 bonds backed by second-lien subprime mortgages. And the list of negative events related to subprime investments continued through the rest of 2007 and beyond.

In retrospect, of critical importance was the August 9, 2007 announcement by BNP Paribas that it had temporarily suspended redemptions for three of its investment funds that had invested in subprime RMBS. It explained that "[t]he complete evaporation of liquidity in certain market segments of the US securitization market has made it impossible to value certain

assets fairly regardless of their quality or credit rating. The situation is such that it is no longer possible to value fairly the underlying US ABS assets." BNP Press Release, Aug. 9, 2007, available at http://www.bnpparibas.com/en/news/press-release/bnp-paribas-investment-partners-temporaly-suspends-calculation-net-asset-value-fo. Following this announcement, money market participants became reluctant to lend to each other and short-term rates increased on instruments that had previously been considered safe.

C. Causes of Contraction in Housing Market

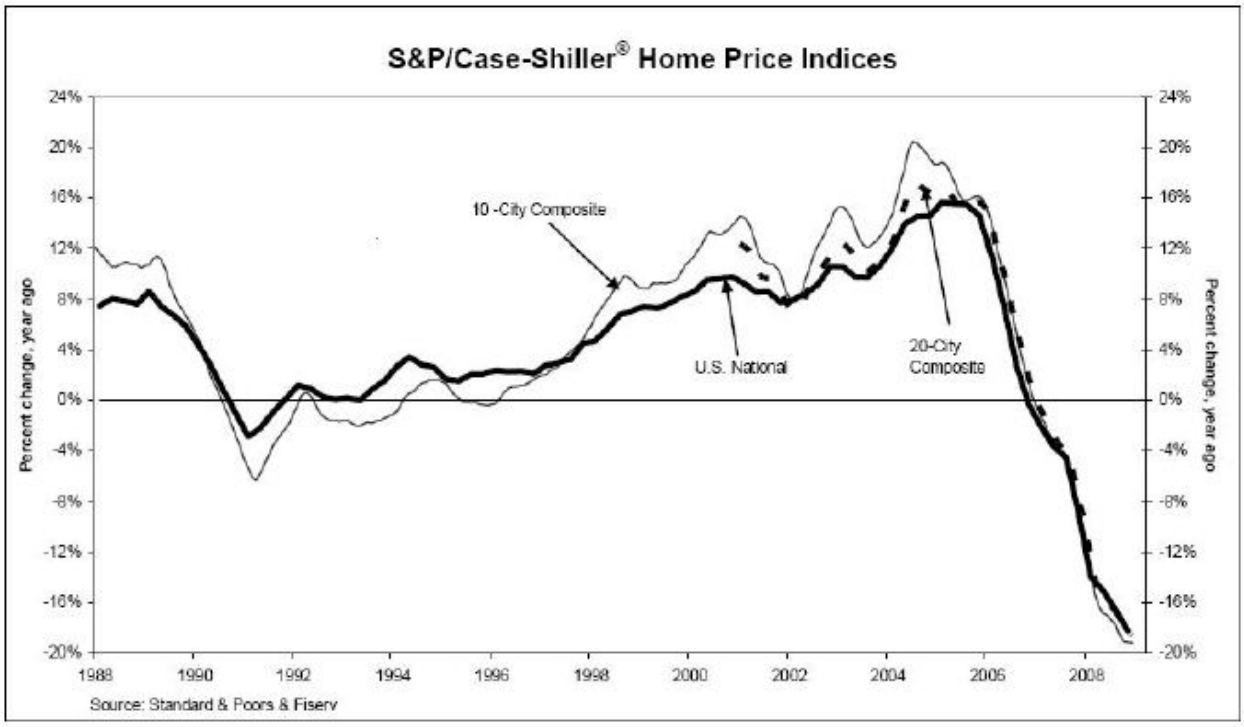
The factors contributing to the contraction of the housing market and the decline in house prices were numerous and mutually reinforcing: Higher prices and higher interest rates led to a softening of demand for homes; falling demand, coupled with oversupply, put downward pressure on house prices; and falling prices led to negative equity, which together with newly tightened underwriting standards limited the ability of homeowners to refinance existing loans. As the economy soured and unemployment soared, defaults and foreclosures increased; with the increase in defaults, investor demand for securitized mortgages collapsed.

Shoddy underwriting practices (as opposed to relaxed underwriting standards) like those at issue here contributed to both the spectacular expansion of the subprime mortgage and

securitization markets and their contraction. The ability of originators to quickly sell and shift the risk of subprime loans off their books reduced their incentive to carefully screen borrowers. They approved loans that did not comply with stated underwriting guidelines and they misrepresented the quality of those loans to purchasers. Appraised values were overstated, owner occupancy was misreported, credit risk was hidden, and second liens were undisclosed. In short, these shoddy practices contributed to the housing price boom.

And, of course, those who had purchased homes during the boom years were most at risk of finding their homes "underwater" when the housing bubble burst. Their mortgage balance was greater than the sharply declining value of their home. By the end of 2009, approximately 24% of all mortgaged residential properties in the U.S. had negative equity. Defaults on mortgage obligations became more rampant. This was particularly true for subprime mortgages, where serious delinquencies increased by more than five times from mid-2005 to late-2009. At the end of that period, about 30% of subprime mortgages were delinquent.

As the following chart illustrates, the decline in housing prices was steep.



The financial crisis and recession exacerbated the housing crisis. With the increase in unemployment, the demand for housing fell and the incidence of delinquencies and defaults rose. The tightening of lending standards and the collapse of the PLS securitization market reduced the supply of credit for would-be borrowers.

Just as the shoddy and unscrupulous origination practices contributed to the housing boom, they contributed to the collapse in prices after the housing bubble burst. Originally understated LTV ratios necessarily increased the rate of defaults, as did the misrepresentations about credit status and owner occupancy. Not surprisingly, Barth found support in academic studies for his opinion that misrepresented PLS

securitized loans had higher delinquency and default rates than other loans. With high delinquency and foreclosure rates, and the re-sale of foreclosed properties, more housing stock was placed on the market and housing prices became even further depressed.

Many of these problems and processes were interconnected and the cross-currents among them were numerous. They fed upon each other to create a housing boom, and they interacted to create and exacerbate the economic decline that followed that boom. The origination and securitization of shoddy mortgages -- mortgages that did not meet their originators' guidelines -- were among the drivers of both phenomena. As recognized by defendants' expert Vandell, to whom the Opinion now turns, the bursting of the housing price bubble triggered a financial crisis and an ensuing recession, which, in turn, further exacerbated the housing crisis.

D. Vandell's Study of the Hunter Loans

To support their contention that it made not one whit of difference to the value of the Certificates if the Offering Documents misrepresented the quality of any or even all of the loans supporting the Certificates, given the drastic decline in housing prices and the deep recession, defendants offered benchmarking analyses. Three of those analyses were excluded prior to trial as unreliable under Daubert and Fed. R. Evid.

702. In none of the three analyses did defendants compare the performance of a set of loans with underwriting defects to a set without such defects. Vandell Opinion, 2015 WL 539489, at *6.

In place of the excluded analyses, the Court permitted defendants to substitute a different test. Vandell, using a multinomial cross-sectional logit model,[143] looked at 721 loans that were re-underwritten by Hunter, comparing the performance of those Hunter found to be materially defective with the performance of those for which Hunter made no such finding. After controlling for observable loan and borrower characteristics, changes in economic factors, and the security-level effect,[144] Vandell concluded that the "probability of

[143] "Multinomial logit is an appropriate approach when the dependent variable consists of three or more . . . outcomes. Specifically, multinomial logit estimates the likelihood of a particular outcome, relative to another category that serves as a referent." Steven J. Balla et al., Outside Communications and OIRA Review of Agency Regulations, 63 Admin. L. Rev. 149, 173 (2011) (citation omitted).

[144] By "security level effect," or "Security Indicators," Vandell refers to the fact that he has controlled for the possibility that the loans in a particular securitization may have unobservable characteristics -- such as neighborhood concentration or origination during the same time period within a year -- that could affect their performance. According to Schwert, Vandell's inclusion of "Security Indicators" in his multinomial cross-sectional logit model is inappropriate for two reasons. First, the probability that a borrower will default does not depend on the securitization into which her loan is placed. Second, the estimated coefficients on the Security Indicators may reflect the effects of underwriting defects, not factors unrelated to the alleged misrepresentations. In any event, Schwert concluded that including the Security Indicators

default or serious delinquency was not statistically significantly different at the five percent significance level for Hunter Defective Loans versus Hunter Non-Defective Loans for the Supporting Loan Groups of any of the At-Issue Certificates." Vandell concluded that "either Mr. Hunter's re-underwriting results are not reliable or his alleged underwriting defects did not affect the performance of the loans in the Supporting Loan Groups."

Another of defendants' experts, Riddiough, reviewed Vandell's analysis and opined that, after accounting for loss causation, FHFA's recovery would be equal to $0. In other words, defendants' expert evidence on loss causation presented the Court with yet another all-or-nothing proposition: Losses on the Certificates were or were not caused entirely by factors other than any material misrepresentations. Defendants made no attempt to tease out a portion of any losses.

There are at least three independent failures in Vandell's analysis. First, and much like the problem that saw his three other analyses excluded, Vandell claimed to be comparing defective loans against non-defective loans, but did not. He admitted at trial that he took no steps to ensure he actually

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did not actually matter, as the predicted probability of default, once corrected as described below, was higher in the model including the Indicators.

had a "clean" set of loans for his comparison. Vandell was unaware of Hunter's testimony that the level of underwriting defects in the Sample was so severe that it was unlikely that any of the loans in the seven SLGs -- including the ones for which Hunter had not identified defects -- was actually free of defects. Additionally, Vandell included in his "non-defective" comparator set loans that Hunter had actually labeled defective (though not in a way that materially increased credit risk).

Second, Vandell misreported the results of his own model. The dependent variable in Vandell's multinomial logit model is equal to one of three possible loan states: current, default, or prepaid. Vandell's model consisted of two legs, one that measured the effect of independent variables on the likelihood of default relative to remaining current, and another that measured the effect of independent variables on the likelihood of prepayment relative to remaining current. Prepayments affect default rates because loans that are prepaid cannot default, but loans that are not prepaid can default. Therefore, loan defects could result in higher overall default rates by increasing the likelihood of default, decreasing the likelihood of prepayment, or both, relative to remaining current. This means that inferences about overall probability of default cannot be drawn from just one equation in what is truly a two-equation system.

Nevertheless, Vandell only reported the estimates of the effect of defects on the likelihood of default relative to remaining current; he omitted the estimates of the effect of defects on the likelihood of prepayment relative to remaining current. Schwert reran Vandell's model to take into account both legs. The corrected analysis showed that the probability of default is, on average, nearly 10% higher for the loans that Vandell labeled "Hunter defective loans" as compared to the loans that Vandell labeled the "Hunter non-defective loans," and that the difference in default rates is statistically significant.

Vandell sat in the courtroom and listened as Schwert explained this problem with Vandell's analysis. When it came time for him to take the stand, Vandell admitted that his direct testimony was misleading. Vandell reversed himself and said that the purpose of his model was not to show the "probability" of default. When confronted with his chart entitled, "Effect of Hunter Defect on Probability of Default and Serious Delinquency," (emphasis added) Vandell admitted that "[t]hat's what it says. That's not, however, what it means."

A third failure in Vandell's analysis is that he failed to consider the impact of subordination on the losses incurred by the GSEs' Certificates. If the true characteristics of the loans had been disclosed, the Certificates would have issued

with AAA ratings, if at all, only if the subordination levels had been higher than they in fact were. This bears directly on any loss causation analysis, but was ignored by Vandell.

Indeed, Schwert's testimony that there is a significant relation between AAA subordination levels of securitizations and the reported characteristics of the underlying loan collateral, including LTV ratios, went effectively unrebutted. While defendants' expert Riddiough attempted to undermine the statistical significance of Schwert's conclusion, Riddiough used the wrong method to assess statistical significance.[145] Defendants further attempted to undermine Schwert's testimony on subordination by arguing that his model did not account for forms of credit enhancement aside from subordination, such as cross-collateralization and excess spread. Defendants, however,

[145] During cross-examination Riddiough was shown an article bearing his name and that of Risharng Chiang. The article contained analysis at odds with testimony Riddiough had given about the operation of the rating agency process. When confronted with the inconsistency, Riddiough said that the statement in the article represented his old thinking, which subsequently had changed. When asked if he had written the article, Riddiough's answer was, "I don't know -- it's interesting that you bring this article up. . . . [T]his article appeared with this other person's name on it. And I've always been puzzled about this article appearing with this person's name. . . . I've always been puzzled by the appearance of this article or with this person's name on it who I don't know." Almost within the same breath, however, when asked if this was the first time he was seeing the article, he responded, "It's the first time I recall seeing the article with this person's name on it, yes, it is."

offered nothing to show how the existence of other forms of credit enhancement could resuscitate Vandell's loss causation analysis from Schwert's critiques. In fact, Riddiough admitted that he did not view it as his job to quantify the effect of any allegedly missing variable in Schwert's analyses. In sum, Vandell's analysis was completely eviscerated at trial.

E. GSE Witnesses

Defendants attempted to buttress their loss-causation defense by calling to the stand three senior GSE executives: Niculescu, Mudd, and Cook. Their testimony confirmed the obvious: The decline in housing prices was correlated with losses in the GSEs' PLS portfolio. In Mudd's view, PLS values were affected by both macroeconomic factors such as employment rates, home prices, geography, and interest rates, as well as security-specific effects, such as the underlying structure, rating, or composition of individual securities. Mudd testified that "generally the movement of housing prices downward would have a negative impact on the general value of mortgage-related assets."

Mudd was shown and agreed with a September 18, 2009 memorandum of law that was filed on behalf of Fannie Mae as a defendant in the unrelated litigation, In re Fannie Mae 2008 Securities Litigation, No. 08cv7831 (PAC) (S.D.N.Y.), which is

one of several cases further discussed below. The memorandum states:

> As investors were well aware, Fannie Mae is a government-sponsored entity ("GSE") whose congressional charter prohibits it from diversifying, requiring that it invest in, and only in, residential mortgages; thus, it would always be particularly vulnerable to a mortgage market collapse. As then-Treasury Secretary Paulson explained a year ago, Fannie Mae's financial collapse was the consequence of "the GSE structure, and . . . the ongoing housing correction. . . . GSE managements and their Boards are responsible for neither."

Cook testified to understanding that certain levels of losses in the underlying collateral could cause the subordination in PLS securitizations to be pierced and, if that happened, could cause Freddie to lose money. According to Cook, defaults in the underlying loans was one of the factors ultimately related to the risks of the PLS that Freddie purchased.

None of this testimony, or similar statements in documents admitted into evidence, such as motion papers filed by the GSEs and FHFA in other cases,[146] discussed below, is sufficient to

[146] In addition to putting into evidence legal briefs filed in other cases, defendants introduced numerous other GSE documents -- such as Forms 10-Q and 10-K, annual reports to Congress, and internal memoranda -- demonstrating that the GSEs at least partially attributed their losses to macroeconomic conditions such as house price declines. As discussed below, pointing to the fact that the GSEs themselves viewed the decline in housing prices as a cause of their losses does not move the ball on defendants' loss causation defense.

carry defendants' burden, on the loss causation defense, of affirmatively proving that any of the amount recoverable represents other than the depreciation in the Certificates' value resulting from the material misrepresentations. That the GSEs themselves attributed their losses in part to macroeconomic factors such as the decline in housing prices does not answer the pertinent question given the interconnected events that fed the housing bubble and drove its collapse.

XI. Corporate Entities and Individual Defendants

As already described, there was no entity or person responsible within Nomura for ensuring the accuracy of the representations in the Offering Documents that are at issue here. Each of the Nomura corporate defendants played an integral role in a seamless securitization process. They shared offices in the same headquarters in Lower Manhattan and were bound together by interlocking ownership, directors, and officers. The Individual Defendants, all of whom were Nomura officers or directors (or both), held titles of significance at the corporate defendants and signed the Registration Statements through which the Certificates were sold, but none of them understood the aspects of the securitization process that created Nomura's legal exposure in this case or took responsibility for the false statements in the Prospectus Supplements displayed so graphically at trial.

A. The Nomura Family

Each of the five Nomura entity defendants -- NHA, Nomura Securities, NCCI, NAAC, and NHELI -- were involved in the assembly, structuring and/or sale of one or more of the seven Securitizations. All are Delaware corporations with their principal places of business in New York City. FHFA seeks to hold NHA and NCCI responsible as control persons; it seeks to hold the remaining Nomura corporate entities (as well as RBS) liable as primary violators of the securities laws.

1. NCCI

NCCI was the sponsor for all seven Securitizations, and housed Nomura's Diligence Group, the Trading Desk, and Transaction Management Group.[147] As such it performed due diligence on and purchased the loans at issue and bundled those loans into the Securitizations, which it then sold to the depositor for each Securitization. It also prepared the Offering Documents for each of the Securitizations. Because it sold the securitized loans to the depositor, it could prevent the issuance of a securitization by declining to sell the loans.

[147] Prior to 2006, the Due Diligence and Transaction Management Groups were formally part of Nomura Securities, and their employees were formally employed by Nomura Securities. It was understood, however, that they were acting on behalf of NCCI. When the groups shifted formally to NCCI in 2006, the groups, employees, and responsibilities remained exactly the same.

NHA established NCCI, and from 2005 through October 2006 wholly owned it. After October 2006, NHA owned NCCI through a new subsidiary corporation, NAMF. NCCI's directors were appointed by NHA, and those directors in turn appointed its officers.

NCCI and Nomura Securities were closely intertwined. All of NCCI's officers were also officers or employees of Nomura Securities. NCCI and Nomura Securities shared directors, officers, and employees, many of whom were also directors and officers of both NAAC and NHELI. Individuals with positions in more than one Nomura entity had identical responsibilities at each entity, and when the Due Diligence and Transaction Management Groups shifted formally to NCCI in 2006, it was without interruption or change.

2. NAAC & NHELI

NAAC and NHELI are special-purpose vehicles established for the sole purpose of participating as depositors in the RMBS process; they had no business operations apart from issuing RMBS. As depositors, their role was to purchase the mortgage loans included in the Securitizations, then sell the corresponding Certificates to underwriters, including Nomura Securities. NAAC was the depositor for one of the Securitizations, NAA 2005-AR6. NHELI was the depositor for the other six Securitizations.

NHA indirectly wholly owned NAAC and NHELI, first through NACC and, after October 2006, through NAMF.[148] NAAC's directors were appointed by its owner -- first NACC, then NAMF -- and its officers were appointed by those directors. NHELI's directors were likewise appointed by NACC and NAMF, and its officers were appointed by those directors. From 2005 to 2007, NHELI and NAAC had the same slate of directors. Neither NAAC nor NHELI had any employees beyond those officers and directors.

3. Nomura Securities

Nomura Securities was the underwriter or co-underwriter of three of the Securitizations: NAA 2005-AR6, NHELI 2006-FM1, and NHELI 2006-FM2. As such, it purchased the Certificates for the three Securitizations from NAAC and NHELI and sold them to the GSEs. As an underwriter, it was responsible for the accuracy of the Offering Documents prepared by NCCI, and for distributing these to the GSEs.

Nomura Securities was, from 2005 to 2007, a wholly owned subsidiary of NHA and an affiliate of NAAC and NHELI. Nomura Securities' directors were appointed by NHA, and those directors in turn appointed its officers.

[148] Neither NACC nor NAMF is a defendant in this action.

4. NHA

NHA is a holding company that holds the stock of its subsidiaries and receives its revenue from those subsidiaries. All of the other corporate defendants were directly or indirectly wholly owned by NHA. NHA, in turn, is owned by Nomura Holdings International, which is not a defendant here.

NHA oversaw and set policy for its subsidiaries' activities in the RMBS industry. During the relevant period, NHA interfaced with Nomura Securities through NHA's Credit Department, Risk Management Group, and Risk Credit Committee ("RCC"). The Credit Department provided services to Nomura subsidiaries; it also set applicable credit policies and established procedures for approving originators to do business with Nomura. Among other things, the Credit Department participated -- along with the RCC and Risk Management Group -- in deciding when to initiate and when to discontinue business with originators.

NHA's Credit Department also set limits on the amount of RMBS and whole loans that Nomura Securities could hold at any given time, and it policed those limits. NHA decided whether it or Nomura Securities would hold residuals in issued securitizations. NHA's Risk Management Group monitored the extent of these holdings, modeled associated credit and default risk, and conducted periodic "stress tests."

NHA could also exercise influence, one step removed, over NAAC and NEHLI through its subsidiaries NACC and NAMF. NHA appointed the directors of these subsidiaries; the subsidiaries in turn appointed the directors of NAAC and NHELI. Those directors were charged with managing and directing the "business and affairs" of NAAC and NHELI. As noted, there was substantial overlap between the directors and officers of NHA, NAAC, and NHELI.

Either NHA or one of its direct subsidiaries selected the directors of every Nomura corporation involved in the Securitizations. Some directors did double duty: All but one of Nomura Securities' directors served also as directors of NHA, and two of NHA's directors were directors of NACC. In turn, two of NACC's directors were directors of NAAC and NHELI. There was similar overlap among officers, as discussed below with the Individual Defendants. NHA provided "back-office" support -- legal services, accounting, tax, and human resources -- to Nomura Securities and NCCI.

B. RBS

RBS is a Delaware corporation with its principal place of business in Stamford, Connecticut. RBS served as the lead or co-lead underwriter on four of the Securitizations. As such, it was responsible for the accuracy of the statements in the

Offering Documents and actually sold four Certificates to Freddie Mac.

C. Individual Defendants

Five defendants are individuals associated with the Nomura entity defendants.[149] Focusing solely on the positions they held at the Nomura entity defendants during the 2005 to 2007 period, Findlay was an officer and director of NHA and Nomura Securities,[150] an officer of NCCI,[151] and a director of NAAC and NHELI. Graham was an employee of Nomura Securities and NCCI, and an officer of NAAC and NHELI. LaRocca was an employee of Nomura Securities, an employee and officer of NCCI,[152] and an officer of NHELI. Gorin was an officer of NHA, Nomura

[149] Reinforcing a picture of a single Nomura organization where separate corporate identities were of little significance, each of the Individual Defendants, with the possible exception of McCarthy, expressed confusion at times regarding their titles, the Nomura entities with which they were associated, and which of the Nomura entities performed tasks vital to the securitization process.

[150] Findlay was a director of NHA and Nomura Securities as of July 2006.

[151] Despite having stipulated to being an officer of NCCI during the relevant period, Findlay backtracked from this statement at trial.

[152] LaRocca was also a director of NCCI as of July 2006.

Securities, NCCI,[153] NAAC, and NHELI. And McCarthy was an outside director of NAAC and NHELI.

Findlay, Gorin, and McCarthy signed each of the Registration Statements and their amendments pursuant to which the Securitizations were issued. LaRocca signed the Registration Statements and their amendments for each of the six NHELI Securitizations; Graham signed the Registration Statement and its amendment for the single NAAC Securitization.[154] Aside from the Individual Defendants, Shunichi Ito ("Ito") was the only other person to sign the Registration Statements.[155]

All five Individual Defendants testified at trial. The general picture was one of limited, if any, sense of accountability and responsibility. They claimed to rely on what they assumed were robust diligence processes to ensure the accuracy of the statements Nomura made, even if they did not

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[153] Despite having stipulated to being an officer of NCCI during the relevant period, at trial Gorin backtracked from this statement.

[154] Defendants point out that none of the Individual Defendants signed the Prospectus Supplements. But the Prospectus Supplements were not signed by anyone. They were issued pursuant to the Registration Statements that the Individual Defendants signed. Moreover, the Registration Statements incorporate by reference the information contained in the Prospectus Supplements. In other words, the negative inference that defendants wish to raise does not follow.

[155] The amendments to the Registration Statements, in addition to being signed by Individual Defendants and Ito, were also signed by an "attorney-in-fact" for the depositors.

understand, or, worse, misunderstood, the nature of those processes. Not one of them actually understood the limited role that due diligence played in Nomura's securitization process, and some of them actually had strong reason to know of the problems with the diligence process and of the red flags that even that problematic process raised.

Each Individual Defendant made a point of highlighting the aspects of Nomura's RMBS business for which he claimed to have no responsibility. None of them identified who was responsible for ensuring the accuracy of the contents of the Prospectus Supplements relevant to this lawsuit, and, as this group of Individual Defendants furnished the most likely candidates, the only logical conclusion is that no one held that responsibility.

1. Findlay

Findlay held critical roles in several of the Nomura entities responsible for the securitization of RMBS. He was responsible for setting up its due diligence practices when it entered the RMBS business. Because of his responsibility for managing risk at NHA, he was informed that Nomura's Securitizations were performing poorly, but took no steps to improve any of its processes. In short, if there was one Individual Defendant most responsible for the poor design and execution of Nomura's due diligence processes and the creation of misleading Offering Documents, it was Findlay.

Findlay joined NHA in October 2000 as CLO. At some point or another, Findlay has sat on the board of directors of NHA and at least seventeen other Nomura entities. He has served as an officer of a number of them as well. In 2012, he became President and CEO of NHA, while continuing to serve as CLO.

During the 2002 to 2012 period, Findlay was CLO of Nomura Securities as well.[156] As CLO of NHA and Nomura Securities, Findlay provided legal advice to Nomura's RMBS businesses. During the period 2005 to 2007, Findlay was also a member of the board of directors of both NAAC and NHELI. The boards of these two entities were each composed of Findlay, McCarthy, and Ito. The boards issued resolutions authorizing the receipt of loans from NCCI and the transfer of loans to the trust.[157]

Findlay testified to having reviewed the seven Prospectus Supplements before they were issued. It appears as though the extent of Findlay's review consisted of verifying that the documents had redlining on them, so that he could assure himself

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[156] During cross-examination, Findlay testified that he became CLO of Nomura Securities in 2000. Whether Findlay took on this role in 2000 or 2002 is immaterial.

[157] In an attempt to disclaim the responsibility of any single director, defendants note that if the members of the boards disagreed, the bylaws required a majority vote. Of course, both boards were comprised of three members, of which Findlay and McCarthy were two. In other words, it would have been impossible for NAAC or NHELI to act without at least one of the two of these Individual Defendants voting in favor.

that others were in fact making changes to the documents. He did not verify the data reflected in the documents.

During the 2002 to 2004 period, as Nomura prepared to enter the RMBS business, Findlay participated in the establishment of NCCI's processes for pre-acquisition due diligence on mortgage loans. Findlay retained outside counsel and due diligence professionals to advise the company on how to structure the process.

Findlay testified that he believed (and still believes today) that Nomura had a robust due diligence process and that the Offering Documents were materially true, correct, and complete; he provided no reasonable basis for those beliefs. Instead, he had a profound misunderstanding about the processes in place at Nomura. Although Findlay was involved in creating Nomura's due diligence processes, Findlay could not recollect that Nomura in fact had no written due diligence policies and procedures with respect to its RMBS business. In fact, Findlay has no present recollection of what the due diligence program focused on. He could not recall the identities of the members of the due diligence team, or whether Nomura used sampling in its pre-acquisition diligence. Similarly, Findlay testified that he would have thought that Nomura's due diligence team should have been able to draw reasonable extrapolations from the samples that they reviewed on a pre-purchase basis. He was not

aware of the fact that Nomura's Diligence Group was unable to perform such an extrapolation. Findlay stated that he was surprised to learn during cross-examination that Kohout regarded the use of adverse sampling, as Nomura did it, to diminish the role of the Diligence Group to that of a noneffective entity. Findlay was not aware of the IngletBlair quality control review of Nomura's due diligence process in the summer of 2006, nor was he aware that Nomura's Diligence Group concluded that many of its originators were responsible for originating defective loans.

At one point, Findlay testified that he believed the due diligence team reviewed the Prospectus Supplements and checked the accuracy of the representations against the actual characteristics of the loans. Moments later, however, Findlay backtracked and said that the due diligence team was charged with preparing, not reviewing, the Prospectus Supplements. Both statements were incorrect. In short, Findlay had faith in a process that he could not recall and did not understand, despite his role in its creation.

There were at least two instances in late 2006 at which the poor quality of Nomura's securitizations was brought to Findlay's attention. From 2005 to 2007, Findlay sat on the RCC, the NHA committee designed to assist management by giving risk and credit advice, including with respect to aspects of the RMBS

business, to NHA's subsidiaries, such as Nomura Securities and NCCI. In his capacity as a member of the RCC, on December 7, 2006, Findlay, along with other RCC members, was told that the originator, Ownit, had been forced to shut down "due to continued pressure from the softening of [the] subprime mortgage market." Findlay was told that Ownit's position was "[l]ike many other originators" in that it was suffering decreasing profits from a "cooling housing market" and "mounting EPD claims."[158] On December 13, 2006, Findlay attended another meeting at which the RCC discussed problems in Nomura's RMBS business, including a review of the actions that Nomura had taken in response to Ownit's closure.

In November 2006, Findlay received an email with the subject line, "Request from Wall Street Journal," and an attached report entitled "How Bad is 2006 Subprime Collateral?" The Wall Street Journal was inquiring about a report put out by UBS that ranked issuers and originators according to sixty-day-or-more delinquency percentages at deal seasoning of six months, with Nomura appearing third from the bottom out of twenty-eight. Even though Findlay was involved in coordinating Nomura's response to the forthcoming article, he testified that he did not read the UBS report. Nevertheless, when he forwarded it

[158] As described above, EPD refers to early payment default.

along to others (which is all that he did), he wrote that the report "basically presented that [Nomura] [was] third from the bottom of 28 issuers with problems[,] and that the key cause is poor underwriting." Findlay guesses that the only way he was able to report on its contents is that someone else told him about it.

Findlay forwarded the report to what he referred to as "risk legal." In his email doing so, he expressed that the approval of a Mr. Kashiwagi would be required before any response was sent to the Wall Street Journal. At trial, Findlay testified that he thinks Kashiwagi was the CEO.[159] According to Findlay, pursuant to an internal Nomura procedure, the CEO's approval was required before anyone could communicate with the press. Findlay's email also referred to a Mr. Takahashi, whom Findlay called a senior Japanese executive, Kashiwagi's boss.[160]

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[159] It was not clear from Findlay's testimony of which Nomura entity he thought Kashiwagi was the CEO.

[160] Findlay's testimony -- that he forwarded this important document, and envisioned it reaching his superiors to approve a response, without ever having read it himself -- could give rise to at least two inferences, neither of which is particularly attractive. The testimony may be false -- he may have actually read the report before sending it along to others. In that case, not only did he commit perjury, but he had good reason to know of the problems in Nomura's RMBS business, yet took no action to solve them. Or the testimony may be true, in which case Findlay was so detached from his professional responsibilities as to effectively render him a figurehead.

2. Graham

Graham was employed by Nomura Securities from April 2005 to October 2006 and by NCCI from October 2006 to October 2007. Shortly after joining Nomura in 2005, Graham became President and CEO of NAAC and, in the 2005 to 2007 time period, was also an officer of NHELI.

When hired by Nomura Securities, Graham's title was Managing Director, and he was the head of the Transaction Management Group. When Graham became employed by NCCI, his title and job responsibilities remained the same.[161] Graham reported to LaRocca. As Managing Director of the Transaction Management Group, the teams responsible for due diligence, loan acquisition, servicing, and securitization all reported to Graham. When he moved to NCCI, these groups continued to report to him, as did the team responsible for collateral analysis.[162]

Graham had direct responsibility for the content of the Prospectus Supplements. Graham's Transaction Management Group was responsible for preparing the transaction documents for the acquisition of loans that would be securitized and for preparing

[161] Apparently the name of the group of which Graham was the head changed once he moved to NCCI, though it is not clear what the new name was.

[162] The general function of the collateral analysis team was to analyze collateral data at both the acquisition and securitization stages.

the Offering Documents that would be used to market the Securitization to investors. It would also assist in obtaining ratings for Securitizations. Graham, or another member of his group, would review the Offering Documents, including the Prospectus Supplements, and make edits or comments about the language.

Graham understood that the disclosures in the Prospectus Supplements were compared to the data on the loan tapes. Graham did not know, however, whether anyone compared the loan file and the underwriting guidelines as part of the due diligence process. Graham knew that credit and compliance diligence was being conducted on only a sample of loans acquired in bulk acquisitions; as far as Graham knew, there was no one in Nomura's Diligence Group who had a background in statistics sufficient to determine if the sample size was adequate. And, although Graham initially testified that he believed Nomura's diligence practices exceeded industry standards, by February 2007 at the latest, Graham became aware that other industry participants were reportedly performing due diligence on all loan files in bulk deals, not just a sample.

In April 2007, Graham became aware that a fraud review on a NHELI transaction revealed that 43 of 263 loans that had passed Nomura's diligence processes were found to "have fraud." Graham

could not recall Nomura taking any action to modify its diligence process in response to this finding.

3. LaRocca

LaRocca was employed by Nomura Securities from February 2001 to October 2006 and by NCCI from October 2006 to May 2008. He was also an officer of NCCI -- he testified that he believed, but could not be sure, that he was a Vice President. As of July 2006, LaRocca was additionally a director of NCCI. During the 2005 to 2007 period, LaRocca was also the President and CEO of NHELI.[163] Pursuant to NHELI's bylaws, the President and CEO "shall have general and active management of the business." It was in his capacity as President and CEO of NHELI that LaRocca signed Registration Statements pursuant to which six of the Securitizations were issued. LaRocca worked with outside counsel to prepare the legal documents for the Securitizations.

Before Graham joined Nomura in April 2005 and began reporting to LaRocca, LaRocca served as the head of the Transaction Management Group.[164] The Diligence Group reported to

[163] According to LaRocca, all of NHELI's officers were employees of either Nomura Securities or NHA, although, when asked which other Nomura entity employed the officers of NHELI, LaRocca had difficulty distinguishing who worked for NHA from who worked for Nomura Securities.

[164] It is not entirely clear from the record which precise group or groups LaRocca and Graham oversaw. Graham referred to himself as having been the head of the Transaction Management Group, while LaRocca testified that Graham was head of the

LaRocca, first directly and later through Graham. LaRocca was involved in setting diligence policy and was kept informed of Nomura's diligence results. As reflected in emails that he sent, LaRocca was aware that originators including Ownit, Fremont, ResMAE, People's Choice, and First NLC were "suspect" loan originators. In August 2006, LaRocca received the results of the audit conducted by IngletBlair. LaRocca could not recall any actions being taken in response to IngletBlair's findings. Despite his familiarity with problems in Nomura's RMBS business, LaRocca maintained at trial that he believed in the accuracy of the information contained in the Offering Documents.

During cross-examination, it was revealed that LaRocca misunderstood the role of Nomura's outside counsel, accountants, and the rating agencies in the securitization process and the extent to which he could rely on them for insuring the accuracy of information in the Offering Documents. For example, he identified the rating agencies as being among the "experts" who would review the Prospectus Supplements, giving him confidence in the accuracy of the representations therein. They did not conduct such a review. While the agencies inspected these documents to confirm that they were consistent with the

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Residential Transaction Management Group, which was a subgroup of the Transaction Management Group.

representations Nomura had made to them, the agencies did not independently confirm the accuracy of the information disclosed in the documents.

4. Gorin

Unlike the first three Individual Defendants, each of whom had a level of responsibility for Nomura's due diligence program, neither of the final two Individual Defendants did. Each of the five Individual Defendants, however, had responsibility as an officer or director of NAAC and/or NHELI for the actions taken by the depositors.

In July 2004, Gorin was hired by Nomura Securities as a Controller. Ultimately, in addition to serving as Controller, Gorin also became Chief Financial Officer ("CFO") at Nomura Securities and NHA.[165] From 2005 to 2007, Gorin was also one of seven officers of NAAC and one of eight officers of NHELI. While Gorin could not remember his precise title, he acknowledged that his electronic signature had been properly placed on the Registration Statements for the Securitizations in his capacity as CFO and Treasurer of NAAC and NHELI. Aside from offering his titles, Gorin did not describe the nature of the work he performed at Nomura.

[165] Gorin also ultimately served as an officer of NCCI.

Despite being a signatory, Gorin was unfamiliar with the contents of the Offering Documents, the type of security to which they related, and the role of NAAC and NHELI in the RMBS industry. Gorin did not review the Registration Statements and did not know what those documents were or even understand what an RMBS was.[166] This is startling given that the depositors, for which he served as CFO and Treasurer, had a singular function: to purchase home mortgage loans and place them in a trust. When asked if he had any belief about the accuracy of any representations in the Prospectus Supplements, his answer was no.

5. McCarthy

McCarthy became an independent director of NAAC and NHELI in January 2004 and still holds those positions today. Along with the other two members of the two boards -- Findlay and Ito -- McCarthy approved the issuance of certificates for securitizations, including those at issue in this case, that McCarthy understood would later be sold to investors. McCarthy's primary responsibility with respect to those transactions was to ensure that they did not impair NAAC's or NHELI's statuses as bankruptcy-remote entities, a status that

[166] When asked if he had an understanding of what a residential mortgage-backed security is, he answered, "[t]he only thing I can really say is that it's a residential mortgage-backed security."

guaranteed that nothing could be clawed back from RMBS investors in a bankruptcy proceeding.

From time to time, Juliet Buck ("Buck"), an attorney who McCarthy understood to have been employed by Nomura Securities and later by NHA, would contact McCarthy when something arose that needed his attention with respect to his role at NAAC and NHELI, such as signing a Registration Statement. McCarthy stated that he had no interaction with NCCI or Nomura Securities, other than to review Prospectus Supplements and other Offering Documents when Buck sent them to him.

In his role as a director of NAAC and NHELI, McCarthy signed Registration Statements and a resolution of the board of directors allowing each Securitization to go forward. McCarthy contends that given his review of the Offering Documents for the Securitizations, he had no reason to doubt that the documents were materially accurate. But during cross-examination, McCarthy admitted that his review was limited to ensuring that a given deal would not jeopardize the bankruptcy-remote status of the two depositors; he did not review the Prospectus Supplements to verify the accuracy of the representations. Furthermore, he had no knowledge of Nomura's diligence activities in connection with any RMBS issued by NAAC or NHELI.

DISCUSSION

Still remaining in this action are FHFA's claims under Sections 12(a)(2) and 15 of the Securities Act, and parallel provisions of Virginia's and D.C.'s Blue Sky laws. Following a description of the legal standards governing these claims, this Opinion will apply those standards to the facts found above.

I. Legal Standards

A. Law Surrounding RMBS

As has previously been explained in this case:

> The RMBS in this case were issued pursuant to "shelf registrations," which are pre-approved registration statements that allow new securities to be issued upon filing of a prospectus supplement. See 17 C.F.R. § 230.409, .415; [UBS I, 2012 WL 2400263, at *2].
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> . . .
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> Asset-backed securities are subject to an elaborate regulatory regime. See Regulation S-K, 17 C.F.R. § 229.10 et seq.; Regulation AB, 17 C.F.R. § 229.1100 et seq.; [UBS I, 2012 WL 2400263, at *2]. Of particular relevance here, Regulation AB requires detailed disclosures in asset-backed securities' prospectus supplements. Those disclosures include "any originator or group of affiliated originators, apart from the sponsor or its affiliates, that originated, or is expected to originate, 10% or more of the pool assets," and, "[t]o the extent material, a description of the originator's origination program" for "any originator . . . that originated, or is expected to originate, 20% or more of the pool assets." 17 C.F.R. § 229.1110. Also required is a "description of the . . . underwriting criteria used to originate or purchase the pool assets, including, to the extent known, any changes in such criteria and the extent to which such policies and criteria are or could be overridden." Id. § 229.1111(a)(3). In

> addition, it requires a prospectus to state the "cut-off date or similar date for establishing the composition of the asset pool." Id. § 229.1111(a)(5).

Hunter Opinion, --- F. Supp. 3d ---, 2015 WL 568788, at *7-8 & n.19.[167] Offering Documents for an RMBS Securitization are subject to the requirements of the Securities Act.

B. Background and Purpose of the Securities Act

The Securities Act of 1933 "emerged as part of the aftermath of the market crash in 1929." Ernst & Ernst v. Hochfelder, 425 U.S. 185, 194 (1976). After that unprecedented financial catastrophe and at the depth of the Great Depression it brought on, the Securities Act was passed to stop the sorts of abuses and omissions that had been instrumental in inflating the bubble that burst in 1929 -- "to prevent further exploitation of the public by the sale of unsound, fraudulent, and worthless securities through misrepresentation." Randall v. Loftsgaarden, 478 U.S. 647, 659 (1986) (quoting S. Rep. No. 73-47, at 1 (1933)). Congress's remedy was a slate of unprecedented measures designed "to place adequate and true information before the investor." Id. (citation omitted).

Knowledge and care, Congress determined, were the surest path to a properly functioning market. The Securities Act aimed "to provide investors with full disclosure of material

[167] As mentioned above, NAA 2005-AR6 was issued before Regulation AB became effective on January 1, 2006.

information concerning public offerings of securities in commerce, to protect investors against fraud, and, through the imposition of specified civil liabilities, to promote ethical standards of honesty and fair dealing." Hochfelder, 425 U.S. at 195; see also Pinter v. Dahl, 486 U.S. 622, 638 (1988) (Securities Act was intended "to protect investors by requiring publication of material information thought necessary to allow them to make informed investment decisions concerning public offerings of securities in interstate commerce"). It was, therefore, no accident that Congress chose to place a heavy burden on the parties with superior access to, and control over, information about securities: those who offered them.

The legislative history of Section 12(a)(2) in particular emphasizes that major market participants were not expected easily to evade the liability the Act imposed:

> For those whose moral responsibility to the public is particularly heavy, there is a correspondingly heavier legal liability -- the persons signing the registration statement, the underwriters, the directors of the issuer, the accountants, engineers, appraisers, and other professionals preparing and giving authority to the prospectus -- all these are liable to the buyer not only if they cannot prove they did not know of the flaw in the information offered the public but also if they cannot prove the use of due care. This throws upon originators of securities a duty of competence as well as innocence . . . .

Gustafson v. Alloyd Co., 513 U.S. 561, 581 (1995) (quoting H.R. Rep. No. 73-85, at 9 (1933)). Congress observed that this was a

standard that "the history of recent spectacular failures overwhelmingly justifie[d]." H.R. Rep. No. 73-85, at 9. A heavy burden, Congress explained, was an indispensable means of maintaining the integrity of the market:

> The provisions throwing upon the defendant in suits under [Section 12] the burden of proof to exempt himself are indispensable to make the buyer's remedies under these sections practically effective. . . . Unless responsibility is to involve merely paper liability it is necessary to throw the burden of disproving responsibility for reprehensible acts of omission or commission on those who purport to issue statements for the public's reliance. . . . It is a responsibility that no honest banker and no honest business man should seek to avoid or fear. To impose a lesser responsibility would nullify the purposes of this legislation.

Id. at 9-10.

C. Securities Act Section 12(a)(2)

The private rights of action in the Securities Act were "designed to assure compliance with [its] disclosure provisions . . . by imposing a stringent standard of liability on the parties who play a direct role in a registered offering." Litwin v. Blackstone Grp., L.P., 634 F.3d 706, 716 (2d Cir. 2011) (quoting Herman & MacLean v. Huddleston, 459 U.S. 375, 381-82 (1983) (discussing Section 11 of the Securities Act)). Through Sections 11 and 12(a)(2), the Securities Act "provides the purchasers of registered securities with strict liability protection for material misstatements or omissions in registration statements filed with the SEC," In re Lehman Bros.

Mortg.-Backed Sec. Litig., 650 F.3d 167, 175 (2d Cir. 2011), as well as "misstatements or omissions in a prospectus," NECA-IBEW Health & Welfare Fund v. Goldman Sachs & Co., 693 F.3d 145, 156 (2d Cir. 2012).

By its terms, Section 12(a)(2) imposes liability on

> [a]ny person who offers or sells a security . . . by the use of any means or instruments of transportation or communication in interstate commerce or of the mails, by means of a prospectus or oral communication, which includes an untrue statement of a material fact or omits to state a material fact necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading (the purchaser not knowing of such untruth or omission), and who shall not sustain the burden of proof that he did not know, and in the exercise of reasonable care could not have known, of such untruth or omission.

15 U.S.C. § 77l(a)(2). The elements of a claim under Section 12(a)(2) are:

> (1) the defendant is a statutory seller; (2) the sale was effectuated by means of a prospectus or oral communication; and (3) the prospectus or oral communication included an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading.

In re Morgan Stanley Info. Fund Sec. Litig., 592 F.3d 347, 359 (2d Cir. 2010) (citation omitted). FHFA must make out its case by a preponderance of the evidence. See Huddleston, 459 U.S. at 390. "Neither scienter, reliance, nor loss causation is an element of . . . § 12(a)(2) claims . . . ." NECA-IBEW Health &

Welfare Fund, 693 F.3d at 156. It has already been determined that the sales of the seven Certificates at issue here were made "by means of" the Prospectus Supplements effectuating those sales. See FHFA v. Nomura Holding Am., Inc., --- F.Supp.3d ---, 2014 WL 7229446, at *8 (S.D.N.Y. Dec. 18, 2014).

1. Statutory Seller

FHFA seeks to hold the two depositors -- NAAC and NHELI -- and the two underwriters -- Nomura Securities and RBS -- liable as statutory sellers.[168] "An individual is a statutory seller -- and therefore a potential section 12(a)(2) defendant -- if he: (1) passed title, or other interest in the security, to the buyer for value, or (2) successfully solicited the purchase of a security, motivated at least in part by a desire to serve his own financial interests or those of the securities' owner." Morgan, 592 F.3d at 359 (citation omitted).

This Court has already determined that a depositor can constitute a statutory seller:

> SEC Rule 159A . . . provides that "in a primary offering of securities," an issuer is a statutory seller for the purposes of Section 12(a)(2) "regardless of the underwriting method used to sell the issuer's securities." See 17 C.F.R. § 230.159A. Moreover, the Securities Act provides that "with respect to certificates of interest or shares in an unincorporated investment trust not having a board of directors . . . the term 'issuer' means the person or persons performing the acts and assuming the duties of

[168] FHFA brings no claim against an underwriter for NHELI 2007-3. This Securitization was underwritten by Lehman Brothers Inc.

> depositor." 15 U.S.C. § 77b(a)(4). . . . Securities Act Rule 191 . . . provides that "[t]he depositor for the asset-backed securities acting solely in its capacity as depositor to the issuing entity is the 'issuer' for purposes of the asset-backed securities of that issuing entity." 17 C.F.R. § 230.191.

FHFA v. UBS Americas, Inc. ("UBS II"), 858 F. Supp. 2d 306, 333-34 (S.D.N.Y. 2012), aff'd, 712 F.3d 136 (2d Cir. 2013) (citation omitted).

As for underwriters, the Securities Act defines that term as

> any person who has purchased from an issuer with a view to, or offers or sells for an issuer in connection with, the distribution of any security, or participates or has a direct or indirect participation in any such undertaking, or participates or has a participation in the direct or indirect underwriting of any such undertaking.

15 U.S.C. § 77b(a)(11). The parties stipulated that it does not remain to be tried whether Nomura Securities sold the NAA 2005-AR6 Certificate to Fannie Mae, whether Nomura Securities sold the NHELI 2006-FM1 Certificate to Freddie Mac, and whether RBS sold the NHELI 2006-HE3, NHELI 2006-FM2, NHELI 2007-1, and NHELI 2007-2 Certificates to Freddie Mac. This answers the question whether these underwriters were statutory sellers here, as they passed title for value. It was Nomura Securities and RBS that solicited the GSEs' purchase of the Certificates by, among other things, providing them with collateral information and preliminary offering materials in the course of underwriting the

public offerings through which each of the Certificates was sold.

2. Material Misrepresentation

With respect to the third element, "[i]n many cases -- including this one -- two issues are central to claims under section[] . . . 12(a)(2): (1) the existence of either a misstatement or an unlawful omission;[169] and (2) materiality." Morgan, 592 F.3d at 360. FHFA asserts that each Prospectus Supplement contained material misrepresentations concerning (1) compliance with underwriting guidelines, (2) LTV ratios, (3) owner occupancy, and (4) credit ratings.

a. Falsity

"[W]hether a statement is misleading depends on the perspective of a reasonable investor: The inquiry (like the one into materiality) is objective." Omnicare, Inc. v. Laborers Dist. Council Const. Indus. Pension Fund, 135 S. Ct. 1318, 1327 (2015) (citation omitted) (Section 11 claim).[170] The truth or

[169] This Opinion uses the shorthand "falsity" to refer to misrepresentations, whether by misstatement or omission.

[170] "The test for whether a statement is materially misleading under Section 12(a)(2) is identical to that under Section 10(b) and Section 11: whether representations, viewed as a whole, would have misled a reasonable investor." Rombach v. Chang, 355 F.3d 164, 178 n.11 (2d Cir. 2004); see also Litwin, 634 F.3d at 717 n.10 ("[T]he test for materiality is the same when claims are brought pursuant to Sections 11 and 12(a)(2) of the Securities Act.").

falsity of facts or assertions in a Prospectus or Prospectus Supplement is assessed by "read[ing] it as a whole." In re ProShares Trust Sec. Litig., 728 F.3d 96, 103 (2d Cir. 2013) (citation omitted) (Section 11). Courts "consider whether the disclosures and representations, taken together and in context, would . . . misle[a]d a reasonable investor about the nature of the securities." Id. (citation omitted). The

> veracity of a statement or omission is measured not by its literal truth, but by its ability to accurately inform rather than mislead prospective buyers. Statements of literal truth can become, through their context and manner of presentation, devices which mislead investors. Even a statement which is literally true, if susceptible to quite another interpretation by the reasonable investor, may properly be considered a material misrepresentation.

Kleinman v. Elan Corp., plc, 706 F.3d 145, 153 (2d Cir. 2013) (citation omitted) (Section 10(b) claim). "The literal truth of an isolated statement is insufficient; the proper inquiry requires an examination of defendants' representations, taken together and in context. Thus, when an offering participant makes a disclosure about a particular topic, whether voluntary or required, the representation must be complete and accurate." Meyer v. Jinkosolar Holdings Co., 761 F.3d 245, 250-51 (2d Cir. 2014) (citation omitted).

Although Section 12(a)(2) forbids untrue statements of fact, false statements of opinion or belief are also actionable under Section 12(a)(2) in at least two ways. First, "every such

statement explicitly affirms one fact: that the speaker actually holds the stated belief." Omnicare, 135 S. Ct. at 1326. For that reason, statements of opinion can be untrue statements of fact if the speaker does not actually hold the opinion -- if, in other words, the statement falsely describes the speaker's state of mind. Id. The Second Circuit recognized this basis for holding statements of opinion actionable under Section 12(a)(2) in Fait v. Regions Fin. Corp., where it explained that the plaintiff would need to show both that the statement was "objectively false" and "disbelieved." 655 F.3d 105, 110 (2d Cir. 2011). It was based on the Second Circuit's analysis in Fait that the Court, throughout this coordinated litigation, explained that, to satisfy the falsity element with respect to alleged misrepresentations of LTV ratios that use an appraised valuation, FHFA would be required to establish both that the original value derived from an appraisal, and thus the LTV ratio based on that appraisal, was inflated (or objectively false), and that the appraiser did not believe the appraised value to be accurate (in other words, that it was subjectively false).[171] See UBS II, 858 F. Supp. 2d at 326-27.

[171] Less than two months before trial, the Court recapped the history of how falsity with respect to LTV ratios has been litigated in this case. Kilpatrick Opinion, 2015 WL 353929, at *1 n.2.

The Supreme Court issued the Omnicare opinion while trial was ongoing in this action.[172] As reflected above, Omnicare confirmed that a statement of opinion could be actionable if not sincerely held. But Omnicare clarified that there is another way in which a statement of belief or opinion can be actionable under Section 12(a)(2): through its omissions clause. Omnicare, 135 S. Ct. at 1333.

> [A] reasonable investor may, depending on the circumstances, understand an opinion statement to convey facts about how the speaker has formed the opinion -- or, otherwise put, about the speaker's basis for holding that view. And if the real facts are otherwise, but not provided, the opinion statement will mislead its audience. . . . Thus, if a [Prospectus Supplement] omits material facts about the issuer's inquiry into or knowledge concerning a statement of opinion, and if those facts conflict with what a reasonable investor would take from the statement itself, then § [12(a)(2)]'s omissions clause creates liability.

Id. at 1328-29.

> [W]hether an omission makes an expression of opinion misleading always depends on context. [Offering Documents] as a class are formal documents, filed with the SEC as a legal prerequisite for selling securities to the public. Investors do not, and are right not to, expect opinions contained in those statements to reflect baseless, off-the-cuff judgments, of the kind that an individual might communicate in daily life. At the same time, an investor reads each statement within such a document, whether of fact or of opinion, in light of all its surrounding text, including hedges, disclaimers, and apparently conflicting

[172] The parties were given an opportunity to address in writing the impact of Omnicare on this case. None chose to make such a submission.

> information. And the investor takes into account the customs and practices of the relevant industry. So an omission that renders misleading a statement of opinion when viewed in a vacuum may not do so once that statement is considered, as is appropriate, in a broader frame. The reasonable investor understands a statement of opinion in its full context, and § [12(a)(2)] creates liability only for the omission of material facts that cannot be squared with such a fair reading.

Id. at 1330.

b. Materiality

FHFA bore the burden of proving that any misrepresentations in the Offering Documents were material. "For a misstatement or omission to qualify as material, there must be a substantial likelihood that a complete and truthful disclosure would have been viewed by a reasonable investor as having significantly altered the total mix of information made available." N.J. Carpenters Health Fund v. Royal Bank of Scotland Grp., PLC, 709 F.3d 109, 126 (2d Cir. 2013) (citation omitted). "[T]he total mix of information relevant to the question of materiality can include publicly available information." Id. at 127. "The test for whether a statement is materially misleading under Section 12(a)(2) is . . . whether representations, viewed as a whole, would have misled a reasonable investor." Rombach, 355 F.3d at 178 n.11.

"Materiality is determined in light of the circumstances existing at the time the alleged misstatement occurred." Ganino

v. Citizens Utils. Co., 228 F.3d 154, 165 (2d Cir. 2000). "[A] material fact need not be outcome-determinative; that is, it need not be important enough that it would have caused the reasonable investor to change his vote. Rather, the information need only be important enough that it would have assumed actual significance in the deliberations of the reasonable [investor]." Folger Adam Co. v. PMI Indus., Inc., 938 F.2d 1529, 1533 (2d Cir. 1991) (citation omitted). "Materiality is an inherently fact-specific finding that is satisfied when a plaintiff alleges a statement or omission that a reasonable investor would have considered significant in making investment decisions." Litwin, 634 F.3d at 716-17 (citation omitted). "[I]n the context of this case, materiality is an objective standard, determined with reference to a reasonable PLS trader -- not a reasonable GSE, or a reasonable PLS trader with plaintiff's idiosyncratic regulatory restrictions and purchasing goals." FHFA v. Nomura Holding Am., Inc. ("Single-Family Activities Opinion"), No. 11cv6201 (DLC), 2015 WL 685153, at *6 (S.D.N.Y. Feb. 18, 2015) (citation omitted).

The SEC has explained that "[a]sset-backed securities and ABS issuers differ from corporate securities and operating companies. In offering ABS, there is generally no business or management to describe. Instead, information about the transaction structure and the characteristics and quality of the

asset pool . . . is often what is most important to investors." Asset-Backed Sec., Securities Act Release No. 8518, 84 SEC Docket 1624 (Dec. 22, 2004).

"[A] court must consider both quantitative and qualitative factors in assessing an item's materiality, and that consideration should be undertaken in an integrative manner." Litwin, 634 F.3d at 717 (citation omitted). The Second Circuit

> ha[s] consistently rejected a formulaic approach to assessing the materiality of an alleged misrepresentation . . . [and has] cited with approval SEC Staff Accounting Bulletin No. 99, which provides . . . [that] the use of a percentage as a numerical threshold such as 5%, may provide the basis for a preliminary assumption of materiality, but a bright line percentage cannot appropriately be used as a substitute for a full analysis of all relevant considerations. Among useful qualitative factors are (1) whether the misstatement concerns a segment or other portion of the registrant's business that has been identified as playing a significant role in the registrant's operations or profitability, and (2) whether management expects that the misstatement will result in a significant market reaction.

Hutchison v. Deutsche Bank Sec. Inc., 647 F.3d 479, 485 (2d Cir. 2011) (citation omitted).

In this case, each of the Prospectus Supplements at issue states that no substantial changes to any SLG are expected after the Cut-off Date and sets a 5% change as the relevant threshold.[173] Five of the Prospectus Supplements also state that

[173] Even the "outlier" Prospectus Supplement for NAA 2005-AR6 provides that "[t]he characteristics of the mortgage loans included in a trust fund will not vary by more than five percent

notice will be given if any material characteristic meaningfully changes, providing:

> If, as of the Closing Date, any material pool characteristic differs by 5% or more from the description in this prospectus supplement, revised disclosure will be provided either in a supplement or in a Current Report on Form 8-K.

The 5% figure comes directly from SEC guidance. Pursuant to Regulation AB, Item 6.05 to SEC Form 8-K requires disclosures "if any material pool characteristic of the actual asset pool at the time of issuance of the asset-backed securities differs by 5% or more . . . from the description of the asset pool in the prospectus." Asset-Backed Sec., Securities Act Release No. 8518, 84 SEC Docket 1624. And in 1999, long before Regulation AB was promulgated, SEC Staff Accounting Bulletin No. 99, cited by the Second Circuit in Hutchison, explained that "[o]ne rule of thumb . . . suggests that the misstatement or omission of an item that falls under a 5% threshold is not material in the absence of particularly egregious circumstances." 64 Fed. Reg. 45150-01 (Aug. 12, 1999) (citation omitted).

Regulation AB further provides that material pool characteristics for RMBS include LTV ratios and occupancy status, and they similarly require detailed disclosures

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(by total principal balance as of the Cut-off Date) from the characteristics of the mortgage loans that are described in the prospectus supplement."

regarding deviations from underwriting guidelines. See 17 C.F.R. § 229.1111(a)(8), (b)(7)(iii)-(iv). As the Second Circuit has explained in a different context, that information is required to be disclosed under the securities laws does not render that information material per se, but it is evidence of materiality. United States v. Bilzerian, 926 F.2d 1285, 1298 (2d Cir. 1991).

3. Damages

Under Section 12(a)(2), once a prima facie case is made out, the plaintiff is entitled "to recover the consideration paid for [the] security with interest thereon, less the amount of any income received thereon, upon the tender of such security, or for damages if he no longer owns the security." 15 U.S.C. § 77l(a)(2). In other words, where a plaintiff still owns the security, its remedy is rescission. Commercial Union Assur. Co., PLC v. Milken, 17 F.3d 608, 615 (2d Cir. 1994) (construing identical language in predecessor Section 12(2)). Under the rescissory measure of damages, FHFA would be entitled to a return of the consideration paid for the Certificates, plus prejudgment interest, less any income received on the Certificates. Id. The amounts of the consideration paid and the income received on the Certificates are not in dispute. See FHFA v. Nomura Holding Am., Inc. ("Riddiough Opinion"), No. 11cv6201 (DLC), 2015 WL 640875, at *1 (S.D.N.Y. Feb. 16, 2015).

The parties dispute the rate of prejudgment interest that should apply. In a lawsuit to enforce a federal right, the rate of prejudgment interest rests in this Court's discretion, as guided by "(i) the need to fully compensate the wronged party for actual damages suffered, (ii) considerations of fairness and the relative equities of the award, (iii) the remedial purpose of the statute involved, and/or (iv) such other general principles as are deemed relevant by the court." Gierlinger v. Gleason, 160 F.3d 858, 873 (2d Cir. 1998). The parties also dispute the date of tender, as discussed below.

II. Falsity

FHFA alleges that four sets of representations in each of the seven Prospectus Supplements were false. They are representations regarding the origination and underwriting of the loans within the SLGs backing the Certificates; LTV ratios and appraisals, including compliance with USPAP; occupancy status; and the credit ratings of the Certificates. FHFA has proven that all four sets of representations in each of the seven Prospectus Supplements were false.

A. Underwritten in Accordance with Guidelines

As described above, each of the Prospectus Supplements includes a representation that "[t]he Mortgage Loans . . . were originated generally in accordance" with originators' guidelines, or, in the case of NHELI 2006-FM1, the equivalent of

this language in reference to the guidelines of the Securitization's sole originator. These representations were false.

At rates ranging from 45% to 59%, the loans within the SLGs had a substantially increased credit risk associated with a failure in the origination process. This number of loans, at a minimum, was not underwritten in compliance with their originators' guidelines and there were no compensating factors identified by the originator or the experts at trial to excuse that failure. This rate of issuance of defective loans reflects a wholesale abandonment by originators of their underwriting guidelines. FHFA showed that originators not only failed to originate loans generally in compliance with their own guidelines, but that they also more generally failed both to assess the ability of borrowers to meet their monthly mortgage obligations and to assure adequacy of the collateral for the mortgage, despite the representations in the Prospectus Supplements that originators had performed these most basic functions of origination.

The due diligence program run by Nomura, and, in the case of two of the Securitizations by RBS, were entirely inadequate to protect against false statements in the Offering Documents. But even with their many serious limitations, those programs provide striking confirmation of the deeply flawed nature of the

originators' underwriting programs and the falsity of defendants' descriptions of the origination process. The serious limitations in defendants' due diligence programs were legion. Among other things, Nomura only conducted pre-acquisition due diligence, and did not do so in a manner that permitted it to extrapolate results to the SLGs backing any securitization. Nomura repeatedly made decisions when conducting due diligence to save money and satisfy sellers of mortgage loans. As a consequence, it failed to subject most loans it purchased to genuine credit or valuation due diligence, and waived in far too many loans that were evaluated and found seriously wanting. Nomura had no system for analyzing the impact of its pre-acquisition due diligence program on the loans it later selected, often from many different originators, for inclusion within an SLG and made no effort to conduct such an analysis.

Despite the amount of due diligence not done, there is significant evidence from its due diligence program that the loans Nomura purchased and securitized were not as described in their Prospectus Supplements. The database created for this litigation determined that less than 40% of the loans within the SLGs for the Certificates were subjected to credit due diligence, and 9% of the loans subject to diligence either had a final grade of EV3 or had been waived in by Nomura despite being

assigned an EV3 grade by the due diligence vendor. Just over 40% of the loans within the SLGs for the Certificates were subjected to valuation due diligence, and of those that did receive valuation due diligence many showed evidence that the origination appraisals were unreliable. Both Nomura and RBS conducted after-the-fact fraud inquiries that pointed to the existence of fraud and serious deficiencies in originators' underwriting practices.

Today, defendants do not defend the underwriting practices of their originators. They did not seek at trial to show that the loans within the SLGs were actually underwritten in compliance with their originators' guidelines. At summation, defense counsel essentially argued that everyone understood back in 2005 to 2007 that the loans were lousy and had not been properly underwritten.

Given the exceedingly poor quality of the SLGs' loans, it is perhaps not surprising that defendants' expert Forester neither properly re-underwrote the loans nor met the FHFA re-underwriting findings head on. Instead, he unreasonably cabined his review of the findings of FHFA's expert. Even then, however, he admitted that, for roughly 5.5% of the loans, there was a "[p]otential significant defect" and that "it cannot be confirmed that a reasonable underwriter at the time of origination could have found that this loan satisfied the

applicable guidelines." After examining each of Forester's specific responses to Hunter's findings, the Court confirmed that FHFA had indeed succeeded in proving the wholesale abandonment of underwriting guidelines by originators.

In opposing a finding of falsity, defendants largely rely on their proposed reading of the Prospectus Supplement language. Each of their arguments is addressed in turn.

1. General Adherence to Process

Defendants argue that the Supplements' representations regarding compliance with underwriting guidelines refer to originators' underwriting processes and describe only general but not perfect adherence to those processes. Defendants emphasize that underwriting is a matter of judgment and the Supplements spoke of exceptions to and deviations from underwriting guidelines.

Defendants are correct that many of the originators' guidelines allowed underwriters to make exceptions to guidelines if the exception could be justified by compensating factors and was documented. They are also correct that underwriting entails the exercise of judgment, at least within the parameters permitted by an originator's guidelines. But Hunter's review of the Sample loans entailed just that nuanced view of the underwriting process. He accepted any indication in a loan file that an underwriter had exercised such judgment, conducted his

own search for compensating factors, and considered each of the instances in which Forester identified another possible compensating factor to excuse a lack of compliance with guidelines. This Court's review of the Dashboard Reports was similarly alert to any compensating factors or grounds for exceptions identified by Forester and his teams. At the end of the day, the defect rates recited above cannot be explained away through the play-in-the-joints of the underwriting process.

2. Whose Guidelines?

Defendants contend that no analysis may be done of the extent to which the loans within an SLG were underwritten in compliance with originators' guidelines for five of the seven Securitizations since, in making representations about compliance with underwriting guidelines, the Supplements were referring only to loans from those originators that contributed over 20% of the loans to the SLG and whose guidelines were described in some detail in the Supplements. This argument has already been rejected once, and it is rejected again. Hunter Opinion, --- F. Supp. 3d ---, 2015 WL 568788, at *11-13.

If this were a genuine argument, one would have expected it to be raised at the outset of this litigation. But it was not. Not by Nomura or RBS, and not by any other defendant in these sixteen coordinated actions. Instead, all the parties in this coordinated litigation expended years of effort and vast sums of

money to collect and analyze the loan files and underwriting guidelines for every Sample loan to assess the extent to which each loan had been originated in compliance with its originators' guidelines. Thus, defendants are judicially estopped from making this argument, which was raised on November 25, 2014. Id. at *12-13.[174] But the argument is also without merit.

As described above, Regulation AB required, "[t]o the extent material, a description of the originator's origination program" for "any originator . . . that originated, or is expected to originate, 20% or more of the pool assets." 17 C.F.R. § 229.1110(b)(2). This latter regulation governed six of the seven Supplements, and each of them did contain a detailed description of one or more originators' guidelines. A single originator, Fremont, contributed the loans to NHELI 2006-FM1 and NHELI 2006-FM2, and defendants concede that the statement about compliance with an originator's guidelines may be accurately measured for those two Securitizations. With respect to every other originator in the other five Securitizations, however,

[174] As before, defendants point to Forester's Expert Report of August 14, 2014, in which he notes that Hunter did not test for compliance with the language of the "standards." While it may have inspired defendants' November 25 legal position, Forester's half-page observation -- presented as fact, not argument -- did not "raise the issue."

defendants contend that the Supplements refer only to general adherence to the underwriting process as it is described in broad strokes in the Supplements, and do not represent that the loans of the smaller contributing originators were underwritten in compliance with their originators' guidelines.

The Court rejected this argument in an opinion of February 11, which is reproduced in pertinent part below.

> The representations in the Prospectus Supplements regarding compliance with underwriting "criteria" and "standards" refer explicitly to a process that occurred prior to the securitization of the loans. . . . The Supplements give an overview of that origination process. They describe the presentation of information by a borrower "to the original lender" and determinations "made by the original lender" about the borrower's ability to make the required loan payments, among other things. They refer as well to the appraisal obtained by the Originator.
>
> As significantly, the only standards and criteria to which the Supplements could be referring are those that were in the hands of the original lenders. After all, the Originators would not even have had access to any language contained in the Supplements since the Originators would not have known into which, if any, Securitization the loan might be placed and the Supplement for the Securitization could not have been available to the Originator at the time of loan origination.
>
> Finally, the general descriptive language about standards and criteria was included in the Supplements to comply with regulatory requirements, see 17 C.F.R. § 229.1111(a)(3), but could hardly have been expected by anyone to give, by itself, comfort to investors that the loans in the SLGs had passed scrutiny. The language in the Supplements regarding the criteria is simply too vague to provide a complete description of the origination process. It omits the specific benchmarks and criteria that are part of the customary

> underwriting process at origination. In essence, these passages are a statement by the defendants that they have reviewed the Originators' processes and guidelines and confirmed that the loans within the Securitization were all originated in compliance with their Originators' standards and processes, and that those standards and processes all contained the central elements summarized in the Supplement.

Hunter Opinion, --- F. Supp. 3d ---, 2015 WL 568788, at *11-12.

Responding to the Court's reasoning that the Supplements' general description of the origination process is too vague to be complete, defendants now argue it would be "much more vague to disclose merely that loans complied generally with the unknown guidelines of unknown originators." There is no reason to think so. The disclosure is a summary prepared by Nomura of the common characteristics of the origination process employed by various originators. It provides assurance that Nomura investigated the guidelines and practices of all originators, whether named or not, and it vouches for the fact that each of the loans was originated generally in compliance with those originators' guidelines. If Nomura had not made such an investigation, it could not honestly represent that the underlying loans "were originated" (even "generally") in accordance with any criteria. Read in the context of the entire Prospectus Supplement, it also vouches for the reliability of the data contained in the Collateral Tables, which was acquired by originators during their underwriting of a loan.

3. The Meaning of "Generally"

Defendants make much of the fact that the representations in the Supplements only attest to "general" compliance -- that loans were "originated generally in accordance" with the relevant guidelines. But the word "generally" must be understood in its context. As this Court has explained,

> Defendants ignore the fact that the Offering Documents represented that "[a]ll of the mortgage loans were originated . . . generally in accordance with [applicable] underwriting guidelines." (Emphasis added.) That all of the loans "generally" met guidelines indicated that certain immaterial exceptions might exist, not that a material number of the loans might substantially deviate from the guidelines, without compensating factors.

Due Diligence Opinion, --- F. Supp. 3d ---, 2014 WL 7232443, at *39.

This plain and contextually appropriate reading of the term "generally" finds confirmation elsewhere. At the time these Supplements were issued, there was also a market for "scratch-and-dent" loans. The Offering Documents for the securitizations of such loans explained that a percentage of loans had not been originated in accordance with their originators' guidelines. This kind of direct disclosure of defective underwriting was required if defendants wished to sell defective loans.

Second, the use of the word "generally" can't bear the weight defendants wish it to bear in this case. It could not and did not convey that roughly half the loans had substantially

increased credit risk because they were not originated in compliance with their originators' guidelines, even after one accounts for exceptions to guidelines justified by compensating factors. Defendants' other argument -- that the word "generally" makes a statement that plainly reads as an assertion of fact an "opinion" -- does not alter its plain meaning, especially given that, as discussed below, Nomura indicated its opinions and beliefs explicitly when it chose to state them.[175] The representation that loans were originated generally in accordance with guidelines is a "classic statement of fact." FHFA v. SG Americas, Inc., No. 11cv6203 (DLC), 2012 WL 5931878, at *2 (S.D.N.Y. Nov. 27, 2012).

4. Context

In summation, defense counsel argued that when the Prospectus Supplements are read "holistically" and "in context," their representations about the extent to which loans were originated in compliance with originators' underwriting guidelines were "true and not misleading." They are wrong.

Defense counsel pointed to two disclosures in the Supplements in particular. Most of the Supplements warned that the underwriting standards for the loans were "generally less

[175] Even if the word "generally" did transform statements of fact into opinions -- and it did not -- what is said below in response to defendants' other opinion-based arguments applies to reject this one as well.

stringent than the underwriting standards established by Fannie Mae or Freddie Mac;"[176] and in the case of the two Fremont Securitizations and NHELI 2007-3, they warned that "a substantial portion" of the mortgage loans may represent exceptions to guidelines due to the existence of compensating factors. Counsel also referred to evidence that subprime and Alt-A mortgages were underwritten to relaxed standards during the period 2005 to 2007.

None of these disclosures nor the existence of relaxed underwriting standards for subprime loans constitute notice, however, that originators of subprime loans had failed to adhere to their underwriting guidelines. They refer to something else.

The subprime market was booming in 2005 to 2006 because originators of subprime loans had adopted relaxed standards that allowed borrowers with low credit ratings and few assets to obtain mortgages. As the Supplements say, these standards were less rigorous than those adopted by the GSEs, but they were standards nonetheless. And some of the features of those new, relaxed standards were quantified and disclosed. For instance, the Collateral Tables listed the number of loans whose borrowers had certain FICO scores and the number of full documentation, partial documentation, or no documentation loans.

[176] This language or its equivalent appeared in six Supplements.

But the Supplements also assured investors that all of the loans within the SLGs were underwritten generally in compliance with their originators' standards. They did not suggest that originators had ignored their own standards. Similarly, while Supplements included notice that exceptions to the standards may have been made for some loans, or even many loans, they explained that exceptions were given only in the presence of compensating factors and after scrutiny of the individual loan. And to provide protection to investors purchasing Certificates backed by these less credit-worthy loans, securitizers structured their offerings with credit enhancement features to provide AAA securities to risk-adverse investors. In sum, notice that loans were now being extended to borrowers who had a less-than-perfect credit history through the adoption of relaxed underwriting guidelines was not notice that originators would ignore even those guidelines.

5. ResMAE Bankruptcy Advisory

Defendants stress that one of the Securitizations provided a pointed warning to investors. The Prospectus Supplement for the last Securitization at issue, NHELI 2007-3, states that ResMAE had "filed for bankruptcy protection under the United States Bankruptcy Code," and therefore

> may have experienced personnel changes that adversely affected its ability to originate mortgage loans in accordance with its customary standards . . . [or]

> experienced reduced management oversight or controls with respect to its underwriting standards. Accordingly, the rate of delinquencies and defaults on these Mortgage Loans may be higher than would otherwise be the case.

(Emphasis added.) ResMAE contributed 77% of the loans to the SLG at issue here.

Later in the Supplement, during the discussion of underwriting standards, there is the typical declaration that the mortgage loans in the SLGs were "generally originated in accordance" with originators' underwriting criteria. There is also a four-and-a-half-page description of the underwriting guidelines "used by ResMAE." It included representations like the following: "The underwriting staff fully reviews each loan to determine whether ResMAE's guidelines for income, assets, employment and collateral are met"; "All of the mortgage loans were underwritten by ResMAE's underwriters having the appropriate signature authority"; and "ResMAE's underwriters verify the income of each applicant under the Full Documentation and Limited Documentation programs."

Hunter found that 66.67% of the loans for this Securitization's SLG had substantially increased credit risk associated with a failure to adhere to underwriting guidelines. The Court found that, conservatively, this was true for 45% of the loans. These percentages are too large to find that they were adequately disclosed by the warning that ResMAE "may" have

been affected in its origination of loans by its bankruptcy, particularly when that warning is read in context.

6. Representations of "Belief"

In summation, defendants advanced an argument previously dismissed by the Court but newly grounded in the Supreme Court's recent Omnicare decision. 135 S. Ct. 1318. Because two Supplements state that Fremont's guidelines were "believed" by the depositor to have been applied "with some variation, by Fremont," defendants contend that FHFA must prove for those two Securitizations that that statement was not only objectively false but also subjectively false.[177]

The language on which defendants focus is in the second of the following two sentences. The first paragraph in the Supplement section addressed to Fremont underwriting standards reads as follows:

> All of the mortgage loans were originated or acquired by Fremont, generally in accordance with the underwriting criteria described in this section. The following is a summary of the underwriting guidelines believed by the Depositor to have been applied, with some variation, by Fremont. This summary does not purport to be a complete description of the underwriting guidelines of Fremont.

Following this paragraph, there are over four pages describing Fremont's underwriting criteria.

[177] The two Fremont-backed Securitizations are NHELI 2006-FM1 and NHELI 2006-FM2.

Read in context, the use of the word "believed" does not transform defendants' representation regarding Fremont's compliance with its underwriting guidelines into a statement of opinion. The first sentence is a straightforward statement of fact. The reference to defendants' belief in the second sentence is little more than a statement of assurance by defendants that they are correctly summarizing Fremont's guidelines -- "little more than a reference to the depositor's exercise of its due diligence function and a further endorsement of the quality of the offering." SG Americas, 2012 WL 5931878, at *2. These "statements of belief about a matter of objective fact . . . [do] not impose upon the plaintiff the duty to [prove] that the defendants did not hold their expressed belief." Id. at *3.

In any event, Nomura may be held liable under the Securities Act and Omnicare for the statement in the second sentence without any showing regarding its scienter. 135 S. Ct. 1318. Nomura's statements of belief implied that defendants knew "facts sufficient to justify" forming the opinion they expressed. Id. at 1330 (citation omitted). The record is replete with evidence that it "lacked the basis for making those statements that a reasonable investor would expect." Id. at 1333. Indeed, defendants were aware of information contradicting the representations in the Supplements: RBS, for

example, became aware of a "big spike" in repurchasing activity for Fremont loans, suggesting Fremont was originating a substantial number of defective loans, well before NHELI 2006-FM2 was issued.[178] Soon afterward, RBS would refer to Fremont as "FraudMont."

7. Due Diligence Confirmation

Finally, defendants contend that the results of Nomura's preacquisition due diligence review are more consistent with Forester's conclusion that only 5.5% of the Sample loans had "[p]otential serious defect[s]," than with Hunter's far larger number. They are wrong.

Defendants are apparently referring to their expert's calculation that, of the loans within the SLGs that had been subjected to pre-acquisition credit and compliance due diligence, 6.6% were rated EV3. But, as explained above, Nomura's due diligence program was seriously flawed. Among other things, it failed to scrutinize most loans, and results from any review it did perform cannot be fairly extrapolated to an SLG population. In addition to finding credit defects, other due diligence found serious valuation defects. Thus, this

[178] As explained above, approximately 63% of the loans in each relevant Fremont SLG received no actual valuation due diligence; of those that did receive due diligence, 49% and 36% of the AVM values outside of tolerance had no follow-up BPOs conducted, and ultimately 8 and 34 loans, respectively, were securitized despite having final LTV ratios of over 100%.

single-digit percentage of credit defects cannot independently confirm the accuracy of Forester's numbers. The Nomura due diligence program was not designed to, and did not, ensure that the Prospectus Supplements accurately described the extent to which an SLG's loans were underwritten in accordance with originators' guidelines.

B. LTV Ratios and Appraisals

Each Prospectus Supplement included Collateral Tables reporting the average LTV ratios and percentage of LTV ratios in certain ranges for each SLG. To show that the appraisals -- and thus the LTV ratios -- were false, FHFA was required to show both objective and subjective falsity. FHFA did so.

For at least 184 of the loans, FHFA established both that the appraisal value was false and the appraisers rendering those appraisal opinions did not believe that the values they reported were the true values of the properties. The proportion of such loans per SLG ranged from 18% to 36%. This had important consequences for the accuracy of the LTV ratio Collateral Tables. For example, the Prospectus Supplements all represented that there were no loans in the SLGs with LTV ratios of over 100; the actual figures ranged from 9.3% to 20.5%. Every LTV ratio Collateral Table contained statistics that were false.

FHFA has proved that LTV ratios were false in the sense of containing opinion statements about property values that were

both objectively wrong and subjectively disbelieved. In addition, the record supports a finding of falsity based on the omission doctrine described in Omnicare, 135 S. Ct. 1318. USPAP requires an appraiser to conduct an investigation and to create a record of that investigation in support of the opinion of value reflected in the appraisal. Each Supplement assured investors that "all appraisals" of the mortgaged properties supporting the loans "conform to [USPAP]." Kilpatrick's CAM demonstrated that this, too, was false; because the CAM was firmly grounded in USPAP requirements, a failing grade on the CAM also indicated a failure to conform to USPAP. Accordingly, whether analyzed as a false statement of belief or as an actionable omission, FHFA has carried its burden of showing that the representations concerning LTV ratios were false.

In defending against this claim, defendants did not choose to conduct any study of the original appraisals, either through an appraisal review or otherwise, to confirm their accuracy. Instead, defendants principally relied on their multi-faceted attacks on Kilpatrick's methodology. Those have been addressed above. In addition, they offered two other kinds of evidence that they contend undermine Kilpatrick's conclusion. They called appraisers who performed two of the 184 non-credible appraisals to testify at trial. For the reasons explained above, their testimony failed to suggest that their appraisal

values were either reliable or reflected honestly held beliefs, and failed to undermine Kilpatrick's work or the variety of evidence that confirmed his conclusions. Finally, defendants point to the valuation due diligence that they performed and the text of each Prospectus. It is to those arguments that this Opinion now turns.

1. BPO Statistics

Defendants contend that only 162 loans, or roughly 1% out of the 15,806 loans in the SLGs, were found during their due diligence review "to be outside the BPO tolerance thresholds." They assert that this is strong evidence that original appraisals were "well-supported" value estimates.

There are several problems with defendants' calculation. First, they did not subject 15,806 loans to due diligence. As explained above, roughly 57% of the loans in the SLGs had no real valuation due diligence performed. Therefore, it is not appropriate to claim that only 162 out of over 15,000 loans were out of tolerance. Nor does the figure 162 reflect the total universe of out-of-tolerance appraisals discovered during Nomura's due diligence review. Many loans that received an out-of-tolerance AVM value were never sent for a BPO review. When the LTV ratios are recalculated for those loans with out-of-tolerance AVM and BPO numbers, taken together, the story is a very different one than that suggested by defendants. Taking

the AVM values and BPO values obtained by Nomura from its vendors, and using those values to recalculate LTV ratios, substantially more than 162 loans -- 242 -- in the SLGs had LTV ratios of over 100%. Nor does the number 162 take into account the 962 loans in the SLGs whose AVM values were outside tolerance thresholds yet had no BPO done at all. And, of course, because of the way Nomura conducted its due diligence, there is no reliable way to extrapolate any of the results from its due diligence program to the entire SLG population. As explained above, the results obtained in Nomura's due diligence program strongly confirm Kilpatrick's conclusions.

2. Text of the Offering Documents

Defendants appeared to argue in an opening statement that FHFA cannot use any evidence, except perhaps an admission of fraud from the original appraiser, to prove that the reported LTV ratios were false. For this argument, they rely of the following formulation in the Prospectuses. Each Prospectus explained that, for purposes of the Prospectus and Prospectus Supplement, "[t]he 'Value' of a Mortgaged Property . . . is generally the lesser of (a) the appraised value determined in an appraisal obtained by the originator at origination of that loan and (b) the sales price for that property." (Emphasis added.) Defendants argue that this language forecloses any independent assessment of the appraisals underlying the loans -- and

therefore, by implication, that the LTV ratios reported in the Supplements cannot be false. Not so.

Section 12(a)(2) imposes strict liability for statements that are materially false. The relevant question is whether the appraisals, and the LTV ratios upon which they were built, were false or not; the fact that FHFA identified with precision which appraisal values it used to construct the LTV ratios cannot and does not inoculate defendants from liability for reproducing false information in the Prospectus Supplements.

C. Owner Occupancy Collateral Tables

FHFA has also claimed that defendants made false statements about the number of mortgage loans issued to borrowers for properties they were occupying. The Collateral Tables for each Prospectus Supplement listed the percentage of loans within an SLG for owner-occupied properties, as well as for second homes and investment properties. These statistics were provided as of the Cut-off Date for the Supplement. Owner-Occupancy Opinion, 2015 WL 394072, at *3-4.

Conservatively, FHFA has shown that the owner-occupancy figures were false in each Supplement. The false statements affected from 1% to 3% of the loans within each SLG.[179] Any

[179] Using the Cut-off Date, Hunter calculated that the percentages ranged from 1.59% to 6.59%.

challenges that defendants have made to this finding have already been addressed.

D. Credit Ratings

Finally, FHFA alleges the falsity of "representations in the Offering Materials that the reported credit rating related to the actual loan collateral for the securitization." Merrill Lynch, 903 F. Supp. 2d at 276 n.2.[180] Each Supplement represented that "[t]he ratings of each class of Offered Certificates will depend primarily on an assessment by the rating agencies of the related Mortgage Loans . . . and the subordination afforded by certain classes of certificates." Each Supplement also represented that credit agencies had rated the Certificates sold to the GSEs as AAA or its equivalent.

It is undisputed that in assigning ratings to the Certificates, the credit rating agencies relied on the data contained in the loan tapes that Nomura provided to them. Those loan tapes contained data stored on Nomura's LMS system. Putting aside transcription errors and the addition of servicing information, the LMS data was the data provided by the loans' originators, including FICO scores, DTI ratios, LTV ratios, and owner-occupancy status. FHFA has shown that that data did not

[180] Defendants' trial memorandum of law discusses at length a legal standard for assessing the falsity of credit ratings that was rejected in Merrill Lynch, 903 F. Supp. 2d at 276 n.6.

accurately reflect those characteristics of the loans within the SLGs.

Given the enormity of the misdescriptions shown, defendants' representation that the ratings "will depend primarily on an assessment . . . of the related Mortgage Loans" is false. The rating agencies could not, and did not, assign ratings to the mortgage loans Nomura was securitizing because the data provided by Nomura did not accurately describe those loans.

E. Excluded Evidence

On April 1, while trial was ongoing, defendants submitted, purportedly pursuant to Fed. R. Evid. 103, what is styled an "Offer of Proof with Respect to Excluded Evidence." The document purports "to place in the record documents and testimony with respect to [certain] categories of evidence . . . that were excluded by rulings of the Court before and during trial, in the event that the substance of this excluded evidence was not clear from the context of the rulings." Four categories of evidence are listed, two of which defendants argue were probative of the truth of their representations in the Prospectus Supplements: Nomura's retention of residual interests in the seven Securitizations and evidence of the GSEs' own due

diligence practices.[181] This evidence was properly excluded pursuant to Fed. R. Evid. 401 and 403 as having little to no bearing on the issue of falsity, and because its limited probative value was substantially outweighed by its tendency to confuse and mislead, to waste the Court's and the parties' resources, and to create unfair prejudice.

1. Retention of Residuals

Defendants sought to introduce evidence that Nomura retained a residual interest in the lowest subordinate tranche of each Securitization and that it lost money as a result. This evidence, they contended, attests to Nomura's stake in the Securitizations, its confidence in its due diligence process, and its motivation to perform adequate due diligence.

Having granted summary judgment against defendants on their affirmative defense of due diligence, see Due Diligence Opinion, --- F. Supp. 3d ---, 2014 WL 7232443, at *40, the Court excluded evidence of Nomura's motivation to create an adequate due diligence program.[182] The only issue at trial to which Nomura's due diligence remained relevant was the issue of falsity.

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[181] The other two categories, which are discussed below, are Housing Goals and GSE selection of loans in the Securitizations, and testimony from Niculescu and Cook.

[182] The Court reserved the right to reopen the trial record for admission of this evidence and further argument by counsel in the event that the Court were willing to impose the most punitive interest rate sought by FHFA.

Nomura and FHFA argued that the due diligence that Nomura performed, and the results it obtained from performing that due diligence, made it more or less likely that the information contained in the Prospectus Supplements was accurate and complete. As a result, evidence of the due diligence that Nomura and RBS performed was received at trial. Nomura's motivations in creating and running its due diligence program are of such minimal relevance to the issue of falsity, however, that its admission was substantially outweighed by the concerns expressed in Rule 403 and it was excluded.[183]

2. GSEs' Single-Family Due Diligence

Defendants also sought to offer evidence of Fannie Mae and Freddie Mac's due diligence processes performed in the part of their businesses in which they purchased whole loans. As expressed in Nomura's Offer of Proof, defendants sought to present evidence of the GSEs' due diligence and the findings from that program, including the exceptions they made to deviations from originators' underwriting guidelines, the GSEs' disclosures in their own securitizations, and the GSEs' communications with and evaluations of originators. With this

[183] In any event, the Court previously held that Nomura's residual interest, a "temporary position in a highly risky investment," could say little to nothing about the quality of their due diligence. See Due Diligence Opinion, --- F. Supp. 3d ---, 2014 WL 7232443, at *33.

evidence, defendants say, they would have shown that the GSEs employed due diligence processes similar to those employed by Nomura, that the GSEs regularly "waived in" loans graded 3 by their due diligence vendors, and that the GSEs' disclosures in their Offering Documents for securitizations were similar to those made by Nomura.

For many reasons, this evidence was largely excluded at trial. See FHFA v. Nomura Holding Am., Inc. ("Single-Family Due Diligence Opinion"), No. 11cv6201 (DLC), 2014 WL 7234593, at *4 (S.D.N.Y. Dec. 18, 2014); Single-Family Activities Opinion, 2015 WL 685153, at *4. It is useful to repeat at least a few of the reasons for excluding that evidence here.

Defendants were never able to explain adequately why this evidence of what the GSEs did or did not do in their own businesses was relevant to the issues being tried. If a due diligence defense remained to be tried, and defendants believed that evidence of an industry standard in performing due diligence would be helpful to them, then the obvious comparators and standard setters would be the other defendants in this coordinated litigation who sold far larger quantities of PLS than did Nomura. But defendants' expert took the position that there was no industry standard for conducting due diligence, undercutting any reason to offer any other institution's

practices. See Due Diligence Opinion, --- F. Supp. 3d --- 2014 WL 7232443, at *39.

Second, for many reasons, evidence of the GSEs' due diligence practices and their disclosures in their own Offering Documents would have been highly prejudicial, wasteful, and misleading. The GSEs bought different loans, under different standards, and securitized different loans through an instrument with different risks and guarantees. See Single-Family Due Diligence Opinion, 2014 WL 7234593, at *3-5. Nor is the fact that the GSEs used identical due diligence vendors relevant. As Nomura stressed at trial, since each client had the opportunity to create its own set of review standards or overlays (although Nomura declined the requests to create credit overlays), conclusions drawn based on a comparison of waiver rates alone would be misleading.[184] Similarly, that the GSEs bought different loans from some of the same originators does not provide any insight into whether defendants' Prospectus Supplements accurately described Nomura's loans.

III. Materiality

In evaluating materiality, each Prospectus Supplement is to be read "as a whole," "holistically and in [its] entirety."

[184] In any event, the Court received, over FHFA's objection, the entirety of Clayton's summary report of the waiver rates of its clients, including many banks and the GSEs.

ProShares Trust Sec. Litig., 728 F.3d at 103, 105. As noted, numerous factors support setting the quantitative materiality threshold in this case at 5%. Those factors include statements in Second Circuit opinions, SEC regulations, and the Offering Documents themselves. In addition, as noted, when RBS asked for a complete list of the originators of the loans in a Securitization, and for statistics including LTV ratio, FICO score, and DTI ratio, Nomura refused to identify originators contributing fewer than 5% of the loans. This is further confirmation that those in the industry viewed it as important if 5% or more of the collateral was misrepresented across such metrics.

As for qualitative factors, there was overwhelming, and essentially undisputed, evidence that the features that would be viewed by the reasonable PLS investor as significantly altering the total mix of information available included collateral characteristics such as LTV ratios, compliance with underwriting guidelines, owner-occupancy status, and the credit ratings of the Certificates.[185] LTV ratios gave assurance about the adequacy of the collateral. Compliance with underwriting guidelines gave assurance about the credit risk associated with

[185] In summation, defense counsel admitted that under the right circumstances each of the relevant subject matters could be material to an investor.

the loans and the reliability of the statistics reported in the Collateral Tables. Owner-occupancy status was intimately tied to the selection of underwriting standards, the evaluation of a borrower's commitment to the loan, and the overall risk associated with the Securitization. Credit ratings evaluated many different quantitative measures of risk and the management of risk through the structure of the Securitization.

Combining these quantitative and qualitative analyses, FHFA showed that the separate misrepresentations within each of the seven Prospectus Supplements on LTV ratios, compliance with underwriting guidelines, and credit ratings were all material in and of themselves. FHFA failed to prove that the materiality threshold was met with respect to the Prospectus Supplements' reporting of owner-occupancy statistics when those representations are taken alone. Only when combined with one of the other misrepresentations do the owner-occupancy statistics add to the showing of materiality.

Little needs to be said in favor of the Court's finding of materiality with respect to the misrepresentation of LTV ratios aside from directing the reader to the chart presented above that demonstrates the differences between what was reported in the Prospectus Supplements regarding LTV ratios (the columns marked "Original") and what was true (the columns marked "Extrapolated"). At least 18% of the loans per SLG had

origination appraisals that were non-credible and inflated by over 15%; for five of the SLGs, the percentages ranged from 28% to 36%. These non-credible, inflated appraisals had a dramatic impact on the reporting of LTV ratios in the Collateral Tables, moving 37% of the ratios in the Securitizations over 80%, instead of the 21% reported. And, examining solely those LTV ratios that moved over 100%, none of the Supplements reported that any loans fell in that range, while the actual LTV ratios above 100% fell somewhere between 9.3% and 20.5% for each SLG.

Similarly, little needs to be said in favor of the Court's finding of materiality with respect to guidelines compliance. As explained, at least 45% of the loans per SLG had underwriting defects that materially increased credit risk.

With respect to credit ratings, each Prospectus Supplement represented that the Certificate would not issue without AAA (or equivalent) ratings from S&P or Moody's. The Prospectus Supplements misrepresented that the reported credit rating related to the actual loan collateral for the Securitization. Through the loan tapes, defendants provided the rating agencies with faulty descriptions of the loan populations of each SLG, and those misrepresentations affected the ratings given by the agencies to these securities, causing them to be inflated and not to reflect the quality of the underlying collateral. Worse LTV ratios and failures to comply with underwriting guidelines

would have increased the level of subordination required to achieve AAA ratings. In other words, had defendants provided the rating agencies with correct loan-level information, the Certificates would have lacked the level of subordination necessary to be rated as AAA (or its equivalent).

As for owner occupancy, FHFA succeeded in showing that it is a critical factor in assessing the credit risk of a loan, but, as noted in the table presented earlier, at most 3.09% of the loans in a given SLG displayed owner-occupancy defects. And Hunter's owner-occupancy defect finding was a decisive factor for only two of the loans supporting the Court's findings of material underwriting defects. In short, FHFA failed to meet the materiality threshold with respect to misrepresentations of owner-occupancy statistics when analyzed in isolation from the other misrepresentations.

Defendants offer essentially six attacks against the conclusion of materiality here. They complain that, to prove materiality, FHFA relied on experts, and did not call as a fact witness any PLS investor or someone from the GSEs. There is no reliance element in FHFA's claims, however; materiality is an objective test. What the GSEs themselves viewed as significant is relevant only to the extent that it sheds light on what reasonable investors in the PLS market generally viewed as

significant.[186] Moreover, defendants offer no compelling reason why expert testimony is inappropriate on this score. But, most significantly, the materiality of these four characteristics was not fundamentally in dispute. Confirmation that these are critical components to anyone's evaluation of a PLS certificate came from every corner of the record, including from defendants' business records, their fact witnesses, and their experts.

Defendants argue that reasonable PLS investors understood that collateral characteristics in Prospectus Supplements could not be read in isolation. But the Court's finding of materiality with respect to LTV ratios, guideline compliance, and credit ratings are not based on isolated readings. Rather, they are based on the totality of the information available to reasonable investors during the period 2005 to 2007, the value placed on those characteristics by such investors, and the magnitude of misrepresentations with respect to those characteristics.

Defendants also maintain that investors knew that appraisals reflected the subjective judgments of individual appraisers and might vary by 10-15% from values produced by

[186] It is telling that defendants took depositions of GSE traders who purchased the Securitizations, yet offered no evidence from those depositions to suggest that LTV ratios, compliance with underwriting guidelines, owner-occupancy status, or credit ratings were not material in making their investment decisions.

AVMs. The appraisals that the Court found false, however, varied by more than 15% from the GAVM estimate, and were separately and individually found to be non-credible after an intensive review. Investors of course understood appraisals to be statements of opinion, but that does not mean investors expected or would tolerate statements of opinion that were wildly inflated, not supported by a USPAP-compliant investigation, and not sincerely held by those who rendered them.

Another point made by defendants is that investors recognized that underwriting determinations were inherently subjective and subject to exceptions. Even assuming this is true as a general proposition, it does not undermine the finding of materiality here, where a minimum of 45% of the loans per SLG had underwriting defects that materially increased credit risk. Defects on this scale cannot be explained away by mere reference to "subjectivity" or "exceptions." At this point they reflect a wholesale abandonment of underwriting guidelines.

Defendants further contend that LTV ratios, compliance with underwriting guidelines, and owner occupancy were but three collateral characteristics among others that investors considered, such as documentation type, loan product type, asset type, geography, FICO score, originator identity, and first or second lien statistics. But many of these factors are

intertwined with the substantive content of the underwriting guidelines, further reinforcing the materiality of misrepresentations concerning compliance with those guidelines. The misrepresentations at issue here were also central to the assignment of credit ratings, underscoring the significance of Nomura's failure to provide accurate information to credit rating agencies. In any event, "a material fact . . . need not be important enough that it would have caused the reasonable investor to change his vote. Rather, the information need only be important enough that it would have assumed actual significance in the deliberations of the reasonable [investor]." Folger Adam, 938 F.2d at 1533 (citation omitted).

Finally, with respect to credit ratings, defendants contend that typical RMBS investors during the relevant time period were large institutions that conducted sophisticated pre-acquisition analyses and that used the credit ratings, at most, to confirm the validity of their own models. The record does not support this assertion. Testimony from defendants' own witnesses confirmed the high importance of credit ratings, and the GSEs' own written policies restricted their purchasing decisions based on the credit rating of a security.

IV. Control Person Liability

A. Section 15

FHFA alleges control person liability on the parts of NHA, NCCI, and each Individual Defendant, for controlling one or more of Nomura Securities, NAAC, and NHELI, the primary violators. Pursuant to Section 15 of the Securities Act:

> Every person who, by or through stock ownership, agency, or otherwise, or who, pursuant to or in connection with an agreement or understanding with one or more other persons by or through stock ownership, agency, or otherwise, controls any person liable under section . . . [12] of this title, shall also be liable jointly and severally with and to the same extent as such controlled person to any person to whom such controlled person is liable, unless the controlling person had no knowledge of or reasonable ground to believe in the existence of the facts by reason of which the liability of the controlled person is alleged to exist.

15 U.S.C. § 77o(a) (emphasis added). In other words, Section 15 imposes joint and several "control person" liability. See Lehman, 650 F.3d at 185.

"To establish § 15 liability, a plaintiff must show a primary violation of § 1[2] and control of the primary violator by defendants." Id. (citation omitted). Given the statutory language and the Supreme Court's acknowledgment, when considering Section 15 in conjunction with its affirmative defense, that the claim imposes a negligence standard only, Hochfelder, 425 U.S. at 208-09 & n.27, Section 15 is not read to include a "culpable participation" requirement. See In re

WorldCom, Inc. Sec. Litig., No. 02cv3288 (DLC), 2005 WL 638268, at *16 n.20 (March 21, 2005); see also In re MF Global Holdings Ltd. Sec. Litig., 982 F. Supp. 2d 277, 308-09 (S.D.N.Y. 2013).[187] If both a primary violation and control are shown, the "unless clause" of Section 15, emphasized above, provides defendants an affirmative defense.

The content of both the "control" element and the affirmative defense are informed by the structure of the larger regulatory framework in which Section 15 sits. As noted above, the Securities Act, of which Section 15 is a part, was passed to provide investors with accurate, honest information, by imposing liability on major market participants -- "the persons signing the registration statement, the underwriters, the directors of the issuer, the accountants, engineers, appraisers, and other professionals preparing and giving authority to the prospectus" -- for misrepresentations. Gustafson, 513 U.S. at 581 (citation omitted). As noted above, the federal securities laws were "designed to assure compliance with disclosure provisions . . . by imposing a stringent standard of liability on the parties who play a direct role in a registered offering,"

[187] The Second Circuit has explicitly reserved judgment on whether a prima facie Section 15 claim, like its Section 20 counterpart for Exchange Act claims, requires a showing of "culpable participation" by the alleged control person. Lehman, 650 F.3d at 186.

thus placing responsibility on directors and officers for public disclosures. Litwin, 634 F.3d at 716 (quoting Huddleston, 459 U.S. at 381–82).

1. Control

> [T]he "controlling person" provisions were enacted to expand, rather than restrict, the scope of liability under the securities laws. Control was defined in a broad fashion to reach prospective wrongdoers, rather than to permit the escape of those who would otherwise be responsible for the acts of their employees.

SEC v. Mgmt. Dynamics, Inc., 515 F.2d 801, 812-13 (2d Cir. 1975) (citation omitted).

Congress did not define the terms "control," "controlled," or "controlling person," that appear in Section 15 of the Securities Act and in the companion Section 20 of the Exchange Act. The legislative history of these statutes makes it clear that Congress deliberately left the concept of control undefined:

> [W]hen reference is made to "control," the term is intended to include actual control as well as what has been called legally enforceable control. It was thought undesirable to attempt to define the term. It would be difficult if not impossible to enumerate or to anticipate the many ways in which actual control may be exerted. A few examples of the methods used are stock ownership, lease, contract, and agency. It is well known that actual control sometimes may be exerted through ownership of much less than a majority of the stock of a corporation either by the ownership of such stock alone or through such ownership in combination with other factors.

H.R. Rep. No. 73-1383, at 26 (1934) (citation omitted).

While Congress did not define "control" under the Securities Act or the Exchange Act, the SEC offered a definition in the rules that it promulgated under those statutes. According to SEC regulations, "[t]he term control (including the terms controlling, controlled by and under common control with) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise." 17 C.F.R. § 230.405 (Securities Act); id. § 240.12b-2 (Exchange Act).

The Second Circuit has adopted the SEC's definition and has held that "control" under Section 15 is "the power to direct or cause the direction of the management and policies of the primary violators, whether through the ownership of voting securities, by contract, or otherwise." Lehman, 650 F.3d at 185 (citing SEC v. First Jersey Sec., Inc., 101 F.3d 1450, 1472-73 (2d Cir. 1996), an Exchange Act case, which itself cited 17 C.F.R. § 240.12b-2).

Numerous considerations bear on whether a defendant exercised "control" for purposes of Section 15, and the inquiry is necessarily context and fact dependent (as is the inquiry into Section 15's affirmative defense). See Howard v. Everex Sys., Inc., 228 F.3d 1057, 1065 (9th Cir. 2000) (Exchange Act Section 20(a)). A review of relevant caselaw and other

authority on Section 15 control person liability reveals certain principles that guide the analysis. Those principles include the nature of the controlled entity, the status of the alleged controlling entity, and the actions taken by the controlling entity on behalf of the controlled entity. These principles must be viewed in the broader context of the purposes of the securities laws, discussed above.

a. Nature of the Controlled Entity

The nature of the controlled entity matters, because if it turns out that the controlled entity was incapable of taking, or unlikely to take, actions on its own, it becomes more likely that others, who controlled the entity, took actions on its behalf. As the Second Circuit has explained, "Section 15 had its genesis in the concern that directors would attempt to evade liability under the registration provisions by utilizing 'dummy' directors to act in their stead." Mgmt. Dynamics, 515 F.2d at 812 (citing S. Rep. No. 73-47, at 5; H.R. Rep. No. 73-152, at 27 (1933) (Conf. Rep.)). The Circuit has not held that a finding of a "dummy director" or "shell corporation," standing alone, demonstrates that some other entity or individual is exercising control, but the Circuit has suggested that such a finding is relevant to the inquiry.

In Lehman, the plaintiffs argued that they had adequately alleged control simply by stating that one of the defendants was

a dummy corporation with the sole purpose of securitizing transactions. 650 F.3d at 187. Were dummy or shell status completely irrelevant to the control person inquiry, the Second Circuit would likely have said as much. Instead, the Circuit noted that the complaint did not, in fact, allege that the corporation was a dummy, and did not, in fact, plead facts suggesting that the corporation "was a shell company created to avoid liability for securities law violations." Id. at 187-88. By negative implication, had facts supporting a shell or dummy finding been adequately pled (and ultimately proved), that would have borne on the control person analysis.

b. Status of Controlling Entity

The status of the putative controlling entity is also relevant. Certain types of entities, or entities that stand in certain relationships to the controlled entity, are especially likely to exert the hallmarks of control. For example, Section 15 itself provides that being a "stock owner[]" is probative. 15 U.S.C. § 77o(a). Being a parent corporation over a subsidiary, and having common officers, directors, personnel, and office space or other shared resources, are also relevant indicia of control. See, e.g., Waterford Inv. Servs., Inc. v. Bosco, 682 F.3d 348, 356 (4th Cir. 2012) (noting relevance of these factors to inquiry of control under FINRA Rule 12100(r), which court analogized to control person inquiry under federal

securities law); In re Mut. Funds Inv. Litig., 566 F.3d 111, 131 (4th Cir. 2009) rev'd on other grounds sub nom. Janus Capital Grp., Inc. v. First Derivative Traders, 131 S. Ct. 2296 (2011) (Exchange Act) (noting that allegation of common director goes to control person status).

The status of the putative controlling entity is important not only if that entity is a business, but also if it is a natural person, such as a director, officer, or employee of a company found to be primarily liable. Officer or director status alone does not constitute control, but it is relevant to the inquiry. Howard, 228 F.3d at 1065 ("[A]lthough the directors' status as such was insufficient for a finding of control, their day-to-day oversight of company operations and involvement in the financial statements at issue" were relevant considerations.).

In this regard, the number and nature of positions held are pertinent. See, e.g., Adams v. Kinder-Morgan, Inc., 340 F.3d 1083, 1108 (10th Cir. 2003), as amended on denial of reh'g (Aug. 29, 2003) (Exchange Act). Thus, the distinction between inside and outside directors can be important to the control person analysis, since an inside director has at least two positions from which to exercise control. The potential for the distinction between inside and outside directors to be relevant for purposes of control person liability mirrors the importance

played by that distinction elsewhere in the regulatory scheme. See, e.g., 15 U.S.C. § 78u-4(f)(2), (10)(C)(ii).

c. Actions Taken on Behalf of Controlled Entity

Again, the SEC's definition of control, adopted by the Second Circuit, focuses on power over "the management and policies" of the controlled person. Lehman, 650 F.3d at 185; 17 C.F.R. § 230.405. Because the status of the putative controlling person, standing alone, may not suffice, it is useful to look as well at the actions that that person took or had the duty to take on behalf of the controlled entity. For instance, in a different RMBS case where, like here, control person liability was alleged against the sponsors of the securities, the district court found that control had been sufficiently pled:

> [T]he complaint explains how the sponsors exercised that control:
>
> The sponsors acquired and selected the loans that would be securitized and determined the terms under which those loans were sold to the depositors and then to the trusts. The sponsors also determined and approved the structure of the securitizations and the manner in which the depositors and the trusts sold the related Certificates, and controlled the disclosures made in connection with the related securitizations.
>
> These allegations state sufficient indicia of the exercise of control . . . .

Capital Ventures Int'l v. J.P. Morgan Mortg. Acquisition Corp., No. 12cv10085 (RWZ), 2013 WL 535320, at *9-10 (D. Mass. Feb. 13,

2013) (citation omitted) (materially similar Massachusetts state statute).

Of particular importance when the putative controlling person is a natural person is whether he or she acted on the controlled entity's behalf by rendering his or her signature on documents issued by the entity. See Howard, 228 F.3d at 1065-66 ("[One's] participation in the day-to-day management of [the controlled entity] and his review and signature of the financial statements" was relevant to control inquiry.). Demonstrating the holistic nature of the control person inquiry, in which one's status and the actions that one takes cannot be viewed in isolation, one's director or officer status and one's responsibility for signing financial disclosures can be linked, further reinforcing the degree of responsibility that one has for the financial actions of the firm.

As this Court has previously queried with respect to signatures required by the securities laws,

> [A]s a practical matter, just what is a signature on an SEC filed document meant to represent if it does not represent a degree of responsibility for the material contained in that document? The very fact that a director is required to sign . . . documents charges the director with power over the documents and represents to the corporation, its shareholders, and the public that the corporation's director has performed her role with sufficient diligence that she is willing and able to stand behind the information contained in those documents. As the SEC explained when it announced [an expanded signature] requirement in 1980:

> With an expanded signature requirement, the Commission anticipates that directors will be encouraged to devote the needed attention to reviewing the Form 10-K and to seek the involvement of other professionals to the degree necessary to give themselves sufficient comfort. In the Commission's view, this added measure of discipline is vital to the disclosure objectives of the federal securities laws, and outweighs the potential impact, if any, of the signature on legal liability.

In re WorldCom, Inc. Sec. Litig., 294 F. Supp. 2d 392, 420 (S.D.N.Y. 2003) (quoting Integration of Sec. Act Disclosure Sys., Securities Act Release No. AS-279, 20 SEC Docket 1308 (Sept. 25, 1980)).

Signature requirements were expanded yet again when Congress enacted the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley"), Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of 15 and 18 U.S.C.), "[t]o safeguard investors in public companies and restore trust in the financial markets." Lawson v. FMR LLC, 134 S. Ct. 1158, 1161 (2014) (citation omitted); see also In re Herald, 730 F.3d 112, 117 (2d Cir. 2013) (noting that Congress passed Sarbanes-Oxley "to increase transparency and stability in the securities markets." (citation omitted)). "The Sarbanes-Oxley Act is a major piece of legislation . . . designed to improve the quality of and transparency in financial reporting . . . . [It] requires CEOs and CFOs to certify their companies' financial reports . . . ."

Cohen v. Viray, 622 F.3d 188, 195 (2d Cir. 2010) (citation omitted).

Specifically, Section 302 of Sarbanes-Oxley, requires principal executive and financial officers to certify each annual and quarterly report. See 15 U.S.C. § 7241(a).

> [P]ursuant to section 302 . . . [a] signing officer must certify that he has reviewed the report, that based on his knowledge the report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made not misleading, and that the report and any information included within the report fairly present in all material respects the financial condition and results of operations of the issuer. Moreover, the officer must certify that he is responsible for establishing and maintaining internal controls, and that he has evaluated the effectiveness of the issuer's internal controls within the past ninety days and has presented in the report his conclusions about the effectiveness of the corporation's internal controls based on his evaluation as of that date.

Zucco Partners, LLC v. Digimarc Corp., 552 F.3d 981, 1003 (9th Cir. 2009), as amended (Feb. 10, 2009) (citation omitted). "It [is] reasonable to expect that corporate officers stand behind the company's public disclosure and be subject to sanction should they violate that certification." H.R. Rep. No. 107-414, at 51 (2002).

The importance that attaches to certifications of quarterly and annual financial reports similarly applies to the certification of Registration Statements and their amendments. After all, Section 11 of the Securities Act imposes liability on

"every person who signed the registration statement," if the Registration Statement contains a materially misleading statement or omission. 15 U.S.C. § 77k(a). This broad imposition of liability underscores the significance that inheres in placing one's name on a document filed with the SEC for the purpose of providing information to investors or would-be investors. As the Second Circuit has explained:

> The Securities Act of 1933 had two major purposes, to provide full and fair disclosure of the character of securities sold in interstate and foreign commerce and through the mails, and to prevent frauds in the sale thereof. These aims were to be achieved by a general antifraud provision and by a registration provision. Section 11 deals with civil liability for untrue or misleading statements or omissions in the registration statement; its stringent penalties are to insure full and accurate disclosure through registration.

Barnes v. Osofsky, 373 F.2d 269, 272 (2d Cir. 1967) (citation omitted).

2. Defense

As expressed in the language of Section 15 reproduced above, the provision includes an affirmative defense if the defendant can show that "the controlling person had no knowledge of or reasonable ground to believe in the existence of the facts by reason of which the liability of the controlled person is alleged to exist." 15 U.S.C. § 77o(a). NHA, NCCI, and the Individual Defendants assert this affirmative defense.

The statutory language of this defense echoes Section 11's defense of reliance on expertised portions of a Registration Statement, which, like the Section 15 defense, turns on whether a defendant has "reasonable ground to believe" that statements are true. Because "it is a normal rule of statutory construction that identical words used in different parts of the same act are intended to have the same meaning," Taniguchi v. Kan Pac. Saipan, Ltd., 132 S. Ct. 1997, 2004-05 (2012) (citation omitted), the meaning of "reasonableness" under Section 15 can be informed by Section 11's mandate that "the standard of reasonableness shall be that required of a prudent man in the management of his own property," 15 U.S.C. § 77k(c).

A prudent man does not assume a totally passive, willfully blind role in the management of his own property. Thus, although the "unless" clause of Section 15 -- "unless the controlling person had no knowledge of or reasonable ground to believe in the existence of the facts" -- could be read to condone a see-no-evil, hear-no-evil approach, that clause must be read in the broader context of the federal securities laws, which promote the opposite values: supervision, due diligence, and accountability. Indeed, the Tenth Circuit has explicitly rejected the see-no-evil, hear-no-evil approach. As that court explained in S.F.-Okla. Petroleum Exploration Corp. v. Carstan Oil Co.:

> The defendant had the burden to demonstrate the exception to Section [15] -- a lack of knowledge. . . . This he attempted to do by taking the position that he was a figurehead; that . . . he did not participate in any way; and that he had made no effort to learn what the corporation was doing. When reliance is placed on his testimony it demonstrates that he must have made a conscious effort not to know. This established that he had not performed his duties as a director. He had the opportunity to know as there is no hint whatever that this is a case where a director or officer made an effort to find out and was unable to find the facts or was prevented from doing so.

765 F.2d 962, 964-65 (10th Cir. 1985).

Similarly, the Seventh Circuit, in ruling that "control does not depend on the qualifications of the control people . . . [but i]nstead . . . refers to their authority," noted that "[i]f the rule were otherwise, corporate officers and directors could escape control liability by remaining as ignorant as possible -- surely not the result that Congress intended." Donohoe v. Consol. Operating & Prod. Corp., 982 F.2d 1130, 1138 (7th Cir. 1992) (emphasis added).

This Opinion likewise rejects the see-no-evil, hear-no-evil approach. The determination of whether someone lacks a reasonable ground to believe in the existence of the facts creating liability must be context- and fact-dependent. Some of the same factors that bear on the control inquiry bear on this inquiry as well, including most notably the status of the controlling person and the actions the controlling person took,

or had the responsibility to take, on behalf of the controlled person. The very same considerations that cause one's status as a corporate director or officer charged with signing Offering Documents to support a finding of control, may undermine a finding of a lack of a reasonable ground to believe in the existence of certain underlying facts when those facts relate to the accuracy of statements in Offering Documents. In short, while the statute offers a defense to one who lacks reasonable grounds to believe in the existence of the underlying facts, if discharging one's responsibilities as a signatory of public documents would furnish such grounds, one will be hard pressed to make out the defense. After all, as described above, the securities laws and the surrounding regulatory framework impute a certain degree of knowledge and responsibility to those who certify an offering's information to the public.

B. Application

Before evaluating the statuses and actions taken by the purported controlling entities -- NHA, NCCI, and the Individual Defendants -- it is useful to note something about the nature of two of the controlled entities, NAAC and NHELI. These two special purpose vehicles were, in effect, shells, with no employees or assets aside from what they held for purposes of Nomura's RMBS business. Their sole function was to serve as depositors for securitizations, including the seven at issue.

1. NHA

NHA controlled -- that is to say, enjoyed the power to direct or cause the direction of the management and policies of -- all three primary violators: Nomura Securities, NAAC, and NHELI. NHA's ownership of Nomura Securities, NAAC, and NHELI;[188] its ability to appoint their directors; and the overlap of their directors have all been discussed above.

NAAC's and NHELI's directors chose the officers, who were responsible for the management and operation of the companies. Two officers of both NAAC and NHELI, Buck and Sam Herbstman, also served as officers of NHA. And Findlay was an officer and director of NHA and a director of NAAC and NHELI.

Moreover, NHA created NAAC and NHELI for the purpose of issuing RMBS Certificates. Because NHA could decide which loans NCCI could purchase and could deny NCCI permission to buy any loans, NHA had the ability to control and even halt NAAC's and NHELI's issuance of securitizations. Indeed, all the varied ways in which NHA oversaw, set policy for, and provided support

[188] Against a finding of control, defendants point out that NHA's ownership of NAAC and NHELI was indirect, through NACC and later NAMF. By negative implication, defendants concede that NHA's direct ownership of Nomura Securities, which they do not deny, is highly relevant to finding that NHA controlled Nomura Securities. Moreover, as noted, NHA's indirect whole ownership of NAAC and NHELI is not the only factor demonstrating NHA's control over those entities.

to the other Nomura entities are detailed above and need not be reproduced here.

2. NCCI

Similarly, NCCI controlled all three primary violators. The overlap of officers, directors, and personnel has been noted: Notably, the CEOs of NAAC and NHELI, Graham and LaRocca, were also officers of NCCI.[189] These NCCI officers signed the Registration Statements and were responsible for putting together the Offering Materials and for otherwise papering the transactions, including by preparing the Prospectus Supplements.

NCCI also controlled the three primary violators by directing their RMBS business activities. NCCI's disclosed position as sponsor manifested a responsibility for the content of the Prospectus Supplements. NCCI was responsible for conducting diligence on the loans before purchase, decided which loans to purchase and securitize, and held the loans on its books before depositing them with NAAC or NHELI. In other words, NCCI could prevent the primary violators from issuing RMBS by refusing to purchase loans for securitization, or, having bought loans, refusing to deposit them.

[189] And, in the case of LaRocca, a director as well.

3. Individual Defendants

Multiple factors also lead to the conclusion that the Individual Defendants controlled the primary violators in some combination or another.[190] All five Individual Defendants were officers and/or directors of the some combination of the primary violators: Nomura Securities, NAAC, and NHELI. Those statuses are coupled with other evidence of control, including signatures on Registration Statements, shelf amendments, and director and officer resolutions.

The Individual Defendants seek to disclaim their responsibility for the accuracy of the statements made in the Prospectus Supplements issued pursuant to those Registration Statements, because they did not sign the Prospectus Supplements. But there is no one better positioned to be held accountable as a control person. With the exception of the third director of the depositors (Ito), the five Individual Defendants are the only signatories of the Registration Statements. If anyone is responsible for the accuracy of the statements made in the Prospectus Supplements issued pursuant to them, it is these five individuals. While the absence of their signatures from the Prospectus Supplements means that they will

[190] As discussed below, under the D.C. Blue Sky law, Findlay's, Graham's, Gorin's, and McCarthy's statuses as officers or directors of NAAC or Nomura Securities suffice to establish the requisite control.

not be held strictly liable as primary violators, the presence of their signatures on the Registration Statements is highly pertinent to the inquiry of control person liability.

Beyond signatures, Findlay, who helped set up Nomura's RMBS due diligence processes, was responsible for approving the Securitizations. The Transaction Management Group, with which Graham and LaRocca were both engaged, was actively involved in various aspects of Nomura's RMBS business, from loan acquisition to securitization to review of the Prospectus Supplements and other Offering Documents. Gorin was responsible for maintaining the financial accounts of various Nomura entities, including NAAC and NHELI.[191] And McCarthy, along with Findlay and Ito, approved the issuance of the seven Certificates and reviewed the Offering Documents, including the Prospectus Supplements.

4. Unsuccessful Affirmative Defense

No defendant has carried the burden of proving, under Section 15, that he had no knowledge of, or reasonable ground to believe in, the existence of the facts by reason of which the primary violators are liable. Assuming defendants had no

[191] Defendants say that, because NAAC and NHELI had no employees or day-to-day operations, there was no management or policy that Gorin could have directed. This argument is unavailing. That the depositors had no employees or day-to-day operations -- i.e., that they were "shells" -- makes it more, not less, likely that they were controlled by the officers at their helms, especially those in charge of their financials.

subjective knowledge of the material misrepresentations in the Offering Documents, they did not prove that they had no reasonable ground to believe that there were such misrepresentations.

NHA did not prove that it lacked a reasonable ground to believe in the existence of the material misrepresentations, both because Findlay designed Nomura's diligence process on NHA's behalf, and because, through the various channels described above, NHA continuously monitored the problems and risks in Nomura's RMBS business. Due to the flaws in the design of Nomura's diligence process and the red flags that even that flawed process raised, NHA failed to show that it had no reasonable grounds to believe that the Prospectus Supplements contained the misrepresentations at issue here. Similarly, NCCI did not prove that it lacked a reasonable ground to believe in the existence of the material misrepresentations, largely because, as sponsor, NCCI was intimately connected to every aspect of the securitization process, including the diligence.

The Individual Defendants similarly failed to make out the affirmative defense for control persons. Based on their roles and knowledge as described in earlier sections of this Opinion, Findlay, Graham, and LaRocca each failed to prove the lack of a reasonable ground to believe in the existence of the material misrepresentations, because it was revealed that they did, in

fact, have reasonable grounds to know the nature of the work being done during the diligence process, the red flags it raised, and the flawed loans that were being securitized.

Gorin and McCarthy are not entitled to the affirmative defense, but, unlike Findlay, Graham, and LaRocca, not because of demonstrated familiarity with the faults of Nomura's diligence or the red flags it revealed. Quite the opposite. Gorin and McCarthy were familiar with next to nothing about Nomura's RMBS business; they took no steps to educate themselves about what was going on and did nothing to assure themselves of the truth of the statements in the Offering Documents. Any information they did have about the business of which they were a part was limited, inaccurate, or both. Their see-no-evil, hear-no-evil approach cannot be countenanced.

In fact, not just Gorin and McCarthy, but all the Individual Defendants, on some level, professed ignorance about the way in which Nomura's system was supposed to work, and in particular, about whose responsibility it was to ensure that the Prospectus Supplements made accurate representations. Their ignorance is unsurprising, as it appears that no one held that responsibility. But this cannot furnish the basis for the defense. If no one is in charge, those who should be do not get a pass. For instance, none of the Individual Defendants has presented an affirmative defense by showing that he had a

reasonable basis to believe both that another qualified, trustworthy, and responsible person or entity was charged with ensuring the accuracy of those portions of the Prospectus Supplements that are at issue here, and that that person or entity had fulfilled that duty.

The Individual Defendants' approach to defending against the charges in this action is not entirely surprising. They effectively had two options, given the interplay between the element of control and the affirmative defense. They could have effectively conceded control but attempted to construct a strong defense by demonstrating the ways in which they, or those on whom they were entitled to rely, were actively engaged in ensuring the quality of Nomura's RMBS business and the accuracy of its Offering Documents -- how, despite having discharged their director and officer responsibilities with care, they simply had no reasonable grounds to believe that the Offering Documents contained material misrepresentations. They did not take this tack. Instead, they attempted to fight Section 15 liability by downplaying their involvement in the business, and maintained that, because they were so absent, they had no grounds to believe in the existence of any underlying facts about the business, including the potential for material misrepresentations in the Offering Documents. But, as described, they cannot seek the protection of the affirmative

defense if simply doing their job -- in the way expected of a prudent man conducting his own affairs -- would have provided the reasonable grounds to believe in the existence of the relevant facts.

The point is encapsulated in Findlay's claim that he did not read the UBS report before passing it along to others, with the expectation that a response would require authorization from his superiors. Either Findlay in this instance, and the other Individual Defendants more generally, were aware of information such as the UBS report, in which case they were affirmatively provided the reasonable grounds to believe that Nomura's Offering Documents contained material misrepresentations. Or Findlay actually did not read the report, as he testified, and the other Individual Defendants actually made no efforts to educate themselves about the processes in which they placed their trust.

But as officers and directors of the two depositors, whose business was exclusively devoted to the securitization of RMBS, and as the individuals invested with signatory authority over the Registration Statements for the Securitizations, they were obligated to act prudently in connection with each of the Prospectus Supplements filed by the depositors. They abdicated these roles and shirked this knowledge and responsibility by failing to satisfy themselves, outside of what each viewed as

his narrowly circumscribed role, that the NAAC and NHELI Offering Documents were truthful and complied with the requirements of the law. Without any basis and without taking any steps to assure themselves, they blindly trusted that the rest of the Nomura RMBS business was operating effectively. Having, in effect, done nothing, they cannot claim the protection of the affirmative defense to control person liability.

V. Damages

Section 12 provides a fixed formula for damages: The plaintiff is entitled "to recover the consideration paid for [the] security with interest thereon, less the amount of any income received thereon, upon the tender of such security, or for damages if he no longer owns the security." 15 U.S.C. § 77l(a)(2) (emphasis added). The GSEs retain the Certificates they purchased from defendants, and thus their recovery is measured by the statutory formula. In the case of an RMBS, investors' original investment is repaid in regular increments. Accordingly, each month, the GSE was to be paid a return of principal on its Certificate and a coupon reflecting an interest payment.

To calculate damages, FHFA's expert deducted principal payments received by each GSE on a month-to-month basis to arrive at the amount of pre-judgment interest due on the

consideration paid. The proceeds balance at the time of judgment plus the accumulated prejudgment interest make up the statute's "consideration paid" with "interest thereon." Finally, to arrive at a damages figure, the expert added all of the coupon interest payments received by the GSEs and subtracted that amount from the sum of the consideration paid and prejudgment interest. The parties do not dispute the amount of "income received" on the seven Certificates, nor is there substantial disagreement about the amount of "consideration paid." Prior to trial, defendants' request for a further reduction of damages based on a calculation of interest on interest was rejected. Riddiough Opinion, 2015 WL 640875, at *2-3.

The parties dispute two remaining issues regarding damages: the date of "tender," and the proper interest rate. The date of tender is the date of judgment, when the GSEs will tender their Certificates to defendants. Prejudgment interest will be calculated at the Certificates' coupon rate.

A. Date of Tender

With its February 20, 2015 submission of the pretrial order and the direct testimony of its damages expert, FHFA argued for the first time that it constructively tendered its securities as of September 2, 2011, the date of the initial complaint, and that because under Section 12 consideration paid is recovered

"upon the tender of such security," it is entitled to receive the recovery dictated by the statute's formula as of that date and to retain all payments received since that date. With this interpretation of the recovery formula, FHFA would be entitled to retain over $178 million in principal and interest payments received since this lawsuit was filed.[192] It is not.

FHFA found support for its creative argument in caselaw recognizing the doctrine of "constructive tender." But that doctrine has been applied not to fix a date from which to calculate damages, but to clarify how a plaintiff might satisfy the prerequisite of "tender" some courts have required of Section 12 claimants. See Wigand v. Flo-Tek, Inc., 609 F.2d 1028, 1034-35 (2d Cir. 1979). In that context, the constructive tender doctrine refers to the implicit offer to tender rather than the actual tender of securities. For instance, in Wigand, the Court of Appeals observed that

> "[a]s a final condition to liability under section 12[(a)](2), the Act requires "tender" of the securities, if they are still held by the plaintiff. The language of that section gives no hint as to the time, place or manner of such tender. . . . Obviously rescission can only take place if the plaintiff gives back the stock he has received, and therefore a [complaint's] demand for rescission contains an implicit offer to tender, sufficient to satisfy the statute."

[192] Depending on the interest rate selected to calculate the recovery due to FHFA here, the effect of selecting FHFA's tender date could be an increase in damages of over $160 million.

Id. (emphasis added); see also Morin v. Trupin, 747 F. Supp. 1051, 1063 (S.D.N.Y. 1990) ("A requisite element of a Section 12[(a)](2) claim is the plaintiffs' tender of the securities they purchased. . . . A complaint that does not plead at least an offer of tender is insufficient and subject to dismissal."); Anisfeld v. Cantor Fitzgerald & Co., 631 F. Supp. 1461, 1464 (S.D.N.Y. 1986) ("An essential condition of liability under Section 12[(a)](2) of the Securities Act is that the plaintiff tender the securities he purchased, . . . and an offer in the complaint to tender the securities is sufficient to satisfy the condition.").

In any event, it would be wholly inconsistent with Section 12's rescissionary aim to impose a date past which a plaintiff would be permitted to keep some kind of recovery bonus. In return for receiving the award dictated by the statute, the statutory formula requires FHFA to return the principal and interest payments it has received during the time that it has possessed the Certificates. While it is true, as FHFA argues, that "Congress shifted the risk of an intervening decline in the value of the security to defendants," Loftsgaarden, 478 U.S. at 659, that risk does not include the risk that FHFA will receive a windfall in its recovery. That risk is the risk that defendants bear from any decline in the value of the

Certificates since their sale to the GSEs. In allowing a rescissionary remedy, Section 12(a)(2) restores the parties to their positions as of the time the contract was made. See Post-Filing Payments Opinion, --- F. Supp. 3d ---, 2014 WL 7232590, at *10.

B. Interest Rate

The parties also dispute the appropriate interest rate to impose. They have advocated for a series of different rates, but both agree that one of those rates may be the coupon rate. FHFA has advocated for the IRS underpayment interest rate, although it also submitted damages estimates assuming the Certificates' coupon rate as well as a flat 3% interest rate. For their part, defendants advocated for the "risk-free" federal postjudgment rate, but concede that if a rate higher than the federal postjudgment rate is imposed, "the only appropriate one would be the coupon rate." The impact of these various interest rate formulations is as follows:[193]

Risk-Free Rate	Coupon Rate	3% Rate	IRS Penalty Rate
$562,825,709	$624,406,948	$693,635,028	$1,001,704,235

The most appropriate rate for Section 12(a)(2) damages is the coupon rate. That rate vindicates the GSEs' original expectations when purchasing the Certificates. The interests of

[193] Risk-free rate is calculated as of March 31, 2015.

"full[] compensation," "fairness," and remediation each militate in favor of the coupon rate. See Gierlinger, 160 F.3d at 873.

FHFA asserts that the appropriate rate is the IRS underpayment interest rate for large corporate underpayments, which is defined as the federal short-term interest rate plus 5%. 26 U.S.C. § 6621(c)(1). The IRS underpayment interest rate is typically applied when defendants have engaged in fraud or other conscious wrongdoing. The prototypical case is an SEC enforcement action. See, e.g., First Jersey Sec., 101 F.3d at 1476. This is a strict liability Securities Act case; it does not allege that defendants engaged in fraud.

Similarly inappropriate is the "risk-free" federal postjudgment interest rate proposed by defendants. The federal postjudgment rate is defined by statute as "the 1-year constant maturity Treasury yield." 28 U.S.C. § 1961(a). While, as defendants point out, interest in some circumstances "should be measured by interest on short-term, risk-free obligations," an award of interest is first and foremost "intended to make the injured party whole." N.Y. Marine & Gen. Ins. Co. v. Tradeline (L.L.C.), 266 F.3d 112, 131 (2d Cir. 2001). In this case, fully compensating FHFA for its reasonable expectations for recovery on AAA rated Certificates is necessary to achieve that end.

VI. Loss Causation

Pursuant to Section 12 of the Securities Act, as amended by the Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737, defendants have pursued the statutory affirmative defense of negative loss causation. The statute provides:

> [I]f the person who offered or sold [the] security proves that any portion or all of the amount recoverable under subsection (a)(2) of this section represents other than the depreciation in value of the subject security resulting from such part of the prospectus or oral communication, with respect to which the liability of that person is asserted, not being true or omitting to state a material fact required to be stated therein or necessary to make the statement not misleading, then such portion or amount, as the case may be, shall not be recoverable.

15 U.S.C. § 77l(b) (emphasis added). In other words, the statute permits a defendant to reduce or eliminate altogether the obligation to pay damages for its violation of Section 12(a)(2). Section 12 places the burden on defendants to prove that something other than the subject of the misrepresentations or omissions was responsible for any decrease in value of the Certificates.

"Loss causation is the causal link between the alleged misconduct and the economic harm ultimately suffered by the plaintiff . . . [and] is related to the tort law concept of proximate cause." Lattanzio v. Deloitte & Touche LLP, 476 F.3d 147, 157 (2d Cir. 2007) (citation omitted) (Section 10(b)

claim).[194] "A misrepresentation is the proximate cause of an investment loss if the risk that caused the loss was within the zone of risk concealed by the misrepresentations." In re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 513 (2d Cir. 2010) (citation omitted) (Section 10(b) claim). "The zone of risk is determined by the purposes of the securities laws, i.e., to make sure that buyers of securities get what they think they are getting." Id. (citation omitted). Therefore, to prevail on its Section 12 defense a defendant must carry its burden of showing that the loss in the value of the securities at issue was proximately caused by events unrelated to the subject of the alleged misrepresentations. GSE Loss Causation Opinion, 2015 WL 685159, at *2.

> Section 12's loss causation defense
>
> fulfills the rescissory purpose of the statute, which repudiates the transaction and seeks to place the parties in the status quo. If the securities being tendered by FHFA are less valuable than the securities the GSEs received at the time of the purchase agreements for reasons unrelated to defendants' alleged misconduct, then the return of the GSEs' consideration will be similarly offset. When a defendant receives a plaintiff's securities in exchange for the return of the plaintiff's

[194] "[T]he negative causation defense in Section 12 and the loss causation element in Section 10(b) are mirror images of one another. Because of their complementarity, the loss causation analysis conducted under Section 10 is informative of the analysis under Section 12." FHFA v. Nomura Holding Am., Inc. ("GSE Loss Causation Opinion"), No. 11cv6201 (DLC), 2015 WL 685159, at *2 (S.D.N.Y. Feb. 18, 2015) (citation omitted).

> consideration paid, offset by any unrelated depreciation in value, the parties are placed in the status quo ante. This is fully in keeping with Section 12(a)(2)'s longstanding offset of the purchase price by the amount of any income received thereon.

FHFA v. Nomura Holding Am., Inc. ("Ryan Opinion"), No. 11cv6201 (DLC), 2015 WL 629336, at *2 (S.D.N.Y. Feb. 13, 2015) (citation omitted).

Defendants contend that the entirety of any loss here is due to macroeconomic factors, all stemming from the collapse of housing prices, beginning in 2007. Recently, in a context in which the plaintiff bore the burden of affirmatively establishing loss causation, the Second Circuit remarked that, "[c]ertainly, when a plaintiff's loss coincides with a marketwide phenomenon causing comparable losses to other investors, the prospect that the plaintiff's loss was caused by the [misrepresentation] is lessened." Fin. Guar. Ins. Co. v. Putnam Advisory Co., LLC, --- F.3d ---, 2015 WL 1654120, at *8 n.2 (2d Cir. Apr. 15, 2015).

But, in a telling observation that resonates with the record created here, the Circuit went on to "observe that there may be circumstances under which a marketwide economic collapse is itself caused by the conduct alleged to have caused a plaintiff's loss, although the link between any particular defendant's alleged misconduct and the downturn may be difficult to establish." Id. Again, this statement was made in a context

in which an element of the plaintiff's claim would require the plaintiff to affirmatively establish that link. Here, by contrast, defendants bear the burden of proving that something other than that which was concealed by the misrepresentations in the Prospectus Supplements caused the loss in value of the Certificates.

In making its observation about the linkage between a defendant's misconduct and a market-wide phenomenon, the Court of Appeals cited the Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States (2011), better known as the Financial Crisis Inquiry Report ("Report"), published by the U.S. Financial Crisis Inquiry Commission.[195] The Report notes links between the shoddy origination practices concealed by the misrepresentations in the Prospectus Supplements and the market-wide factors on which defendants blame the losses.[196] According to the Report:

> As defaults and losses on the insured mortgages have been increasing, the [private mortgage insurance ("PMI")] companies have seen a spike in claims. As of October 2010, the seven largest PMI companies, which share 98% of the market, had rejected about 25% of the

[195] Available at http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf (last visited May 11, 2015).

[196] No party introduced the Report as an exhibit, and the Court did not consult it in making any of the findings of fact in this action. Directed by the Second Circuit's Putnam Advisory decision to the Report, however, the Court views it as confirmatory of the record created at trial.

> claims (or $6 billion of $24 billion) brought to them, because of violations of origination guidelines, improper employment and income reporting, and issues with property valuation.

Report at 225 (emphasis added).

Defendants have failed to carry their burden of proving their affirmative defense of negative loss causation. Notably, they have not quantified the loss that they say is due to macroeconomic factors. They seek to offset the entirety of any judgment awarded to FHFA and offer no means to set off only a portion of any award. As already described, shoddy origination practices contributed to the housing bubble, and were among the factors that contributed to the economic collapse that followed when that bubble burst. Defendants do not dispute this. They do not deny that there is a link between the securitization frenzy associated with those shoddy practices and the very macroeconomic factors that they say caused the losses to the Certificates. This lack of contest, standing alone, dooms defendants' loss causation defense, which, again, requires them to affirmatively prove that something other than the alleged defects caused the losses.

Rather than fighting the existence of the link, defendants present a series of other arguments, each of which is addressed here. They argue that four decisions from the Second Circuit Court of Appeals support their defense; the recession was not

within the zone of risk of the misrepresentations and omissions in the Offering Documents; these seven Securitizations played a miniscule role in the creation of the housing bubble; the Government played a role in the creation of the bubble; FHFA has already admitted in court filings and elsewhere that the collapse of housing prices led to the decline in securities' prices; and excluded evidence would have supported the defense.

A. Second Circuit Caselaw

Defendants cite four decisions by the Court of Appeals for the Second Circuit in support of the argument that market-wide phenomena, such as the housing and financial crises, "can be" intervening causes sufficient to break the proximate causal chain.[197] In the appropriate case, that is of course so. But none of the cases carries the weight defendants wish. In all four cases, the plaintiffs bore the burden of proving loss causation, so an inability to disentangle the cause of losses inured to the defendants' benefit. In the instant case, by contrast, where the burden of proving negative loss causation falls on defendants, the exact same inability to disentangle works to defendants' disadvantage. Moreover, in none of these four cases did the plaintiff allege that the defendant's own

[197] This argument was presented in defendants' March 9 brief.

practices had fueled the market-wide phenomena associated with the loss.

In Lentell v. Merrill Lynch & Co., 396 F.3d 161 (2d Cir. 2005), in the context of an Exchange Act Section 10(b) claim, where loss causation is an element of the plaintiff's prima facie case, the complaint failed to plead loss causation because it included "no allegation that the market reacted negatively to a corrective disclosure" by the defendants. Id. at 175. In Castellano v. Young & Rubicam, Inc., 257 F.3d 171, 188-89 (2d Cir. 2001), there was no argument made about market-wide factors and thus there was no need for either side to disentangle losses caused by the alleged misconduct from losses caused by larger market trends. In Powers v. British Vita, P.L.C., 57 F.3d 176, 180 (2d Cir. 1995), a civil RICO action, the court affirmed in part the dismissal of the complaint for failure to allege loss causation. In that case, the plaintiff conceded that the stock price fell for reasons other than the defendants' conduct. Id. at 189.

Finally, in First Nationwide Bank v. Gelt Funding Corp., 27 F.3d 763, 765 (2d Cir. 1994), a bank that made loans through mortgage brokers brought a civil RICO claim against one such broker, alleging that the broker misrepresented the value of properties pledged as collateral to induce the bank to make

loans. Affirming dismissal of the RICO complaint for failure to plead loss causation, the court reasoned:

> [T]he substantial period [of five years] between the alleged fraud and [the plaintiff]'s loss, coupled with the concurrence of that loss with the real estate market crash, is additional support for the conclusion that the fraud was not a substantial cause of [the plaintiff]'s injury. Despite [the plaintiff]'s allegation that the net operating income for most of the collateral properties was insufficient to service the principal and interest payments due on the loans, few of the properties went into default until mid-1990, when the real estate market collapsed. . . . [The plaintiff's] claims fail because it has not adequately plead facts which, if proven, would show that its loss was caused by the alleged misstatements as opposed to intervening events.

Id. at 772 (emphasis added). The court went on to qualify its ruling by warning that it "d[id] not mean to suggest that in all cases a fraud plaintiff will be unable to plead proximate cause when the claim follows a market collapse." Id. Again, unlike the instant case, there is no indication that the plaintiff in First Nationwide Bank attempted to connect the real estate market crash of the '90s to widespread misconduct of the kind in which its defendant was alleged to have engaged.

B. Zone of Risk

In their March 9 filing, defendants argue that the housing market and economic recession that they say led to the losses in value of the Certificates were not within the "zone of risk" concealed by the misrepresentations, and thus represent a break in the causal chain, giving rise to a loss causation defense.

This argument conceives of "zone of risk" under the loss causation doctrine too narrowly. Narrowly construed, what caused the losses on the Certificates was default and delinquency by borrowers on the mortgages backing the relevant SLGs. The relevant question, of course, is what caused these instances of default and delinquency. It is in response to this question that the interrelatedness of the underlying undisclosed collateral defects and the macroeconomic factors urged by defendants comes into stark relief.

C. The Seven Securitizations Were Comparatively Small.

Defendants argue that their role in the market generally, and with respect to these deals individually, was too small to have contributed in a serious way to the liquidity that fueled the housing bubble. These seven deals, valued at roughly $2.45 billion, represented less than 0.1% of the roughly $3 trillion in PLS issued in the period 2005 to 2007.

Such an approach will not be credited. On defendants' view, each PLS depositor, sponsor, or underwriter in the RMBS market may well have contributed to the housing market collapse and the financial recession through their practices, but, because no single depositor, sponsor, or underwriter can be proved solely or largely responsible, all of them can use those macroeconomic declines to their advantage in a loss causation defense. Unsurprisingly, defendants have not pointed to any

legal support for this position. The affirmative defense of loss causation requires a defendant to prove that the loss in the value of the security was proximately caused by events unrelated to the phenomena underlying the alleged misrepresentations. The fact that defendants, along with many others, took part in those phenomena, is not a defense. Unable to show this fundamental unrelatedness, appeals to the size of one's own contribution to a larger cause are unavailing.

Defendants bemoan the fact that FHFA's expert Barth would not quantify the precise extent to which the loans at issue in the seven Securitizations contributed to the oversupply of credit in the housing market. But this turns the burden on its head. For FHFA's purposes of rebutting a showing of loss causation, it is enough to call into question whether defendants have succeeded in putting forth a cause of loss independent of the material misrepresentations. Affirmative quantification would be required on defendants' part, to prove the amount, if any, of the losses attributable to such independent factors. Notably, and indicative of defendants' shortfall in this case, their expert Vandell admitted that he had not undertaken any effort to evaluate how much additional credit went to borrowers as a result of the origination of defective loans, or to apportion the loss to the value of the Certificates to different causes.

D. The Government's Contribution to the Bubble and Recession

Defendants argue that Government regulations and policies, such as those pursued by the GSEs, also contributed to the macroeconomic factors that defendants say caused the losses. The implication, presumably, is that FHFA as a governmental agency and the Government Sponsored Entities on whose behalf it acts should not seek to recover for losses that may have been caused in part by the Government. As has been recounted tirelessly in this litigation, the identity of the plaintiff is wholly irrelevant to the legal issues that were tried here. Defendants were not restricted from offering evidence of the growth of liquidity in the housing market. But what is at stake is the amount of growth overall; not the particular amounts attributable to any one actor. For present purposes, the question is whether defendants persuasively proved that something other than that which was misrepresented in the Offering Documents caused the alleged losses. Defendants did not.

E. Admissions by FHFA and the GSEs

Defendants used trial testimony from three witnesses who worked at the GSEs, GSE statements made in SEC filings and elsewhere, and court filings on behalf of the GSEs in support their loss causation defense. According to defendants, since

the GSEs and FHFA have admitted repeatedly that the collapse in housing prices caused the GSEs to incur losses, they have essentially conceded the loss causation defense offered at this trial.

In particular, defendants contend that the statements by GSE agents in prior lawsuits definitively establish FHFA's position on the issue of losses sustained by these seven Certificates. In other words, defendants argue that, under the doctrine of judicial estoppel, FHFA may not make a different argument to rebut defendants' loss causation defense here.

Judicial estoppel is intended "to protect the integrity of the judicial process by prohibiting parties from deliberately changing positions according to the exigencies of the moment." Adelphia Recovery Trust v. Goldman, Sachs & Co. ("Goldman"), 748 F.3d 110, 116 (2d Cir. 2014) (citation omitted). "Typically, judicial estoppel will apply if: 1) a party's later position is clearly inconsistent with its earlier position; 2) the party's former position has been adopted in some way by the court in the earlier proceeding; and 3) the party asserting the two positions would derive an unfair advantage against the party seeking estoppel." In re Adelphia Recovery Trust, 634 F.3d 678, 695-96 (2d Cir. 2011) (citation omitted). Application of the judicial estoppel doctrine "depends heavily on the specific factual context before the court," and "relief is granted only when the

risk of inconsistent results with its impact on judicial integrity is certain." Goldman, 748 F.3d at 116. "This latter requirement means that judicial estoppel may only apply where the earlier tribunal accepted the accuracy of the litigant's statements." In re Adelphia, 634 F.3d at 696. The Second Circuit has described estoppel as appropriate where the statements at issue are in "irreconcilable direct conflict." Rodal v. Anesthesia Grp. of Onondaga, P.C., 369 F.3d 113, 119 (2d Cir. 2004).

The testimony offered by trial witnesses employed by the GSEs and the GSEs' own documents and filings have been described earlier in the Opinion. None of that evidence contradicts the position taken by FHFA here in its analysis of defendants' loss causation defense. Similarly, statements made in the four prior lawsuits on which defendants rely do not judicially estop FHFA from asserting at this trial that the industry-wide practices in which defendants engaged, and the subject matter of the misrepresentations and omissions in the Offering Documents, contributed to any loss in value of the Certificates.

In the four prior lawsuits on which defendants rely, the GSEs were defending against allegations that their stock prices -- a reflection of the GSEs' performance overall (including both their PLS and Single-Family businesses) -- had fallen because of the GSEs' own misrepresentations or

mismanagement. In mounting their defense, the GSEs sensibly pointed to a systemic economic collapse to argue that the plaintiffs had failed to adequately plead loss causation (as was their burden).

First, in Ohio Pub. Emps. Ret. Sys. v. Fed. Home Loan Mortg. Corp., No. 08cv160 (BYP) (N.D. Ohio), the plaintiff alleged that Freddie Mac and its officers misrepresented the amount of subprime loans that the GSE purchased. 2014 WL 5516374, at *2. In moving to dismiss, Freddie Mac argued that the plaintiffs could not show loss causation because, among other reasons, they "ignor[ed] the single worst financial crisis since the Great Depression" and thus "fail[ed] to allege any facts to exclude the most obvious explanation for Freddie Mac's stock decline -- the impact of a dramatic, unprecedented financial markets collapse." Freddie Mac's motion was granted on loss causation grounds -- not because the plaintiff failed to account for the market collapse, but because under controlling Sixth Circuit precedent it failed to plead that Freddie Mac made a corrective disclosure or revealed a truth behind any alleged misrepresentation. Id. at *9.

Second, in In re Fed. Home Loan Mortg. Corp. Derivative Litig., No. 08cv773 (LMB) (E.D. Va.), prior to initiating derivative suits, the plaintiffs made demands on Freddie Mac's board, which appointed a special litigation committee to

investigate. The case was stayed after the court found that the plaintiffs lacked standing, see 643 F. Supp. 2d 790, 799 (E.D. Va. 2009), aff'd sub nom. La. Mun. Police Emps. Ret. Sys. v. FHFA, 434 F. App'x 188 (4th Cir. 2011), but during the pendency of the stay the committee's investigation continued. The report that resulted, filed as an exhibit in the case, stated that "[m]uch of the Company's losses was a result of the nationwide decline in house prices, which was not foreseen by Company management."

Third, in Kuriakose v. Fed. Home Loan Mortg. Corp., No. 08cv7281 (JFK) (S.D.N.Y.), the plaintiff brought a securities fraud action against Freddie Mac and its officers, asserting that they had materially misrepresented Freddie Mac's exposure to non-prime mortgage products, the sufficiency of its capital, and the strength of its due diligence and quality control mechanisms. 2011 WL 1158028, at *4 (S.D.N.Y. Mar. 30, 2011). In moving to dismiss, Freddie Mac pointed to macroeconomic factors and argued that "[f]ailing to predict the timing and magnitude of a historically unprecedented drop in housing prices and the recent financial crisis is not fraud." The district court dismissed all claims. In dismissing the claims concerning its exposure to loss and capitalization, the court found that the complaint failed to plead a false or misleading statement, or to present facts giving rise to a strong inference of

scienter. Id. at *11-13. In dismissing the plaintiffs' allegations that Freddie Mac misrepresented the strength of its underwriting standards and internal controls, the court found that the plaintiffs failed to plead that any disclosure of concealed information by Freddie Mac concerning its internal controls supported a theory of loss causation. Id. at *13. It further found that, given that "the price of Freddie Mac's stock was clearly linked to the 'marketwide phenomenon' of the housing price collapse, there [was] a decreased probability that Plaintiffs' losses were caused by fraud." Id. In summarily affirming the subsequent dismissal of a second amended complaint, the Second Circuit explained that the plaintiff had failed to allege any decline in the price of the GSE's stock that was related to a corrective disclosure regarding the alleged misrepresentations. Cent. States, Se. & Sw. Areas Pension Fund v. Fed. Home Loan Mortg. Corp., 543 F. App'x 72, 74 (2d Cir. 2013).

Finally, in In re Fannie Mae 2008 Sec. Litig., No. 08cv7831 (PAC) (S.D.N.Y.) (about which, as noted earlier, Mudd was questioned during this trial), in moving to dismiss, Fannie Mae argued that the plaintiffs could not show loss causation because "in the historically tumultuous market of late 2007 through 2008, there were a multitude of factors affecting the price of Fannie Mae's securities -- most of which were global and market-

wide factors not specifically relating to Fannie Mae." The court dismissed all but the plaintiffs' claims related to risk management and internal controls for failure to adequately plead material misrepresentation. In relation to the remaining claims, it held that, "[a]lthough it may be likely that a significant portion, if not all, of Plaintiffs' losses were actually the result of the housing market downturn and not these alleged misstatements," the plaintiffs had still pled a theory of loss causation adequate to survive a motion to dismiss. 742 F. Supp. 2d 382, 414 (S.D.N.Y. 2010).

Here, FHFA is not judicially estopped from presenting its evidence and arguments against defendants' loss causation defense. In this case, FHFA seeks to hold specific parties responsible, under strict liability securities law, for their roles in making misrepresentations in Offering Documents for seven specific Certificates. Arguing that a systemic collapse in housing prices caused a decline in the GSEs' stock price does not conflict with, let alone foreclose, FHFA's claims here or its opposition to defendants' affirmative defense.

There is no dispute that there is a strong correlation between the collapse of housing prices and losses incurred by the GSEs, whose entire existence is devoted to the housing market. The question presented by the loss causation defense in this case, however, when asserted in connection with FHFA's

Securities Act claims, is a different one. The question is whether defendants have shown that the macroeconomic events that contributed to a loss in value of the Certificates were unrelated to defective loans whose quality was misrepresented in the Offering Documents. The various statements by the GSEs and FHFA (in prior lawsuits, public filings, and elsewhere) to which defendants point do not assist them in answering that question.

The losses the GSEs suffered on these seven Certificates certainly coincided with a catastrophic market event. The misrepresentations FHFA has shown were made in defendants' Offering Documents have not been persuasively separated from that event. An event cannot be "intervening" if defendants' misrepresentations, and the underlying facts they concealed, were part and parcel of it.

F. Excluded Evidence

As noted above, two of the categories of evidence listed in defendants' April 1 Offer of Proof are testimony from Niculescu and Cook, and evidence concerning Housing Goals and the GSEs' selection of loans in the Securitizations. Defendants contend that this evidence would have been probative with respect to the loss causation defense.

1. Testimony from Niculescu and Cook

FHFA moved in limine to preclude defendants from using GSE employee witnesses to provide their opinions regarding the issue

of loss causation. In response, as the Offer of Proof recounts, the Court outlined before trial the evidentiary showing that a party would need to make for the admission of lay opinion testimony. See GSE Loss Causation Opinion, 2015 WL 685159, at *4; Order of March 4, 2015, ECF Doc. No. 1358. And at the final pretrial conference, the Court explained that what was critical to the receipt of lay opinion testimony was a showing that the employee had a responsibility for developing an opinion regarding the cause of any loss, and not whether the employee was the person who did the research necessary to inform that opinion.

The Offer of Proof lists the subjects concerning loss causation on which defendants were unsuccessful in questioning Niculescu and Cook because the Court sustained FHFA's objections.[198] But, in many instances, an objection was sustained because defendants failed to lay an adequate foundation for the testimony; in other instances, the objection that was sustained was as to form only. The few objections sustained on the basis of relevance were done so in keeping with the Court's prior rulings, for instance, because the question

[198] Defendants claim that such testimony would have been relevant not only to loss causation, but also to materiality. The previous discussion of materiality, particularly the emphasis on its objective standard, which does not account for the GSEs' idiosyncrasies, forestalls this claim.

did not relate to losses to the PLS side of the GSEs' businesses. In sum, nothing in defendants' Offer of Proof indicates that disallowed testimony was admissible and would have aided defendants' loss causation defense.

2. Housing Goals and GSE Selection of Loans in Securitizations

On December 18, 2014, the Court excluded evidence pertaining to the Housing Goals put in place for the GSEs by federal statute and regulations promulgated by the Department of Housing and Urban Development. Housing Goals Opinion, at *3-4 (S.D.N.Y. Dec. 18, 2014). The Court rejected defendants' contention that Housing Goals are important to the loss causation defense, explaining:

> The question is not whether the GSEs purchased Certificates backed by particularly risky subprime or Alt-A mortgages. Rather, the question is whether defendants' alleged misrepresentations concerning those loans in their Offering Documents caused losses beyond losses that would have occurred had the loans been as represented -- however risky. If defendants represented risky loans accurately, or if the Certificates suffered some or all of their loss in value due to factors other than the purported misrepresentations, then defendants will not be liable for those losses.

Id. at *3.[199]

[199] The Court also rejected defendants' argument that Housing Goals are relevant to materiality, an argument that rested on defendants' view that materiality should be assessed from the perspective of a GSE with broad public missions to support liquidity and affordability in the market. Housing Goals Opinion, 2014 WL 7229361, at *3. For similar reason, on March

Defendants' Offer of Proof maintains that absent this ruling, they would have offered evidence that the GSEs' losses were caused by their desire to invest in PLS to meet the agencies' Housing Goals.[200] But the GSEs' motives in making a particular type of investment and the but-for cause of their loss are not at issue here. Indeed, the Offer of Proof does not explain how any of the excluded Housing Goals evidence is relevant. In addition to being irrelevant to the claims and defenses, receipt of such evidence would run afoul of Fed. R. Evid. 403. Housing Goals Opinion, 2014 WL 7229361, at *3. Accordingly, nothing in defendants' Offer of Proof causes the Court to doubt the soundness of the December 18 decision to exclude such evidence as irrelevant to the loss causation defense.

For all of the reasons given above, defendants ultimately failed to disentangle, as was their burden on the affirmative defense, what they say caused the losses from the very subjects of the material misrepresentations at issue. Defendants set for themselves the challenging task of proving the counterintuitive

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10, 2015, the Court excluded evidence concerning the GSEs' selection of loans in the seven Securitizations.

[200] The Offer of Proof states that, but for the contested rulings, defendants would have examined FHFA expert Barth about the contribution of the GSEs to the housing bubble. But defendants were permitted to examine Barth about that topic and did so.

proposition that more shoddy origination did not produce worse performing loans. It is unsurprising that they failed to carry that burden.

VII. Blue Sky Laws

With respect to four of the seven Securitizations, FHFA has brought suit under the Blue Sky laws of Virginia and the District of Columbia, Va. Code Ann. § 13.1-522(A)(ii); D.C. Code § 31-5606.05(a)(1)(B), (c).[201] FHFA brings claims under the Virginia Blue Sky law against RBS in its capacity as underwriter on the NHELI 2006-FM2, NHELI 2007-1, and NHELI 2007-2 Securitizations. FHFA brings a claim under the D.C. Blue Sky law against NAAC as depositor and Nomura Securities as underwriter on the NAA 2005-AR6 Securitization, and a control person claim against NHA, NCCI as sponsor, and Findlay, Gorin, Graham, and McCarthy.

A. Legal Standards

The Virginia and D.C. Blue Sky laws were modeled on the Uniform Securities Act of 1956, which was in turn modeled on the Securities Act of 1933. FHFA v. HSBC N. Am. Holdings Inc., 988 F. Supp. 2d 363, 370 (S.D.N.Y. 2013). Therefore, it is not

[201] FHFA does not assert Virginia Blue Sky claims with respect to NHELI 2006-FM1 and 2006-HE3, which are time-barred, see FHFA v. HSBC N. Am. Holdings Inc., No. 11cv6189 (DLC), 2014 WL 4276420, at *1 (S.D.N.Y. Aug. 28, 2014), and NHELI 2007-3, whose statutory seller was Lehman Brothers, a nonparty.

surprising that the two Blue Sky laws have similar language, and that courts look to federal law to interpret the similar terms.

The Virginia Blue Sky law provides, in pertinent part, that

> [a]ny person who . . . sells a security by means of an untrue statement of a material fact or any omission to state a material fact necessary in order to make the statement made, in light of the circumstances under which they were made, not misleading (the purchaser not knowing of such untruth or omission), and who shall not sustain the burden of proof that he did not know, and in the exercise of reasonable care could not have known, of such untruth or omission, shall be liable to the person purchasing such security from him who may sue either at law or in equity to recover the consideration paid for such security, together with interest thereon at the annual rate of six percent, costs, and reasonable attorneys' fees, less the amount of any income received on the security, upon the tender of such security, or for the substantial equivalent in damages if he no longer owns the security.

Va. Code Ann. § 13.1-522(A)(ii). The Virginia Blue Sky law has been described as "substantially identical" to the Securities Act. Dunn v. Borta, 369 F.3d 421, 428 (4th Cir. 2004). For that reason, "Virginia courts will look to interpretations of the federal securities laws when called upon to construe the Virginia Securities Act." Id. at 428 n.17 (citation omitted); Andrews v. Browne, 662 S.E.2d 58, 62 (Va. 2008).

The D.C. Blue Sky law provides:

> A person shall be civilly liable to another person who buys a security if the person [o]ffers or sells a security by means of an untrue statement of a material fact or an omission to state a material fact necessary in order to make the statement made, in the light of the circumstances under which made, not misleading,

> the buyer does not know of the untruth or omission and the offeror or seller does not sustain the burden of proof that the offeror or seller did not know, and in the exercise of reasonable care could not have known, of the untruth or omission.
>
> . . .
>
> [A] buyer may sue at law or in equity: To recover the consideration paid for the security, interest at the rate used in the Superior Court of the District of Columbia from the date of payment, costs, and reasonable attorneys' fees, less the amount of any income received on the security, upon the tender of the security and any income received on it . . . .

D.C. Code § 31-5606.05(a)(1)(B), (b)(1)(A). Like the Virginia Blue Sky law, the D.C. Blue Sky law is generally interpreted in accordance with Section 12(a)(2). Hite v. Leeds Weld Equity Partners, IV, LP, 429 F. Supp. 2d 110, 114 (D.D.C. 2006).

The relevant provisions of the Virginia and D.C. Blue Sky laws are essentially the same as those of Section 12(a)(2), and the same duty to prove falsity and materiality is imposed on FHFA. Dunn, 369 F.3d at 428, 433; Hite, 429 F. Supp. 2d at 114. Accordingly, here it will suffice to note the ways in which the legal standards applicable to the Blue Sky claims differ from those applicable to the Securities Act claims.

1. Damages

The Virginia and District of Columbia Blue Sky laws both adopt Section 12(a)(2)'s measure of damages. Va. Code Ann. § 13.1-522(A); D.C. Code § 31-5606.05(b)(1)(A). "The formulae differ only in the applicable interest rate." Riddiough

Opinion, 2015 WL 640875, at *1. Additionally, while Section 12(a)(2) does not expressly provide for recovery of costs and reasonable attorneys' fees, the Blue Sky laws do. Va. Code Ann. § 13.1-522(A); D.C. Code § 31-5606.05(b)(1)(A).

Under the Virginia Blue Sky law, a six-percent interest rate is set by statute. Va. Code Ann. § 13.1-522(A) ("together with interest thereon at the annual rate of six percent"). Similarly, under the D.C. Blue Sky law, the interest rate is the "rate used in the Superior Court of the District of Columbia," D.C. Code § 31-5606.05(b)(1), which is also six percent, id. § 28-3302(a) ("The rate of interest in the District upon . . . things in action in the absence of expressed contract, is 6% per annum.").

2. Loss Causation

"[N]either Virginia's nor the District of Columbia's Blue Sky law provides a loss causation defense to the claims at issue." Ryan Opinion, 2015 WL 629336, at *2.

3. Control Person Liability

FHFA asserts control person liability not only under Section 15 of the Securities Act, but also under a largely analogous provision of the D.C. Blue Sky law[202]:

> A person who directly or indirectly controls a person liable under subsection (a) of this section; a

[202] FHFA does not assert a control person claim under the Virginia Blue Sky law.

> partner, officer, or director of the person liable; a person occupying a similar status or performing similar functions; an employee of the person liable who materially aids in the conduct giving rise to the liability; and a broker-dealer or agent who materially aids in the conduct shall be liable jointly and severally with, and to the same extent as the person liable, unless he[] or she is able to sustain the burden of proof that he or she did not know, and in exercise of reasonable care could not have known, of the existence of the facts by reason of which the liability is alleged to exist. There shall be contribution among the several persons so liable

D.C. Code § 31-5606.05(c). The notable difference is that the D.C. Blue Sky law renders liable (subject to a reasonable care affirmative defense) officers and directors of the person liable without regard to whether they possessed control.

4. Jurisdictional Elements

Under the Virginia and D.C. Blue Sky laws, FHFA bears the burden of demonstrating that the sales of the Certificates occurred in Virginia and D.C., respectively. Freddie Mac is headquartered in McLean, Virginia, and Fannie Mae is headquartered in Washington, D.C.

The Uniform Securities Act, substantially adopted by both jurisdictions, by its own terms applies "to persons who sell or offer to sell when (1) an offer to sell is made in this state, or (2) an offer to buy is made and accepted in this state." Unif. Sec. Act (1956) § 414(a). The Uniform Act goes on to say that, "an offer to sell or to buy is made in this state, whether or not either party is then present in this state, when the

offer (1) originates from this state or (2) is directed by the offeror to this state and received at the place to which it is directed." Id. § 414(c). While the Virginia Blue Sky law does not contain this language, it "is intended to govern those who sell securities within the state [of Virginia] even though incorporated elsewhere and never entering into the state." Lintz v. Carey Manor Ltd., 613 F. Supp. 543, 550 (W.D. Va. 1985).

The D.C. Blue Sky statute itself provides that it "shall apply to a person who sells, or offers to sell, when an offer to sell is made in the District or an offer to purchase is made and accepted in the District." D.C. Code § 31-5608.01(a). Again, like the Uniform Act, the D.C. statute provides that "an offer to sell or to purchase is made in the District, whether or not either person is present in the District, if the offer originates in the District, or is directed by the offeror to a destination in the District and received where it is directed." Id. § 31-5608.01(c).

B. Applying the Blue Sky Laws

Given the substantial similarity between both Blue Sky laws and the relevant provisions of Section 12, the proof of falsity and materiality described above with respect to Section 12 suffices to prove falsity and materiality under the Blue Sky laws. Defendants have not argued to the contrary.

Only the Securitization's direct seller, RBS, is liable under Virginia's Blue Sky law. Under the D.C. Blue Sky law, Nomura Securities and NAAC are liable as direct sellers. Under the D.C. Blue Sky law, Findlay, Graham, Gorin, and McCarthy are liable as control persons due to their positions as officers and directors of NAAC,[203] and NHA and NCCI are liable for the reasons stated above in connection with the discussion of Section 15. Moreover, that which has been said above with respect to the Section 15 affirmative defense applies with equal force to what they could have known with the exercise of reasonable care, thus precluding the affirmative defense under the D.C. Blue Sky law. Any signatory director or officer of NAAC exercising reasonable care under the law and in service of his office could have known of the existence of material misrepresentations in the Offering Documents.

FHFA is awarded damages under the Blue Sky laws in accordance with the damages calculation described above, with the exception that the interest rate applied is the statutorily prescribed 6% interest rate. As of March 31, 2015, those damages are $522,942,248. As double recovery is not permitted, to the extent it seeks Blue Sky damages on a Securitization,

[203] And, for Findlay and Gorin, due to their positions at Nomura Securities as well.

FHFA may not also recover on its Section 12 claims for that Securitization.

1. Place of Sale

Defendants offer a single defense unique to the Blue Sky laws. They contend that FHFA did not carry its burden of proving that the sales or offers of sale were directed to persons within Virginia or the District of Columbia. After all, say defendants, that an employee was generally based at a particular location does not mean that the person was necessarily at that location at the time he or she received or sent an email.

When there is no contrary evidence, the location of one's workplace can adequately prove presence in that location while conducting business that would ordinarily take place there. There is sufficient evidence that the offers of sale were directed at and received by individuals who work in the GSEs' headquarters in Virginia and D.C. and that those offers were accepted there. The facts proven at trial thus suffice to establish the jurisdictional prerequisites for both Blue Sky laws.

a. Three Freddie Mac Transactions

Freddie Mac has its principal place of business in McLean, Virginia. This is where Freddie Mac's PLS traders worked

between 2005 and 2007, including Hackney and Aneiro, who worked on the three Securitizations.

RBS and Nomura sent offering materials and collateral information regarding each of the three Securitizations to Freddie Mac employees using their Freddie Mac email addresses, to a designated Freddie Mac email address for the receipt of documents,[204] or to the Freddie Mac business mail address in McLean. This included, for the NHELI 2006-FM2 Certificate, a term sheet, computer records reflecting approval of purchase, and an RBS confirmation of pre-trade details; for the NHELI 2007-1 Certificate, an email with details of the trade, and an RBS confirmation of pre-trade details; and for the NHELI 2007-2 Certificate, e-mails and a physical mailing confirming investment requirements, as well as an email confirming pre-trade details.

b. Fannie Mae Transaction

Fannie Mae has its principal place of business in Washington, D.C., which is where Fannie Mae's PLS traders worked when Fannie Mae purchased the NAA 2005-AR6 Certificate in 2005. Nomura sent offering materials and collateral information for this Securitization to Fannie Mae PLS traders at their work email addresses. Nomura Securities sent its confirmation for

[204] It appears to have been routine that "final deal documents" were sent to a departmental account, "abs_docs."

the Certificate's purchase to Fannie Mae's physical address in Washington, D.C.

Defendants have offered no affirmative evidence that the offers to sell were not made in and/or accepted in Virginia and D.C. RBS has pointed to the fact that one Freddie Mac trader communicated an agreement to purchase a Certificate from his Blackberry. The implication, apparently, is that the trader must have been using his Blackberry because he was not in the office on that day. It hardly follows from use of a Blackberry that the user is out of the office. Moreover, the Blackberry message was for a Certificate other than the three Freddie Mac Certificates on which FHFA is proceeding under the Blue Sky laws. Finally, defendants point to no evidence that any Freddie Mac traders lived anywhere other than the State of Virginia.

Defendants argued that an adverse inference should be drawn against FHFA because it did not bring the traders or other GSE witnesses to New York to testify to the traders' locations at the time they made the decisions to purchase the Certificates. No adverse inference is appropriate. There is sufficient evidence to find that both the offers to sell and the decisions to buy were made in the relevant jurisdiction, and evidence of either one would be sufficient.

2. The Dormant Commerce Clause

Defendants made a last-minute argument that applying the Blue Sky laws here would violate the Dormant Commerce Clause. The argument fails.

For over a century it has been established that state Blue Sky laws do not violate the Dormant Commerce Clause because they "only regulate[] transactions occurring within the regulating States." Edgar v. MITE Corp., 457 U.S. 624, 641 (1982) (citing Hall v. Geiger-Jones Co., 242 U.S. 539, 557-58 (1917)). Indeed, Congress has recognized the validity of intrastate securities laws through a provision in the Securities Exchange Act "designed to save state blue-sky laws from pre-emption." Edgar, 457 U.S. at 641 (citation omitted).

Defendants acknowledge this line of precedent, but argue that it was overturned sub silentio by Morrison v. Nat'l Austl. Bank Ltd., 561 U.S. 247 (2010), and Absolute Activist Value Master Fund Ltd. v. Ficeto, 677 F.3d 60 (2d Cir. 2012), which they claim "set[] forth a new, federal definition of where a transaction occurs." Morrison and Absolute Activist are the "principal case authority in this Circuit governing the application of § 10(b) and Rule 10b-5 to claims involving extraterritorial conduct." Parkcentral Global Hub Ltd. v. Porsche Auto. Holdings SE, 763 F.3d 198, 209 (2d Cir. 2014) (emphasis added). The Blue Sky claims do not involve

extraterritorial conduct, and a legal standard for cases that do involve such conduct will not be applied.

CONCLUSION

Judgment will issue on the following claims, against the following defendants, as to the following Securitizations:

Securitization	Section 12(a)(2)	Section 15	D.C. Code § 31-5606.05(a)(1)(B)	D.C. Code § 31-5606.05(c)	Va. Code Ann. § 13.1-522(A)(ii)
NAA 2005-AR6	NAAC, Nomura Securities	NHA, NCCI, Individual Defendants	NAAC, Nomura Securities	NHA, NCCI, Findlay, Gorin, Graham, McCarthy	
NHELI 2006-FM1	NHELI, Nomura Securities	NHA, NCCI, Individual Defendants			
NHELI 2006-HE3	NHELI, RBS	NHA, NCCI, Individual Defendants			
NHELI 2006-FM2	NHELI, RBS	NHA, NCCI, Individual Defendants			RBS
NHELI 2007-1	NHELI, RBS	NHA, NCCI, Individual Defendants			RBS
NHELI 2007-2	NHELI, RBS	NHA, NCCI, Individual Defendants			RBS
NHELI 2007-3	NHELI	NHA, NCCI, Individual Defendants			

Eighty-two years ago, in the midst of the Great Depression, Congress passed the Securities Act in the hope that "full disclosure of material information," Hochfelder, 425 U.S. at 195, in Offering Documents would "prevent further exploitation of the public by the sale of unsound . . . securities through misrepresentation." Loftsgaarden, 478 U.S. at 659 (citation omitted). Now, in the aftermath of our great recession, FHFA

seeks to vindicate those principles. For the reasons stated here, it is entitled to judgment.

An order will issue for FHFA to submit a proposed judgment with updated damages figures calculated under the formulae applied in this Opinion. A schedule will also be set for submissions concerning attorneys' fees.

SO ORDERED:

Dated: New York, New York
May 11, 2015

DENISE COTE
United States District Judge