Exhibit 83:

Expert Report of Patricia A. McCoy

Previously filed under seal (Docket No. 130)

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

Beverly Adkins, et al.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	Civil Action No.
	)	1:12-cv-7667-VEC
Morgan Stanley, et al.,	)	
	)	
Defendants.	)	

EXPERT OPINION OF PATRICIA A. McCOY IN SUPPORT OF CLASS CERTIFICATION

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EXPERT OPINION OF PATRICIA A. McCOY IN SUPPORT OF CLASS CERTIFICATION

I, Patricia A. McCoy, respectfully submit this expert report on behalf of named plaintiffs Beverly Adkins, Charmaine Williams, Rebecca Pettway, Rubbie McCoy, William Young, Michigan Legal Services, and the plaintiff class in the above-captioned case.[1]

I. Basis Of Expert Opinion And Compensation

All of the expert opinions expressed in this report are based on my professional experience and research and on materials I have reviewed regarding the parties and the events at issue in this case, which include documents produced by the parties, certain depositions in this case, certain pleadings, my own publications and writings, regulatory documents, and pertinent standards and guidances, including without limitation:

- Selected pleadings in this case and exhibits thereto
- Deposition of Anton Peterson and exhibits thereto
- Deposition of Brad Davis and exhibits thereto
- Deposition of Steven Shapiro and exhibits thereto
- Deposition of Frank Telesca and exhibits thereto
- Deposition of Vanessa Vanacker and exhibits thereto
- Deposition of Eric Kaplan and exhibits thereto
- Deposition of Deborah Goodman and exhibits thereto
- Deposition of Pamela Denise Barrow and exhibits thereto
- Deposition of Andrew Neuberger and exhibits thereto
- Deposition of Craig Phillips and exhibits thereto
- Selected Securities & Exchange Commission filings for Morgan Stanley and New Century Financial Corporation

[1] The author is not related to named plaintiff Rubbie McCoy.

- Selected investor conference and conference call presentations;
- New Century Bankruptcy Examiner's Report and related interview notes, including K&L Gates Memorandum to New Century Team from Robert A. Lawton, Regarding January 9, 2008 Interview of Donald Lange (Jan. 25, 2008) and K&L Gates Memorandum to New Century Team from Jonathan D. Borrowman, Regarding October 5, 2007 Interview of Karl Weiss (Oct. 25, 2007).
- Press reports cited in this case
- Other documents produced in this case
- Selected statutes, regulations, *Federal Register* notices, and statements by government officials
- Government and academic studies cited in this report, and
- My publications and working papers.

My opinions are solely based on my professional experience and research and on materials I have reviewed. I reserve the right to supplement and/or modify my opinions based on future discovery in this case and other new information not now known to me. My expert compensation in this case is $450.00 per hour.

II. Expert Qualifications

I hold the titles of Connecticut Mutual Professor of Law and Director of the Insurance Law Center at the University of Connecticut School of Law, where I specialize in financial services (including banking) regulation. I received my J.D. from the University of California (Berkeley) School of Law and was a Visiting Scholar at the Massachusetts Institute of Technology Department of Economics in 2002-2003. In 2011, I served as the first Assistant Director of Mortgage Markets at the Consumer Financial Protection Bureau in Washington, D.C., where I oversaw all of the Bureau's mortgage policy initiatives. My resume is enclosed with this expert report as Appendix I.

I have extensive expertise in the operations, structure and economics of the residential mortgage originations and servicing and am a recognized national authority on mortgage markets and the mortgage crisis. My experience is based in part on extensive research that I have conducted into residential mortgage industry practices and economics that resulted in authorship of the articles, book chapters, and working papers listed in Section V below.

My mortgage lending expertise also builds on my broader expertise in federal banking and securities regulation, which I acquired in practice, as an academic, and as a federal regulator. In practice, I handled complex banking, securities fraud, and discrimination cases at the law firm of Mayer, Brown, & Platt (now Mayer, Brown, Rowe and Maw, LLP) in Washington, D.C., from 1984 to 1992, where I was a partner and earlier an associate. In that capacity, while representing nationally recognized accounting firms, I reviewed numerous residential loan files and internal lending controls in cases involving failed banks and savings and loan institutions.

In academe, I have published a book analyzing the mortgage crisis, as well as two books on federal banking regulation. In 2000, I wrote a leading treatise on federal bank regulation titled BANKING LAW MANUAL: FEDERAL REGULATION OF FINANCIAL HOLDING COMPANIES, BANKS AND THRIFTS (Lexis 2d ed. 2000 & cum. supps.). In 2002, I served as the editor for and a contributor to FINANCIAL MODERNIZATION AFTER GRAMM-LEACH-BLILEY (Lexis 2002), which dealt with modernization of the financial services industry. Finally, in 2011, I published THE SUBPRIME VIRUS: RECKLESS CREDIT, REGULATORY FAILURE, AND NEXT STEPS (Oxford University Press), together with my coauthor, Kathleen C. Engel.

Starting in 2002, I served on several national boards in which I reviewed and provided advice on mortgage lending practices. From 2002 to 2004, I was a member of the Consumer Advisory Council of the Board of Governors of the Federal Reserve System, where I chaired the Council's Consumer Credit Committee, which studied developments in home mortgage lending and considered whether there was a need to amend the federal statutes and regulations governing that area, including the Truth in Lending Act, the Home Ownership Equity Protection Act, and the Real Estate Settlement Procedures Act. In 2006, I served on the Blue Ribbon Advisory Committee on Risk or Race of the Joint Center on Housing Studies at Harvard University. From 2005 to 2010, I sat on the Research Advisory Council of the Center for Responsible Lending. Both of these advisory committees examined home lending practices. In 2008, I was appointed to the Advisory Committee on the Ford Foundation Subprime Crisis Project, sponsored by the Harvard University Joint Center for Housing Studies. Closer to home, through 2007, I sat on the board of directors and was Treasurer of the Connecticut Fair Housing Center, a non-profit organization that seeks to further equal access to housing and mortgage lending. In 2011, the Harvard University Joint Center on Housing Studies appointed me to the Advisory Committee on Improving Low-Income and Minority Access to Mortgage Credit after the Housing Bust. This past April, the Federal Deposit Insurance Corporation appointed me to its Advisory Council on Economic Inclusion.

I have also testified before Congress, my home state legislature, and the Federal Reserve Board on mortgage lending practices. In 2009, I testified twice before the U.S. Senate and once before the U.S. House of Representatives on mortgage lending reforms.[2] In February 2008, I testified before the Committee of Banks of the Connecticut General Assembly on mortgage lending reform in the subprime industry. In July 2006, I testified in Atlanta, Georgia, before the Federal Reserve Board at hearings on the Home Ownership and Equity Protection Act. I also helped design a national subprime mortgage database under the auspices of the Ford Foundation.

In January 2011, I was appointed as the first Assistant Director for Mortgage Markets of the new Consumer Financial Protection Bureau in Washington, D.C., and I served in that position until the end of 2011. In that role, I established the risk analytics function for home mortgages and was responsible for analyzing the operations, economics, and trends of the residential mortgage

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[2] Hearing before the Subcommittee on Securities, Insurance, and Investment of the U.S. Senate Committee on Banking, Housing, and Urban Affairs at hearing titled "Securitization of Assets: Problems and Solutions," October 7, 2009, Washington, D.C.; Hearing before the Subcommittee on Domestic Monetary Policy and Technology of the U.S. House Committee on Financial Services at hearing titled "Regulatory Restructuring: Safeguarding Consumer Protection and the Role of the Federal Reserve," July 16, 2009, Washington, D.C.; Hearing before the U.S. Senate Committee on Banking, Housing, and Urban Affairs at hearing titled "Consumer Protections in Financial Services: Past Problems, Future Solutions," March 3, 2009, Washington, D.C.

lending and servicing industry in the United States. In addition, as head of the Mortgage Markets Section, I oversaw all of the Bureau's mortgage policy initiatives. Those initiatives included the Dodd-Frank Act's mortgage rulemakings assigned to the Bureau, such as the ability to repay and qualified mortgage rule, simplified mortgage disclosures, mortgage servicing, alternative mortgages, high-cost loans, reverse mortgages, service members' relief, appraisals, escrows, and mortgage data collection under the Home Mortgage Disclosure Act and related statutes. While at the Bureau I also conducted interagency initiatives for the Bureau on mortgage rulemakings, mortgage data, and the joint state-federal mortgage servicing settlement.

III. Background

This class action lawsuit arises out of Defendants' financing and purchase of high-cost, high-risk residential mortgages from New Century Mortgage Company ("New Century") for purposes of securitization. Defendants include the Wall Street investment bank Morgan Stanley and its affiliates Morgan Stanley & Co. LLC, Morgan Stanley ABS Capital I Inc., Morgan Stanley Mortgage Capital Inc., and Morgan Stanley Mortgage Capital Holdings LLC (together, "Morgan Stanley"). The individual plaintiffs are five African-American homeowners in the metropolitan Detroit area who received high-cost and high-risk residential mortgages from New Century. Michigan Legal Services is also a named plaintiff.[3]

The class action complaint alleges that Morgan Stanley, as New Century's leading financier, used its leverage to cause New Century to originate large percentages of mortgages containing highly risky features for sale (defined in the complaint as "combined-risk loans"). These risk characteristics placed borrowers at heightened danger of default and foreclosure. According to plaintiffs, Morgan Stanley's actions in requiring New Century to originate combined-risk loans disproportionately hurt the members of the plaintiff class, who were more likely to receive those dangerous loans than white borrowers, in violation of state and federal fair lending laws.[4] Plaintiffs seek certification of a plaintiff class consisting of all African-American individuals who, between 2004 and 2007, resided in the Detroit area and received combined-risk loans from New Century.[5]

By way of background, New Century's primary business consisted of originating and selling subprime residential mortgages. The company had a rapid rise and an even more rapid demise. New Century was the second largest subprime mortgage originator according to market share by 2006.[6] Thereafter, on February 7, 2007, New Century announced that it had to restate its financial statements for the first three quarters of 2006. On March 2, 2007, New Century disclosed that it would not file its 2006 annual report on time. After the company missed a

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3 Class Action Complaint ¶¶ 1-8, 13-24, 123-220.

4 Class Action Complaint ¶¶ 1, 3, 8, 30-35.

5 Class Action Complaint ¶ 229.

6 Adam B. Ashcraft & Til Schuermann, Understanding the Securitization of Subprime Mortgage Credit 4 tbl. 2 (Fed. Res. Bank of N.Y. Staff Working Paper No. 318, March 2008), available at www.newyorkfed.org/research/staff_reports/sr318.pdf.

margin call, New Century's lenders, including Morgan Stanley, cut off further funding and New Century filed for bankruptcy on April 2, 2007.[7]

IV. Opinion

A. Combined-Risk Loans Presented Heightened Risk Of Default And Foreclosure

Plaintiffs assert that Morgan Stanley structured its relationship with New Century to make sure that New Century provided it with a steady supply of combined-risk home loans. Those loans, which Morgan Stanley purposely requisitioned, had multiple risk factors. Individually, each of those risk factors placed the plaintiffs at heightened risk of default and foreclosure. When combined, those risk factors further magnified the risk of default and foreclosure.

The complaint defines a "Combined-Risk Loan" as a loan that meets the definition of a high-cost loan under the regulations implementing the Home Mortgage Disclosure Act (HMDA) and also contains two or more of specific high-risk terms.[8] During the relevant time period, between 2004 and 2007, under the rules implementing HMDA, residential mortgage originators subject to HMDA's reporting provisions were required to report "the difference between the loan's annual percentage rate (APR) and the yield on Treasury securities having comparable periods of maturity, if that difference is equal to or greater than 3 percentage points for loans secured by a first lien on a dwelling, or equal to or greater than 5 percentage points for loans secured by a subordinate lien on a dwelling."[9] Accordingly, a high-cost first mortgage for purposes of HMDA was one whose APR exceeded the average prime offer rate by at least 3.0 percentage points (or 300 basis points). For a high-cost second mortgage, the APR exceeded the average prime offer rate by at least 5.0 percentage points (or 500 basis points).

In order to be a "Combined-Risk Loan," a high-cost loan as per HMDA must also contain two or more of the following high-risk features: (a) the loan was issued based on the "stated income," rather than the verified income, of the borrower; (b) a debt-to-income ratio of over 55%; (c) a loan-to-value ratio of 90% or more; (d) an adjustable interest rate; (e) an "interest only" amortization feature; (f) a negative amortization feature; (g) a balloon payment feature; and/or (h) a prepayment penalty.[10]

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[7] Final Report of Michael J. Missal, Bankruptcy Court Examiner, In re: New Century TRS Holdings, Inc., Case No. 07-10416, at 1 (D. Del. Bkrtcy., Feb. 29, 2008) (hereafter referred to as "New Century Bankruptcy Examiner's Report").

[8] Class Action Complaint ¶ 34.

[9] *See* Board of Governors of the Federal Reserve System, Home Mortgage Disclosure: Final Rule and Staff Interpretation, 67 Fed. Reg. 43218, 43223 (June 27, 2002), *amending* 12 C.F.R. § 203.4(a). Under the current version of the rule, effective since 2009, a lender is required to report "the difference between the annual percentage rate (APR) and the average prime offer rate for a comparable transaction as of the date the interest is set, if that difference is equal to or greater than 1.5 percentage points for loans secured by a first lien on a dwelling, or equal to or greater than 3.5 percentage points for loans secured by a subordinate lien on a dwelling." 12 C.F.R. § 203.4 (a)(12)(i) (2009). Average prime offer rate is defined as "an annual percentage rate that is derived from average interest rates, points, and other loan pricing terms currently offered to consumers by a representative sample of creditors for mortgage loans that have low-risk pricing characteristics." 12 C.F.R. § 203.4(a)(12)(ii) (2009).

[10] Class Action Complaint ¶ 34.

Each of the individual risk factors in the definition of a "Combined-Risk Loan" increases the default and foreclosure risk to the borrower. When two or more of those risk factors are combined, they further increase the default and foreclosure propensity of the loan significantly.

Higher Interest Rates: Higher interest rates are positively correlated with an increased chance of default and foreclosure.[11] Most of the work in this area has consisted of comparisons of adjustable rate mortgages whose interest rates dropped versus those whose interest rates did not.[12] One study concluded, for example, that a three percentage point drop in the interest rate cut the number of delinquencies, other things being equal, by more than half.[13] Another study concluded that whenever an adjustable rate mortgage adjusted upwards, each increase in the interest rate of one percentage point made it thirty percent more likely that a household would terminate homeownership and return to being renters.[14]

Higher interest rates increase the risk of default and foreclosure because they raise the borrowers' monthly payments, putting added strain on often tight family budgets. This affects every borrower who pays higher rates. Many of those borrowers, moreover, actually qualified for lower rates.[15] Often they ended up paying more because originators steered those borrowers into subprime loans. Steering was particularly rampant in predominantly African-American and

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[11] See, e.g., Roberto G. Quercia, Michael A. Stegman & Walter Davis, *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties and Balloon Payments*, 18 HOUSING POLICY DEBATE 311 (2007).

[12] This methodology holds the borrower's credit risk constant and thus is able to avoid the selection problem that would otherwise arise when lenders charge some borrowers higher interest because they pose a higher risk of default.

[13] Andreas Fuster & Paul S. Willen, Payment Size, Negative Equity, and Mortgage Default 2 (Fed. Res. Bank of New York Staff Report No. 582, August 2013). *Accord* Joseph Tracy & Joshua Wright, Payment Changes and Default Risk: The Impact of Refinancing on Expected Credit Losses, (Fed. Res. Bank of New York Staff Report No. 562, 2012) (lower interest rates improved the delinquency rates of ARM borrowers in the prime market); Jun Zhu, Refinance and Mortgage Default: An Empirical Analysis of the HARP's Impact on Default Rates 35 (Freddie Mac Working Paper, 2012) (refinances that lowered the interest rate substantially reduced subsequent default rates).

[14] *See* Donald R. Haurin & Stuart S. Rosenthal, The Growth Earnings of Low-Income Households and the Sensitivity of Their Homeownership Choices to Economic and Socio-Demographic Shocks 18 (Apr. 2005) (unpublished manuscript, on file with the Fordham Law Review), *available at* http://www.huduser.org/Publications/pdf/EarningsOfLow-IncomeHouseholds.pdf.

[15] *See, e.g.*, Freddie Mac, Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families, ch. 5 & nn.5-6 (1996) (ten to thirty-five percent of subprime borrowers could have qualified for prime-rate loans); Howard Lax et al., *Subprime Lending: An Investigation of Economic Efficiency*, 15 HOUS. POL'Y DEBATE 533, 565 (2004) (finding that "some borrowers end up with subprime loans for reasons other than risk" and calling that finding "disturbing"); Wei Li & Keith S. Ernst, The Best Value in the Subprime Market: State Predatory Lending Reforms 8 (2006) (finding that fourteen percent of subprime borrowers studied between 1998 and 2004 were prime-eligible). Fannie Mae's former President Franklin Raines similarly stated that up to half of all subprime mortgages were eligible for purchase by Fannie Mae under its prime loan guidelines. *See* HUD's Regulation of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), 65 Fed. Reg. 65,044, 65,053 (Oct. 31, 2000); *see also* Darryl E. Getter, *Consumer Credit Risk and Pricing*, 40 J. CONSUMER AFF. 41, 49-50 (2006) (finding that 36.4 percent of households paying the costliest interest rates on home mortgage "were of high credit quality"); Rick Brooks & Ruth Simon, *Subprime Debacle Traps Even Very Credit-Worthy – As Housing Boomed, Industry Pushed Loans To a Broader Market*, WALL STREET JOURNAL, December 3, 2007, at A1 (fifty-five percent of all subprime loans in 2005 went to people with sufficiently high credit scores to qualify for prime loans); Diana B. Henriques & Lowell Bergman, *Profiting from Fine Print with Wall Street's Help*, N.Y. TIMES, Mar. 15, 2000, at A1.

Latino neighborhoods at the height of the subprime boom, as evidenced by the heavy concentration of subprime mortgages in these neighborhoods even after controlling for income and credit scores.[16]

Debt-to-Income Ratios: The debt-to-income or DTI ratio is the ratio of the borrower's monthly debt obligations to his or her monthly income. A number of economic studies have concluded that higher DTI ratios are positively correlated with higher defaults.[17] The reason why is that higher debt-to-income ratios squeeze the average borrower's budget by leaving less money available for other necessities after the monthly loan payment and credit card bills are paid.[18] In addition, stated income underwriting was used during the housing bubble to give investors the appearance of higher borrower incomes and lower DTI ratios.[19]

Plaintiffs' decision to designate a debt-to-income ratio of over 55% as presumptively risky is highly capacious and much higher than federally imposed caps. Traditionally, for instance, the government-sponsored enterprises Fannie Mae and Freddie Mac limited the back-end debt-to-income ratio (which includes the borrower's mortgage obligations and all other consumer debt) to 36%.[20] Meanwhile, the Consumer Financial Protection Bureau adopted a maximum back-end debt-to-income ratio for qualified mortgages of 43% in its 2013 ability-to-repay rule.[21] In the

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16 Christopher Mayer & Karen Pence, Subprime Mortgages: What, Where, and Whom?, at 12 (National Bureau of Economic Research Working Paper No. 14083, June 2008).

17 *See, e.g.*, John Y. Campbell & João F. Cocco, A Model Of Mortgage Default 3 (working paper Oct. 2011) (higher loan-to-income ratios increase the chance of default); Yuliya Demyanyk, *Quick Exits of Subprime Mortgages*, 91 FEDERAL RESERVE BANK OF ST. LOUIS REVIEW 79-93 (2009); Yuliya Demyanyk & Otto Van Hemert, Understanding the Subprime Mortgage Crisis (Working Paper 2008), http://ssrn.com/abstract=1020396; Austin Kelly, *"Skin in the Game": Zero Downpayment Mortgage Default*, 17 J. HOUSING RESEARCH 75, 87 (2008) (measuring effect of front-end DTI); Shane M. Sherlund, The Past, Present, and Future of Subprime Mortgages, 10 & tbl. 5 (Federal Res. Bd. Finance & Econ. Discussion Series Working Paper 2008-63, 2008), http://www.federalreserve.gov/pubs/feds/2008/200863/200863pap.pdf; Consumer Financial Protection Bureau, *Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z): Final rule; official interpretations*, 78 Fed. Reg. 6408, 6526-27 (Jan. 30, 2013).

18 *See, e.g.*, Barrow Depo. 189-90 (high DTI ratios affected ability to repay).

19 Former Comptroller of the Currency John Dugan elaborated on this problem in 2007*:*

> [S]tated income undermines transparency. How can lenders seriously talk about "debt-to-<u>income</u>" ratios, for example, if the denominator of 'income' is really an unknown variable that can be whatever the borrower says it is? Put another way, stated income is a way for lenders . . . to ease debt-to-income ratios without disclosing that fact to investors or regulators – or without disclosing how much easing has taken place. If lenders believe that higher debt-to-income ratios can be prudent, then they should be willing to disclose the actual, higher debt-to-income ratios rather than masking them through stated income loans.

Remarks by John C. Dugan, Comptroller of the Currency, Before the Neighborhood Housing Services of New York, May 23, 2007, at 6-7, available at www.occ.gov (emphasis in original).

20 *See* Consumer Financial Protection Bureau, *Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z): Final rule; official interpretations*, 78 Fed. Reg. 6408, 6505 (Jan. 30, 2013). The 2011 proposed qualified residential mortgage rule also espoused a 36% DTI cap. *See id.* at 6416 (citing Department of the Treasury et al., *Credit Risk Retention: Proposed Rule*, 76 Fed. Reg. 24090 (Apr. 29, 2011)).

21 Consumer Financial Protection Bureau, *Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z): Final rule; official interpretations*, 78 Fed. Reg. 6408, 6526-28 (Jan. 30, 2013). The Bureau adopted the 43% cutoff after conducting an empirical analysis of delinquency rates and noting that the Federal Housing Administration used the same 43% debt-to-income limit for many years as its general boundary for defining affordability. *Id.* at 6505.

preamble to the rule, the Bureau declined to set the cap any higher, noting: "[I]f the qualified mortgage debt-to-income ratio threshold were set above 43 percent, it might sweep in many mortgages in which there was not a sound reason to presume that the creditor had a reasonable belief in the consumer's ability to repay."[22] Finally, the Federal Reserve Board of Governors stated in 2008 that a "borrower whose DTI ratio exceeds 50 percent at consummation . . . will likely have greater difficulty repaying a particular loan, all other things being equal, than a borrower with a lower DTI ratio."[23] These federal thresholds are all more conservative than the 55% threshold advanced by plaintiffs and definitively establish that loans exceeding a debt-to-income ratio of 55% are inherently risky.

Stated Income Documentation: In a stated income loan, the loan application states the borrower's income and the lender underwrites the loan without proof of the borrower's income. Stated income loans were also known as low-documentation or reduced documentation loans.

Stated income and other reduced income underwriting is one of the most important drivers of default on home mortgages.[24] This is because subprime lenders used stated income documentation during the housing bubble to qualify loan applicants who lacked enough income to repay their loans. As several economists observed:[25]

> Dropping the important verification step from the underwriting process opens the mortgage window to large numbers of borrowers who would not qualify ordinarily. Unobservable borrower quality could drop precipitously and investors would be unaware for months or years before worsening performance became significant enough to reveal that a significant change in borrower quality had occurred.

The degree of income exaggeration in stated documentation subprime loans got worse every year from 2005 through 2007.[26] Thus, it comes as no surprise that low-documentation loans substantially raised default rates during the housing bubble.[27]

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22 Consumer Financial Protection Bureau, *Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z): Final rule; official interpretations*, 78 Fed. Reg. 6408, 6528 (Jan. 30, 2013).

23 Federal Reserve System, *Truth in Lending (Part II): Proposed rule, request for public comment*, 73 Fed. Reg. 1672, 1695 (Jan. 9, 2008).

24 *See, e.g.*, Yuliya Demyanyk, *Quick Exits of Subprime Mortgages*, 91 FEDERAL RESERVE BANK OF ST. LOUIS REVIEW 79-93 (2009); Yuliya Demyanyk, Ralph S.J. Koijen & Otto A.C. Van Hemert, Determinants and Consequences of Mortgage Default 11-16 (Working Paper Jan. 2011), http://ssrn.com/abstract=1706844; Michael LaCour-Little & Jing Yang, Taking the Lie Out of Liar Loans: The Effect of Reduced Documentation on the Performance and Pricing of Alt-A and Subprime Mortgages 22-23 (working paper 2013); Roberto Quercia, Michael Stegman & Walter R. Davis, *Residential Mortgage Default: A Review of the Literature*, 3 J. HOUSING RESEARCH 341-379 (2005); Barrow Depo. 197-98; Barrow Depo. Exh. 12, at MS00761254 ("The 100%, Stated Doc are our most risky and most prevalent in default").

25 Charles D. Anderson, Dennis R. Capozza & Robert Van Order, Deconstructing a Mortgage Meltdown: A Methodology for Decomposing Underwriting Quality 22 (May 2009), http://ssrn.com/abstract=1411782. *See also* Barrow Depo. 161-66; Barrow Depo. Exh. 18, at MS02698234.

26 Michael LaCour-Little & Jing Yang, Taking the Lie Out of Liar Loans: The Effect of Reduced Documentation on the Performance and Pricing of Alt-A and Subprime Mortgages 26 & exh. 5 panel B (working paper 2013); *see* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 36-37 (2011).

27 *See, e.g.*, Charles D. Anderson, Dennis R. Capozza & Robert Van Order, Deconstructing a Mortgage Meltdown: A Methodology for Decomposing Underwriting Quality 21 (May 2009), http://ssrn.com/abstract=1411782; Ronel Elul, Nicholas S. Souleles, Souphala Chomsisengphet, Dennis Glennon &

Loan-to-Value Ratios: The loan-to-value or LTV ratio represents the ratio of the amount of the borrower's loan to the value of the collateral. A combined LTV ratio (CLTV) divides the combined total amount of all loans on the property by the property value.

LTV ratios and combined LTV ratios are two of the most powerful predictors of default.[28] This is especially true for LTV ratios over ninety percent, which is the threshold designated by the plaintiffs.[29] In determining LTV ratios, moreover, it is critical that appraisals be sound, because inflated or fraudulent appraisals work to artificially lower LTV ratios.

Borrowers in financial trouble usually do not default if their homes are worth more than their loans because they can retire their mortgages by selling their houses. But as their LTV ratios mount and approach 100%, their ability to pay off their mortgage by selling their house diminishes once transaction costs are taken into account. When LTV ratios exceed 100%, borrowers are "underwater" and owe more on their loans than their homes are worth. At that point, it will be impossible to pay off the mortgage by selling the home. Starting in 2007, virtually no lender was willing to refinance an underwater mortgage. Accordingly, underwater borrowers who experienced large income shocks faced significantly higher chances of going into default during that time period.

Adjustable-Rate Loans: Fixed-rate loans have a fixed interest rate for the term of the loan; adjustable-rate loans tie the interest rate to an underlying index and periodically allow the interest rate to "adjust" or float. On average, adjustable-rate loans have significantly higher default and foreclosure rates than fixed-rate loans.[30]

Robert Hunt, What "Triggers" Mortgage Default?, tbl. 1 (Fed. Res. Bank of Phila. Working Paper No. 10-13, April 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1596707; Christopher Mayer, Karen Pence & Shane M. Sherlund, *The Rise in Mortgage Defaults*, 23 J. ECON. PERSPECTIVES 27, 43-44 (2009).

[28] *See, e.g.*, John Y. Campbell & João F. Cocco, A Model Of Mortgage Default 3 (working paper Oct. 2011); Yuliya Demyanyk, *Quick Exits of Subprime Mortgages*, 91 FEDERAL RESERVE BANK OF ST. LOUIS REVIEW 79-93 (2009); Yuliya Demyanyk, Ralph S.J. Koijen & Otto A.C. Van Hemert, Determinants and Consequences of Mortgage Default 13-15 (Working Paper Jan. 2011), http://ssrn.com/abstract=1706844; Ronel Elul, Nicholas S. Souleles, Souphala Chomsisengphet, Dennis Glennon & Robert Hunt, What "Triggers" Mortgage Default?, 6-7 & tbl. 1 (Fed. Res. Bank of Phila. Working Paper No. 10-13, April 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1596707; C. Foote, Kristopher Gerardi & Paul Willen, Negative equity and foreclosures: theory and evidence (Fed. Res. Bank of Boston Public Pol'y Discussion Paper No. 08-3, 2008); Julapa A. Jagtiani & William W. Lang, Strategic Default on First and Second Lien Mortgages During the Financial Crisis, 16, 21 (Fed. Res. Bank of Philadelphia Working Paper No. 11-3, 2009), http://ssrn.com/abstract=1724947; Christopher Mayer, Karen Pence & Shane M. Sherlund, *The Rise in Mortgage Defaults*, 23 J. ECON. PERSPECTIVES 27, 42-43 (2009); Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed-Rate Mortgages*, 38 REAL EST. ECON. 399, 413-416 (2010); John Quigley & Robert Van Order, *Explicit tests of contingent claims models of mortgage default*, 11 J. REAL EST. FIN. & ECON. 99-117 (1995); Shane M. Sherlund, The Past, Present, and Future of Subprime Mortgages, 9-10 & tbl. 5 (Federal Res. Bd. Finance & Econ. Discussion Series Working Paper 2008-63, 2008), http://www.federalreserve.gov/pubs/feds/2008/200863/200863pap.pdf; U.S. Government Accountability Office, Nonprime Mortgages: Analysis of Loan Performance, Factors Associated with Defaults, and Data Sources, 22 (GAO-10-805, 2010).

[29] John Y. Campbell & João F. Cocco, A Model Of Mortgage Default 3 (working paper Oct. 2011).

[30] *See*, *e.g.*, B. Ambrose, M. LaCour-Little & Z.R. Huszar, *A Note on Hybrid Mortgages*, 33 REAL ESTATE ECONOMICS 765 (2005); Roberto G. Quercia, Michael A. Stegman & Walter Davis, *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties and Balloon*

During the period at issue in this case, the most common type of adjustable-rate mortgage was a hybrid ARM. Hybrid ARMs were New Century's most common loan product[31] and represented about three-fourths of the loans in subprime securitizations from 2004 through 2006.[32] Hybrid ARMs had fixed initial rates that reset into adjustable-rate mortgages in a specified number of years. Often they were called 2/28s or 3/27s; the two numbers referred to the respective lengths (in years) of the fixed-rate and adjustable-rate periods. Because the initial payments on hybrid ARMs were generally lower than on comparable fixed-rate mortgages, lenders used these products to qualify weaker borrowers for loans.[33]

Hybrid ARMs put the interest rate risk on the borrower, with the attendant hidden risk of payment shock – the risk that monthly payments will rise dramatically upon rate reset.[34] During the housing bubble, many subprime hybrid ARMs had initial rate resets of three percentage points, resulting in increased monthly payments of as much as fifty percent.[35] Two leading researchers found that "a one-standard-deviation increase in the size of the payment shock [was] associated with . . . a 300% increase in the probability of defaulting." According to those researchers, that was the interest rate environment that borrowers faced during 2004 through 2006.[36]

When home prices were rising, subprime borrowers usually avoided impending payment shock by refinancing their mortgages or selling their homes. But both options evaporated for borrowers who had little or no equity when housing prices nationally began to slide in the first quarter of 2007. Many hybrid ARM borrowers who faced high rate resets after the housing bubble burst ended up defaulting on their loans.

Interest-Only Loans: Unlike traditional mortgages, interest-only loans did not fully amortize the principal. Instead, borrowers with interest-only mortgages only had to pay interest – not principal – for an initial period ranging from six months to five years. Once the introductory period expired, their payments went up, often substantially. The initial payments on interest-only loans were low compared to those on hybrid ARMs and traditional fixed-rate mortgages, however, making it easier for lenders to qualify marginal borrowers at the low initial rate.[37]

Payments, 18 HOUSING POLICY DEBATE 311 (2007); Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed-Rate Mortgages*, 38 REAL EST. ECON. 399, 402 (2010) (hybrid 2/28 ARMs had higher default rates compared to fixed-rate mortgages).

[31] New Century Financial Corporation at Southern California Investor Conference – Final, Transcript, FD (Fair Disclosure) Wire, August 11, 2006.

[32] *See* FDIC Outlook, *Breaking New Ground in U.S. Mortgage Lending* (Summer 2006), available at www.fdic.gov/bank/analytical/regional/ro20062q/na/2006_summer04.html.

[33] KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 38 (2011).

[34] *See, e.g.*, KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 34 (2011).

[35] *See America's Housing Market: Cracks in the Facade*, THE ECONOMIST (March 22, 2007); Jay Brinkmann, An Examination of Mortgage Foreclosures, Modifications, Repayment Plans and Other Loss Mitigation Activities in the Third Quarter of 2007 (Mortgage Bankers Association, Jan. 2008), 4.

[36] Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed-Rate Mortgages*, 38 REAL EST. ECON. 399, 423 (2010).

[37] *See* THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 111, 158, 423 (2011).

The non-amortizing aspect of interest-only loans came with several risks.[38] First, eventually the loans began to amortize and the borrowers had to start paying principal as well as interest, which could lead to payment shock. Second, the principal payments were higher than with a fully amortizing loan because there were fewer years left to pay off the principal. Third, many loans layered interest-only features on top of ARMs, known as interest-only ARMs. When interest rates were rising, as they were between 2004 and 2006, the adjustable rate on the loan also went up on the reset date.[39] For all of these reasons, interest-only loans originated during the housing bubble had much higher default propensities following recast than comparably seasoned traditional fixed-rate and adjustable-rate loans.[40]

Negative Amortization Loans: In negative amortization loans, the borrower pays no principal and some amount less than the entire interest payment owed every month, at least for an initial period. As a result, instead of retiring principal, the loan is structured so that the borrower's principal grows.[41] Researchers who have studied the question agree that non-amortizing and negative amortization features increase the chance of default.[42]

Balloon Terms: Balloon loans are another type of non-fully amortizing loan and were similarly used to qualify cash-strapped borrowers during the subprime boom due to their lower payments. In a balloon loan, the borrower does not fully pay off principal by the end of the loan. Instead, when the term ends, the borrower owes a large lump payment, known as a balloon payment. Borrowers who cannot refinance in that circumstance will face enormous payment shock on the loans. Balloon loans are also associated with a higher risk of default and foreclosure.[43]

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[38] KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 34 (2011); Patricia A. McCoy, *Rethinking Disclosure in a World of Risk-Based Pricing*, 44 HARV. J. LEGIS. 123, 143-44 (2007).

[39] *See, e.g.*, CHRISTOPHER L. CAGAN, FIRST AM. REAL ESTATE SOLUTIONS, MORTGAGE PAYMENT RESET: THE RUMOR AND THE REALITY 17, 25 (2006), *available at* http://www.firstamres.com/pdf/MPR_White_Paper_FINAL.pdf (discussing the burden of higher payments when teaser rates reset); MICHAEL FRATANTONI ET AL., MORTGAGE BANKERS ASS'N, HOUSING AND MORTGAGE MARKETS: AN ANALYSIS 55 (2005), *available at* http://www.mortgagebankers.org/files/Bulletin/InternalResource/38151_MBA_Monograph_No1.pdf (describing I-O loan repayment); Jody Shenn, *ARM Lenders Prep for Wave Of Teaser-Rate Expirations*, AM. BANKER, Jan. 18, 2006, at 1, 11 (discussing the anticipated consequences of the first significant wave of ARM payment shock); Ruth Simon, *Home Rundown: A Look at the Pros and Cons of Different Types of Mortgages--and Which One May Be the Best for You Now*, WALL ST. J., Jan. 16, 2006, at R4 (informing readers about the drawbacks of I-O loans); Barrow Depo. 198.

[40] John Y. Campbell & João F. Cocco, A Model Of Mortgage Default & fig. 6 (working paper Oct. 2011).

[41] *See, e.g.*, KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 34 (2011) (discussing the negative amortization feature in pay-option ARMs.

[42] *See, e.g.*, Neil Bhutta, Jane Dokko & Hui Shan, Consumer Ruthlessness and Strategic Default During the 2007-2009 Housing Bust 22-23 & tbl. 5 & fig. 7 (Working Paper June 2011); John Y. Campbell & João F. Cocco, A Model Of Mortgage Default 19, 34 (working paper Oct. 2011); Ronel Elul, Nicholas S. Souleles, Souphala Chomsisengphet, Dennis Glennon & Robert Hunt, What "Triggers" Mortgage Default?, tbl. 1 (Fed. Res. Bank of Phila. Working Paper No. 10-13, April 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1596707; Shane M. Sherlund, The Past, Present, and Future of Subprime Mortgages, 10 & tbl. 5 (Federal Res. Bd. Finance & Econ. Discussion Series Working Paper 2008-63, 2008), http://www.federalreserve.gov/pubs/feds/2008/200863/200863pap.pdf; Mark Zandi & Christian de Ritis, *The Skinny on Skin in the Game*, MOODY'S ANALYTICS (March 8, 2011); cf. Christopher Mayer, Karen Pence & Shane M. Sherlund, *The Rise in Mortgage Defaults*, 23 J. ECON. PERSPECTIVES 27, 38-40 (2009).

[43] Roberto G. Quercia, Michael A. Stegman & Walter Davis, *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties and Balloon Payments*, 18 HOUSING POLICY DEBATE 311 (2007).

Prepayment Penalties: During the housing bubble, prepayment penalties were found in the vast majority of subprime loans. Those penalties typically required borrowers to pay six months' worth of interest if they refinanced within a stated period, commonly one to five years. Wall Street firms like Morgan Stanley usually demanded these stiff prepayment penalties in subprime mortgage-backed securities such as those involved in this case. This was because borrowers with subprime loans had incentives to quickly refinance and thereby terminate their mortgages, either to lower their interest rates or to avoid a high impending rate reset on an adjustable-rate mortgage. Because investment banks feared the loss of the lucrative cash flow from prepayment of high-priced subprime mortgages, they exacted a price in terms of hefty prepayment fees in order to lock borrowers into loans. In the wake of the financial crisis, it became well established that large prepayment penalties were associated with significantly larger rates of default and foreclosure.[44]

Combined-Risk Features: Each of the risk factors just discussed individually raises a borrower's default risk significantly. To make matters worse, New Century and other subprime lenders increasingly made loans that layered these risk factors on top of one another during the housing bubble.[45] In fact, a senior Morgan Stanley due diligence supervisor, Pamela Barrow, complained that New Century's list of layered risk loans "read[] like a trash novel. High cost, non arms-length, no income, apparent origination issues."[46]

This practice – known as risk layering – boosted the already high risk of default even higher than the sum of its part.[47] As Chart 1 shows, layered risks were the single biggest cause of the high default rates in subprime mortgages from January 2006 through at least January 2009.

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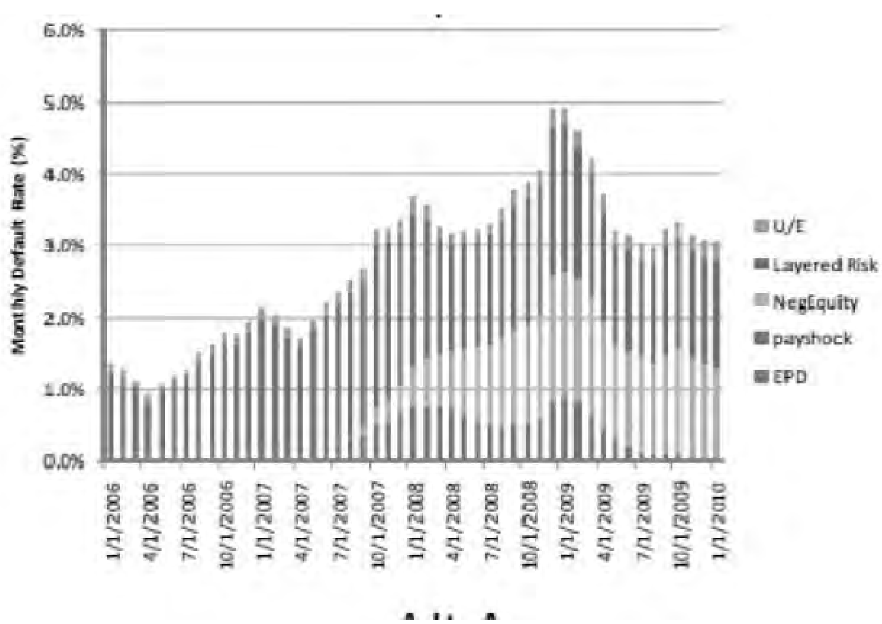
44 M.A. Danis & Anthony Pennington-Cross, *The Delinquency of Subprime Mortgages*, 60 J. ECONOMICS AND BUSINESS 67 (2008); Yuliya Demyanyk & Otto Van Hemert, Understanding the Subprime Mortgage Crisis (working paper 2008); Roberto G. Quercia, Michael A. Stegman & Walter Davis, *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties and Balloon Payments*, 18 HOUSING POLICY DEBATE 311 (2007); Morgan J. Rose, *Predatory Lending Practices and Subprime Foreclosures: Distinguishing Impacts by Loan Category*, 60 J. ECONOMICS AND BUSINESS 13 (2008); Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed-Rate Mortgages*, 38 REAL EST. ECON. 399 (2010). *See also* Morgan J. Rose, Origination Channel, Prepayment Penalties, and Default (working paper June 2011) (non-bank-originated subprime mortgages with prepayment penalties have a higher probability of default than bank-originated subprime mortgages with those same penalties).

45 *See, e.g.*, New Century Bankruptcy Examiner's Report at 128-31 (documenting growth in risk layering by New Century); Amherst Securities Group LP, *The Coming Crisis in Credit Availability*, AMHERST MORTGAGE INSIGHT 3, exh. 2 (demonstrating growth in layered risk factors in the private-label market).

46 Barrow Depo. Exh. 20, at MS01255917.

47 *See* Shirish Chinchalkar & Roger M. Stein, Comparing loan-level and pool-level mortgage portfolio analysis 20 (Moody's Research Labs 2010) ("[i]n the mortgage setting, research suggests that the relationship between, e.g., default probability and loan factors is non-linear, and in some cases highly so . . ."); Clifford V. Rossi, Anatomy of Risk Management Practices in the Mortgage Industry: Lessons for the Future 34 (Research Institute for Housing America 2010) (in an option adjustable-rate mortgage, "[t]he combination of reduced FICO together with a simultaneous second lien, a higher loan amount and stated income, stated asset documentation presents incremental default risk beyond the individual risk factors"); KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 36-37 (2011); *see also id.* at 35 fig. 3.5; Shane M. Sherlund, Mortgage Defaults 2-3 & fig. 2 (working paper 2010) (a report prepared by Amherst Securities for the Securities & Exchange Commission concluded that "[n]egative equity and the layering of risk are the largest components of default across mortgage products").

Chart 1: **Subprime Loans: Components of Mortgage Default**[48]



Source: Shane M. Sherlund, Mortgage Defaults 3 & fig. 2 (working paper 2010).

Cost to borrower is a major driver of default risk, particularly when combined with other high-risk features. From 2004 through 2006, it was increasingly common for lenders to combine subprime pricing (*i.e.*, interest rates consistent with the reporting treatment of a high-cost first-lien mortgage for purposes of HMDA) with combined loan-to-value ratios of greater or equal to ninety percent and low- or no-documentation underwriting. That particular combination of risk factors went from almost zero in 2001 to almost 20% of subprime originations by year-end 2006.[49] Loans with these three risk factors experienced an especially sharp increase in defaults compared to other loans, indicating that loans with "incomplete documentation were particularly prone to default."[50]

Another toxic combination involved mixing high debt-to-income (loan-to-income) ratios with high loan-to-value ratios. According to a leading study, when these factors were combined,

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[48] In Chart 1, in the legend to the right, "U/E" stands for unemployment, "NegEquity" refers to a negative equity position (in which homeowners owe more on their mortgages than their houses are worth), "payshock" refers to payment shock (the risk that a borrower's monthly payment will suddenly increase when the mortgage rate resets or recasts), and "EPD" refers to early payment defaults (in which borrowers make no more than two mortgage payments total and may make no payments at all). Shane M. Sherlund, Mortgage Defaults 2 (working paper 2010).

[49] Kristopher Gerardi, Andreas Lehnert, Shane M. Sherlund & Paul Willen, *Making Sense of the Subprime Crisis*, BROOKINGS PAPERS ON ECONOMIC ACTIVITY 69, 81, 84-83 (2008).

[50] Kristopher Gerardi, Andreas Lehnert, Shane M. Sherlund & Paul Willen, *Making Sense of the Subprime Crisis*, BROOKINGS PAPERS ON ECONOMIC ACTIVITY 69, 88-90, 93, tbl. 5 & fig. 6 (2008). This effect was even worse in 2005 and 2006 than in previous years. *Accord* DBRS, U.S. RMBS Rating Methodology Update 7 & chart 3 (Jan 2008); Fitch Ratings, *Subprime Collateral Trends and Early Payment Defaults* (2007) (the added risk from the higher leverage and stated income feature drove up default rates for subprime purchase loans).

"default probabilities accordingly increase[d]."[51] The combination of these two risk factors was noxious across the board, including in adjustable-rate mortgages, and was especially dangerous when found in interest-only mortgages.[52]

Recently, researchers examined the default propensities of a dataset of non-subprime mortgage loans that combined reduced documentation underwriting with adjustable rates and negative amortization. That combination of features significantly boosted default rates compared to reduced documentation traditional ARMs.[53] The researchers also found that the dangerous effect of low documentation practices on loan default rapidly increased in 2005 and 2006. In their view, that "[i]ndicated increasing risk associated with low-documentation loans leading up to the onset of the financial crisis."[54]

Finally, making adjustable-rate loans with high loan-to-value ratios to borrowers with low credit scores was a recipe for heightened defaults during the period at issue in this case. In the private-label market in which Morgan Stanley and New Century operated, adjustable-rate mortgages with loan-to-value ratios of over 90% to subprime borrowers had higher default rates in 2004 through 2007 than fixed-rate mortgages with those same LTV and FICO score profiles.[55]

In sum, layered-risk loans were the loans most likely to land people in foreclosure after the housing bubble burst. Plaintiffs' definition of combined-risk loans is a useful and accurate proxy for the type of layered-risk loans associated with high rates of default and foreclosure.

B. During the Housing Bubble, Morgan Stanley Staked Its Growth On Mortgage-Backed Securitization And Needed A Continuous Supply Of Combined-Risk New Century Loans To Sustain And Expand That Growth

During the housing bubble, the real impetus for the breakdown in mortgage lending standards was Wall Street's quenchless appetite for high-priced, combined-risk loans for use in residential mortgage-backed securitization.[56] Morgan Stanley was one of the leading issuers of residential mortgage-backed securities during that period and ranked number three by 2007.[57] Because subprime mortgages formed the raw material for its securitization machine, Morgan Stanley

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[51] John Y. Campbell & João F. Cocco, A Model Of Mortgage Default 3, 21-22 & fig. 4 (working paper Oct. 2011).

[52] *Id*. at 24-27 & tbl. 3.

[53] Michael LaCour-Little & Jing Yang, Taking the Lie Out of Liar Loans: The Effect of Reduced Documentation on the Performance and Pricing of Alt-A and Subprime Mortgages 24 & exh. 4 Panel B (2013)

[54] *Id*. at 24-25 & exh. 4 panel C.

[55] Jason M. Thomas, Credit Risk and Return Predictability in Corporate and Residential Finance 73 tbl. 2.2, panel A (2012) (defining subprime borrowers as ones with Fair Isaac (FICO) credit scores of less than 660).

[56] Drawing on his experience as a former derivatives trader, Frank Partnoy wrote: "The driving force behind the explosion of subprime mortgage lending in the U.S. was neither lenders nor borrowers. It was the securitizers of CDOs [collateralized debt obligations]. They were the ones supplying the cocaine. The lenders and borrowers were just mice pushing the button." FRANK PARTNOY, F.I.A.S.C.O.: BLOOD IN THE WATER ON WALL STREET 263 (W.W. Norton & Co., 2009). Subprime CDOs were securities consisting of subprime RMBS and backed by subprime mortgages. *See* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 51-53 (2011).

[57] Neil Fligstein & Adam Goldstein, *The Anatomy of the Mortgage Securitization Crisis*, MARKETS ON TRIAL: THE ECONOMIC SOCIOLOGY OF THE U.S., at 29, 43 & tbl. 2 (2010).

needed a constant supply of combined-risk mortgages from New Century and other subprime lenders in order to produce and expand its profits from its securitization operations.

Residential mortgage-backed securities (RMBS) proceeded from a simple premise: turn monthly payments from pools of mortgages into bonds and back them by collateral in the form of the mortgages. Most often during the housing bubble, these securities were divided into "tranches," which resembled the layers in a layer cake. One deal could have over twenty tranches. The top layer – usually known as the AAA tranche for the top rating given to it by the rating agencies – had the lowest default risk, paid the lowest interest rate to investors, and was paid off first. The bottom layer – known as the unrated tranche or the residual – paid the highest interest rate and was the first to absorb losses if any of the mortgages defaulted.[58]

The RMBS market took off shortly after the new millennium was ushered in. Following 9/11, the dot-com crisis, and Enron's implosion in 2001, the public offering market dried up and mortgage-backed securitization and related services became huge profit centers.[59] On Wall Street, the top independent U.S. investment banks – Morgan Stanley, Lehman Brothers, Bear Stearns, Merrill Lynch, J.P. Morgan, and Goldman Sachs – underwrote numerous private-label subprime securitizations of the type at issue in this case.[60] That business became so lucrative that Morgan Stanley's chief executive officer received over $40 million in bonuses in 2006.[61]

The sale of private-label RMBS by Wall Street expanded rapidly after 2001 due to investor demand.[62] RMBS investors came from all over the world, ranging from small cities in Norway to large Chinese banks. University endowments, pension funds, insurance companies, banks, money market funds, mutual funds, and municipalities had investment grade subprime RMBS in their portfolios. More aggressive investors, like hedge funds, bought the riskier tranches of subprime RMBS with their even higher yields.[63]

Investors flocked to RMBS for multiple reasons during the housing bubble. Returns on traditional bonds were depressed during that period, causing investors to hunt for yield. Subprime RMBS offered higher yields than conventional government and corporate bonds.[64] In addition, the rating agencies portrayed the top-rated subprime bonds – ranging from AAA down

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58 *See* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 47 (2011).

59 THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 43, 56, 59-60, 102 (2011).

60 THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 56 (2011); *Bookrunners of US MBS*, ASSET-BACKED ALERT (statistical tables available by year at ABAlert.com).

61 Jenny Anderson, *Goldman Chief Gets Record $53.4 Million Bonus*, N.Y. TIMES, December 20, 2006.

62 New Century Bankruptcy Examiner's Report at 31. Indeed, U.S. issuance of private-label RMBS rose every year, from $149 billion in 2001 to $687 billion in 2006, before declining in 2007 and then collapsing. SIFMA, U.S. Mortgage-Related Securities Issuance and Outstanding (excel spreadsheet), available at http://www.sifma.org/research/statistics.aspx.

63 THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 43, 71-72, 115-17 (2011); KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 58-59, 80 (2011)..

64 THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 85, 102, 104, 115-17 (2011).

to A – as having negligible default risk. Overseas investors considered other high-yield options, such as bonds issued by their own countries, substantially riskier.[65]

During this period, investors who were looking for highly-rated securities had very few options. For example, "only five nonfinancial companies and a few sovereigns had AAA ratings as of 2007."[66] In contrast, most offerings of mortgage-backed securities provided a tranche with a AAA rating.[67] State and federal laws also spurred demand among investors for investment grade[68] mortgage-backed securities. Insurance companies, pension plans, money market funds and banks were all subject to laws restricting their bond holdings to investment grade debt. Institutional investors who wanted to expand beyond cash and corporate bonds consequently turned to highly-rated RMBS.[69]

Post-2001, Morgan Stanley and its Wall Street counterparts geared up their securitization machines to meet the groundswell of investor demand for private-label subprime RMBS. By 2007, the top four securitizers of private-label subprime RMBS were Morgan Stanley, Lehman Brothers, Merrill Lynch, and Countrywide.[70] To create mortgage-backed securities, all four of these securitizers had a voracious need for newly originated loans. As the *Wall Street Journal* noted, "[w]ithout a production-line of mortgages, the inventory for all those fee-paying securities would dry up."[71]

During the housing bubble, subprime RMBS became one of the central profit drivers for Wall Street firms, including Morgan Stanley, as investors clamored for those bonds. The more loans they securitized, the higher the profits. Similarly, the more those securitizations contained the kind of loans with risk factors associated with greater cash flow, the higher the profits. *See* Section IV.D.1 *infra.*

Consistent with this general incentive structure, Morgan Stanley booked those profits up front, at the time of securitization.[72] Booking the profits up front allowed Morgan Stanley to recognize the earnings immediately in that quarter's earnings statement. Furthermore, the more loans that Morgan Stanley securitized in a given quarter – and the more those loans contained the type of

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65 David Cho, *Pressure at Mortgage Firm Led To Mass Approval of Bad Loans*, THE WASHINGTON POST, May 7, 2007; *see* THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 102, 104 (2011).

66 Efraim Benmelech & Jennifer Dlugosz, The Alchemy of CDO Credit Ratings 20 (Working Paper No. 14878, National Bureau of Economic Research, April 2009).

67 One or more of the three big ratings agencies, Standard & Poor's (S&P), Moody's, and Fitch, rated each tranche of an offering of RMBS for the credit risk associated with that tranche (in other words, the likelihood of default). Standard & Poor's highest rating was a AAA and its next highest rating was an AA. The middle, mezzanine tranches were ranked A to BBB. Lower tranches received ratings of BB or lower, while the residual was unrated. *See* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 47 (2011).

68 Investment grade tranches were defined under S&P's rating system as tranches that were rated anywhere from a AAA down to a BBB. Any tranche that was rated BB or lower was below investment grade. *See* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 47 (2011).

69 *See* KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 58-59 (2011).

70 Neil Fligstein & Adam Goldstein, *The Anatomy of the Mortgage Securitization Crisis*, MARKETS ON TRIAL: THE ECONOMIC SOCIOLOGY OF THE U.S., at 29, 43 & tbl. 2 (2010).

71 Dennis K. Berman, *Why Street Bankers Get Away with Repeating Old Mistake*, THE WALL STREET JOURNAL, November 6, 2007.

72 Vanacker Depo. 200, 204, 208, 227-28.

risk characteristics that maximized cash flow – the higher reported earnings would be. Since the compensation of Morgan Stanley's managers was based on the overall performance of the firm and its units,[73] higher quarterly earnings rewarded them handsomely in the form of higher pay and bonuses.

This business model resulted in perverse financial incentives at Morgan Stanley, to the detriment of the named plaintiffs and the class. Morgan Stanley's quest for increasingly higher volumes of securitizations required expanding mortgage lending to borrowers who could not repay.[74] Similarly, the emphasis on maximizing cash flow made Morgan Stanley demand as many loans as possible with specific risk features – most notably higher interest rates, adjustable-rate terms and prepayment penalties – in New Century loan pools.[75] Finally, Morgan Stanley's ability to immediately book its profits from securitizing combined-risk New Century loans reduced its incentives to care about the credit quality of those loans.

In a study for the Mortgage Bankers of America, Clifford Rossi explained how securitization drove the demand for loans with layered risks:[76]

> Fueling the movement toward greater risk layering was the affordability problem. As reported by the National Association of Realtors, the trend in the Housing Affordability Index leading up to the crisis had steadily declined, suggesting that the median income borrower was not able to keep pace with the costs of homeownership over time unless the latter part of 2006.
>
> As investor appetite for mortgage securities rose through this period, and as resulting product offerings took various forms, these market changes artificially boosted home prices, further putting pressure on lenders to find product combinations that could help borrowers get into increasingly costly homes.

As Rossi observed, Wall Street's insatiable demand for high-priced loans caused lenders to cut corners to qualify borrowers however they could.

Because Morgan Stanley staked its earnings on its RMBS activities, it had much to lose from buying safer, less lucrative loans. Assessing the actual amount that Morgan Stanley earned from its activities with New Century is beyond the scope of this report. However, we can get a qualitative sense of the magnitude of those revenues from a variety of sources.

First, Morgan Stanley's quarterly earnings releases showed that Fixed Income Sales & Trading – which encompassed Morgan Stanley's residential mortgage securitization activities – was the single biggest force propelling Morgan Stanley's profits for the period in question. In fact, in eleven out of the thirteen quarters from January 1, 2004 through March 31, 2007, the earnings for Fixed Income Sales & Trading surpassed the earnings for Morgan Stanley as a whole. *See*

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[73] Neuberger Depo. 84-85; Barrow Depo.49-51.

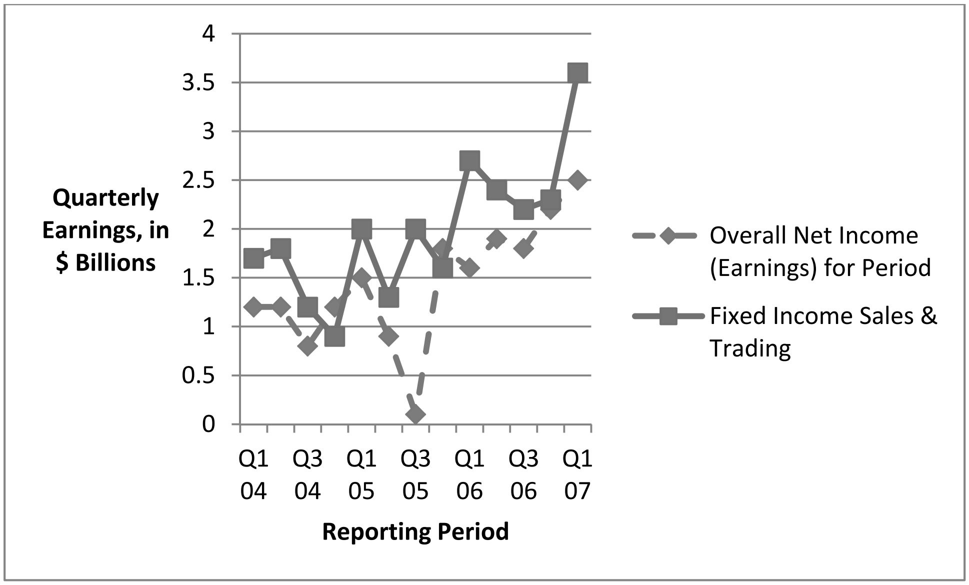
[74] *See* Section IV.C.1 *infra*.

[75] *See* Section IV.D.1 *infra*.

[76] Clifford V. Rossi, Anatomy of Risk Management Practices in the Mortgage Industry: Lessons for the Future 36 (Research Institute for Housing America 2010).

Chart 2. Virtually every quarter during that period, the earnings reports singled out securitized products as a driver of Fixed Income's profits. By inference, then, a substantial part of Morgan Stanley's profits during the housing bubble came from its securitization activities.

Chart 2 Morgan Stanley's Quarterly Earnings (in $ Billions), First Quarter 2004 Through First Quarter 2007

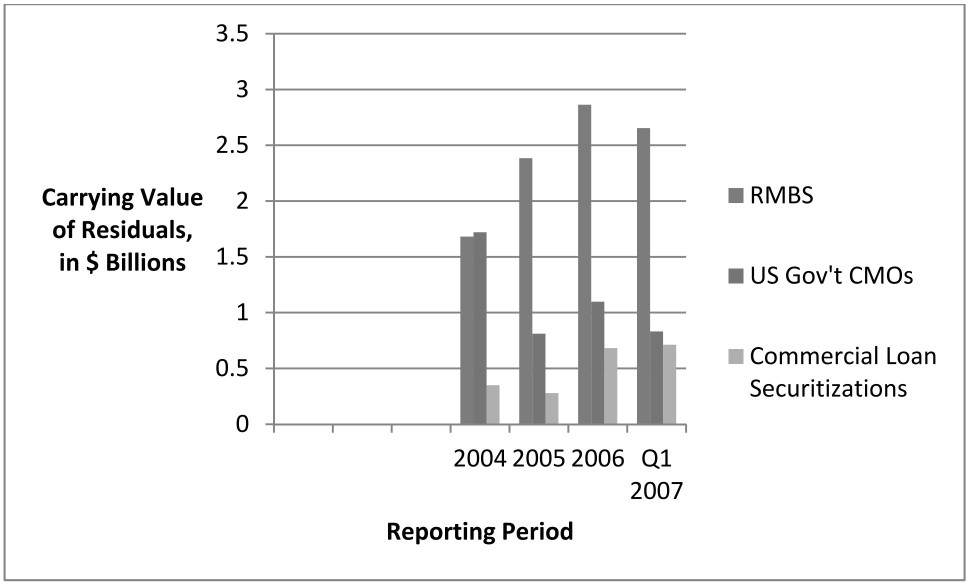


Source: Morgan Stanley Quarterly Earnings Releases

Second, RMBS were responsible for the lion's share of Morgan Stanley's profits from securitization activities during the period in question. Morgan Stanley's 30(b)(6) witness, Vanessa Vanacker, testified that residuals were the leading source of Morgan Stanley's profits from its securitization activities. [77] Chart 3 shows that Morgan Stanley's residuals on RMBS dwarfed its other types of residuals (namely, those on agency-issued collateralized mortgage obligations and commercial lending securitization) from 2005 through first quarter 2007. Consequently, it is fair to assume that RMBS provided the leading source of Morgan Stanley's securitization profits, at least starting in 2005.

[77] Vanacker Depo. 200, 204-05, 208, 227-28.

Chart 3 Fair Value of Morgan Stanley's Mortgage Residuals (in $ Billions)



Source: Morgan Stanley 10-Ks and 1st Quarter 2007 10-Q

Finally, the securitization of New Century loans formed a significant portion of Morgan Stanley's RMBS profits. An internal Morgan Stanley document cited New Century as "one of SPG's most profitable accounts."[78] This is not surprising given the size of the New Century account. During the relevant period, New Century was one of the two "biggest names in" Morgan Stanley's "residual book."[79] This flowed directly from the fact that New Century was Morgan Stanley's single biggest seller of subprime whole loans.[80]

For all of these reasons, New Century was a "key strategic relationship" for Morgan Stanley's Securitized Products Group.[81] The New Century relationship was so vital to Morgan Stanley that it was "the focus of senior management at Morgan Stanley, who [was] committed to making sure that we have the balance sheet and capital to meet New Century's liquidity needs."[82] Indeed, Morgan Stanley's own managers stated in an internal document that the firm "allocate[d] the majority of its balance sheet to meet New Century's whole loan and warehouse liquidity needs."[83]

78 Shapiro Depo. Exh. 6 at MS01791975. *See also* Goodman Depo. Exh. 19 ("New Century has been the most important client for all of SPG in the subprime space. We are their biggest lender and biggest buyer of loans for over 3 years running"). "SPG" referred to Morgan Stanley's Securitized Products Group. Shapiro Depo. Exh. 6 at MS01791975.

79 Vanacker Depo. 198; Vanacker Depo. Exh. 23.

80 Telesca Depo. 137, 172; *see also* Peterson Depo. 257; Kaplan Depo. Exh. 10, at MS00834838; Kaplan Depo. Exh. 11, at MS01260042.

81 Shapiro Depo. Exh. 6 at MS01791975.

82 Shapiro Depo. Exh. 8 at MS 00834838; Shapiro Depo. 164.

83 Shapiro Depo. Exh. 8 at MS 00834838.

To assure a constant supply of subprime loans for securitization, Morgan Stanley and other securitizers bought pools of whole loans from subprime lenders such as New Century.[84] In the process, Morgan Stanley used warehouse lending as a type of golden handcuffs to ensure there were always enough loans in Morgan Stanley's pipeline to securitize.[85] Nonbank mortgage originators such as New Century depended on these enormous warehouse lines of credit to fund the loans that they made. In fact, New Century relied so heavily on warehouse loans that it had approximately $8.5 billion in warehouse lines from Morgan Stanley and other Wall Street firms at the end of third quarter 2006.[86] As Section IV.C.2 *infra* will discuss in further detail, that gave Morgan Stanley, as New Century's top warehouse lender, sway over New Century for the right to purchase the loans.

Finally, because maximizing revenues was crucial to its RMBS profit center, Morgan Stanley dictated the terms of the subprime loans that it bought. As Section IV.D.1 *infra* will discuss in further detail, certain risk factors generated higher cash flow, so Morgan Stanley imposed bid stipulations to maximize those risk characteristics in the pools that it purchased. This was not only true for traditional "live" pools (containing loans that had already been originated), but also for "forward settle" deals, in which Morgan Stanley agreed to buy loans from New Century, subject to bid stipulations, before the loans were made. In these stipulations, Morgan Stanley dictated the combination of risk factors it wanted in the loan pools awaiting creation. Consequently, Morgan Stanley orchestrated New Century's subprime lending from behind the scenes and defined the terms of those combined-risk loans.

C. Morgan Stanley Exerted Singular Influence Over New Century Because New Century's Economic Incentives Were Driven By Wall Street Demand

1. New Century's Dependence On The Secondary Market

As a publicly held company, New Century faced expectations of continued growth from its shareholders. Its profits were largely based on gains on sale from the mortgages it originated.[87] Accordingly, New Century needed funding to make the mortgages that generated its profits. It did not have a captive source of deposits, however, with which to finance those mortgages.[88] Consequently, New Century could not conduct and expand the mortgage originations that were

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[84] Jennifer E. Bethel, Allan Ferrell & Gang Hu, Law and Economic Issues in Subprime Litigation 73 (Harvard Law School Discussion Paper No. 612, March 2008).

[85] *See* Neuberger Depo. 51, 139-41, 144; Neuberger Depo. Exh. 3, at MS00834911; Neuberger Depo. Exh. 13, at MS02326743 (discussing New Century's latest request for a warehouse line increase in terms of "the critical importance of New Century to SPG's principal business", *i.e.*, the whole loan purchase and securitization business); Neuberger Depo. Exh. 16; Neuberger Depo. Exh. 17, at 5 (New Century considered whether a bank provided it with a warehouse line when deciding to sell whole loans to that bank).

[86] New Century Bankruptcy Examiner's Report at 62.

[87] *See, e.g.*, New Century Financial Corp. 2004 10-K, at 69 ("During 2003 and 2004, we sold between 75% to 80% of our loans through whole loan sales, providing the cash and capital to support the remainder that we added to our balance sheet"); id. at 71 ("Historically, one of major components of revenue has been the recognition of gain on sale of our loans through whole loan sales . . ."); New Century Bankruptcy Examiner's Report at 118.

[88] THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 113 (2011).

essential to its growth without continual warehouse funding and whole loan purchases by capital markets financiers. Of these, Morgan Stanley was New Century's most important funding source. Because New Century depended on Morgan Stanley and other banks for financial survival, New Century had strong incentives to provide the volume and risk profile of mortgages that investment banks needed to feed their securitization machines.

New Century acknowledged that it sought to maximize its gains from whole loan sales by originating loans that had the types of risk characteristics for which institutional buyers, especially Morgan Stanley, were willing to pay more.[89] The company's Chief Financial Officer, Patti Dodge, stated in a conference call with investors that its major warehouse lenders dictated the risk features of New Century's loans:

> our underwriting . . . lending criteria are very much driven by the secondary market buyers of the loans, because our financing outlet is a buyer wanting to buy those loans. And in fact the same people who buy our loans generally finance them; they provide us our short-term warehouse line. So we absolutely have to answer to them in terms of that criteria.
>
> So if the secondary market starts to say – gee, we don't like this particular loan product, we think you should limit it to this FICO score, we have to do that because we don't have another outlet. So very much driven by secondary market**.** [90]

In another investor conference call, New Century touted its ability to conform its product mix to Wall Street demand: "[W]hen we see a secondary market environment where a particular product is selling stronger than it traditionally does then we can immediately start to grow that percentage of our volume by changing the rates, and being more competitive on that product."[91] Similarly, New Century stated in its conference calls with investors that it tailored its loan products and loan features to satisfy the demands of secondary market actors such as Morgan Stanley. It "talk[ed] to Wall Street" and "talk[ed] to bond investors" to gauge investor interest. [92] It delivered "loan products to meet the margin and yield requirements of our REIT portfolio and

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[89] *See, e.g.*, New Century Financial Corp. 2004 10-K at 72 ("We seek to maximize our premiums on whole loan sales by closely monitoring requirements of institutional purchasers and focusing on originating or purchasing the types of loans that meet those requirements and for which institutional purchasers tend to pay higher premiums. During the year ended December 31, 2004, we sold $14.1 billion of loans to Morgan Stanley and $5.2 billion of loans to DLJ Mortgage Capital, which represented 46.4% and 17.2%, respectively, of total loans sold").

[90] New Century Financial Corporation at Southern California Investor Conference – Final, FD (Fair Disclosure) Wire, Aug. 11, 2006.

[91] Investor/Analyst Roundtable - Lunch Meeting – Final, FD (Fair Disclosure) Wire, Sept. 7, 2005. *See also* Investor/Analyst Roundtable - Lunch Meeting – Final, FD (Fair Disclosure) Wire, Sept. 6, 2005 (New Century shifted its product mix away from interest-only loans to 40-year loans because "the ratings agencies like the 40-year product quite a bit better than they like the I/O"); Q3 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Nov. 3, 2005 ("the moves that we've made to both increase coupon and shift our product mix will bring us to satisfactory gain on sale execution levels going forward"); Q4 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Feb. 2, 2006 (New Century increased its coupon rates (causing borrowers to pay higher interest rates) in order to get "better secondary market execution").

[92] Q3 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Nov. 3, 2005.

our bond investors."[93] It made "concerted efforts" to alter its mix of loan products for sale to Morgan Stanley and other Wall Street firms when "there was a fairly soft secondary market for those loans."[94] Indeed, in response to Steven Shapiro's demands, New Century specifically changed the features of its 40-year loan product.[95]

During the housing bubble, investors including Morgan Stanley also pressed New Century to deliver increasingly higher volumes of subprime loans.[96] However, New Century faced real challenges in expanding its mortgage lending during the period at issue in this case. The mortgage lending market was highly unconcentrated and New Century faced stiff competition from traditional prime lenders such as Countrywide.[97] At the same time, housing prices were accelerating rapidly in many parts of the country while the buying power of the average American paycheck was static or declining, making homeownership less and less affordable between 2004 and 2006.[98] During part of that period, moreover, traditional rate-reduction refinancings slowed due to rising mortgage interest rates.[99]

Under those market conditions, subprime lenders, including New Century, resorted to a number of techniques to qualify growing numbers of borrowers. [redacted] Another was to put borrowers into two-year hybrid ARMs to create "a constant need for refinancing within 2 years of a loan's origination."[101] These products were New Century's most common loan product,[102] in part because Morgan Stanley preferred two-year hybrid ARMs and "pare[d] down the . . . 3 year" ARMs in the loan pools it bought from New Century.[103] Finally, New Century made growing

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93 Q3 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Nov. 3, 2005. *Accord* New Century Financial Corporation Earnings Revision Conference Call – Final, FD (Fair Disclosure) Wire, Sept. 23, 2005 ("When the Wall Street investment banks who buy this product buy it from us, they look at a number of factors to determine the price they are willing to pay us. One of those factors is the appetite of that bond buyer and the credit spread that bond buyer requires").

94 Event Brief of Q1 2006 New Century Financial Corporation Earnings Presentation – Final, FD (Fair Disclosure) Wire, May 4, 2006. *Accord* Investor/Analyst Roundtable - Lunch Meeting – Final, FD (Fair Disclosure) Wire, Sept. 6, 2005 ("When we think about how big an appetite we have for that type of an asset, we are certainly sensitive to investor concerns over that type of an asset").

95 Shapiro Depo. Exh. 23 at MS00966075; Shapiro Depo. 299-302; Q3 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Nov. 3, 2005 ("our 40-year has the 30-year balloon payment, so the way it's set up is comfortable to the secondary market").

96 New Century Bankruptcy Examiner's Report at 31.

97 *See, e.g.*, New Century Financial Corp. 2004 10-K at 18 ("We continue to face intense competition in the business of originating, purchasing and selling mortgage loans"); Shapiro Depo. Exh. 11 at MS00885761.

98 For data, see Federal Reserve Bank of St. Louis, Economic Research, Housing Affordability Index (Composite)©, available at http://research.stlouisfed.org/fred2/series/COMPHAI.

99 For historical data, see Freddie Mac, 30-Year Fixed-Rate Mortgages Since 1971, available at http://www.freddiemac.com/pmms/pmms30.htm.

100 *See, e.g.*, K&L Gates Memorandum to New Century Team from Robert A. Lawton, Regarding January 9, 2008 Interview of Donald Lange, at 2, 11, 13 (Jan. 25, 2008), NC_ADKINS_PLAINTIF_0000202 .

101 Shapiro Depo. Exh. 22 at MS02467886; *see also* Shapiro Depo. 285.

102 New Century Financial Corporation at Southern California Investor Conference – Final, Transcript, FD (Fair Disclosure) Wire, August 11, 2006.

103 Vanacker Depo. Exh. 13 at MS1066391; *see also id.* at MC 1066390. Vanacker Depo. Exh. 13 at MS1066391; *see also id.* at MC 1066390.

proportions of loans with 100% combined loan-to-value ratios to accommodate customers who lacked down payments.[104]

New Century and its subprime competitors also resorted to stratagems designed to lower the initial monthly payment and thus to make it easier to qualify borrowers for loans. Borrowers were shunted into riskier alternative mortgage products such as hybrid ARMs, interest-only mortgages, and balloon loans because all of those products had lower initial payments than traditional fixed-rate mortgages.[105] Once a borrower was placed into one of the products, New Century and other lenders evaluated his or her ability to repay based solely on the initial payment, without regard to subsequent payment shock.[106] Increasingly, New Century and its counterparts also used stated-income and other types of reduced documentation underwriting to mask weak income or assets.[107] These lenders relied on inflated appraisals as a way to artificially inflate loan-to-value ratios in order to qualify borrowers. New Century boosted its mortgage originations by stretching its underwriting guidelines, by approving exceptions to its underwriting guidelines and by approving loans that did not make "sense."[108] New Century relaxed its loan underwriting guidelines over time, among other things, to allow higher principal amounts of loans, no-income-no asset documentation, and higher loan-to-value ratios for specified borrowers. This deterioration in New Century's underwriting standards can be seen from the following chart:[109]

[104] New Century Bankruptcy Examiner's Report at 128-29.

[105] New Century Bankruptcy Examiner's Report at 30-31, 125-26. *See* Shapiro Depo. Exh. 9 at MS00758644 (New Century increased its origination of interest-only loans and "forecast this as 22% of their total originations" for 2005"); Vanacker Depo. Exh. 10.

[106] New Century Bankruptcy Examiner's Report at 130.

[107] New Century Bankruptcy Examiner's Report at 126-28. *See also* Kaplan Depo. Exh. 13, page immediately after MS00615484.

[108] *See, e.g.*, Shapiro Depo. Exh. 16 at MS00193900-01; Shapiro Depo. Exhs. 17-19; Kaplan Depo. Exh. 14; Kaplan Depo. 279-84; Peterson Depo. Exh. 18, at MS00218918-19; KATHLEEN C. ENGEL & PATRICIA A. MCCOY, THE SUBPRIME VIRUS 38-39 (2011)..

[109] In Chart 4, "Interest-Only" refers to interest-only loans, "Stated Income" refers to stated income loans, and "CLTV" refers to combined loan-to-value ratio (taking both first and junior liens into account).

Chart 4:

NEW CENTURY UNDERWRITING TRENDS

Reporting Period	% Interest-Only	% Stated Income	% 100% CLTV	Weighted Average CLTV
Mar-03	0		7.90%	82.2
Dec-03	2.77%	42.46%	9.10%	83.69
Jun-04	21.39%	43.73%	19.08%	83.77
Dec-04	21.04%	43.50%	23.54%	84.73
Jun-05	38.49%	44.89%	33.83%	86.92
Dec-05		45.51%	35.23%	87.07
Jun-06		42.85%	34.77%	87.45
Dec-06		47.24%	29.22%	87.47

Source: New Century Bankruptcy Examiner's Report 126-29 (2009)

Shaded areas: No data reported

Morgan Stanley had no effective compliance procedure in place to address New Century's "sloppy underwriting" or "terrible appraisals," however.[110] To the contrary, Morgan Stanley fed into those lax practices. *See* Section IV.E *infra*.

New Century pursued these strategies so successfully that its loan originations grew nearly tenfold from $6.2 billion in 2001 to $56.1 billion in 2005, reaching $45.4 billion for the first three quarters of 2006.[111] Concurrently, its whole loan sales to secondary market purchasers including Morgan Stanley skyrocketed from $4.7 billion in 2001 to $41.8 billion in 2005, reaching $41.1 billion for the first three quarters of 2006.[112]

In short, New Century's dependence on capital markets financing caused it to boost the riskiness of its subprime mortgages in order to satisfy investment banks' specifications for risky loan characteristics and demand for higher volumes of loans.

2. Morgan Stanley's Exercise Of Influence Over New Century

As the last section discussed, New Century was not a depository institution and therefore it could not rely on traditional deposits to finance its subprime mortgage lending activities.[113] Instead, New Century depended heavily on capital from Morgan Stanley to sustain and expand its

110 Kaplan Depo. 279-80, 292-94; *see* Kaplan Depo. Exhs. 14, 16.

111 New Century Financial Corp. 2005 10-K, at 53; New Century Bankruptcy Examiner's Report at 45.

112 New Century Financial Corp. 2005 10-K, at 53; New Century Bankruptcy Examiner's Report at 45.

113 THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 113 (2011).

operations. In turn, Morgan Stanley used the leverage it gained from that dependence to ensure that New Century's loan pools contained the highest proportion of loans with the risky loan features that maximized cash flow.

New Century's business model depended on selling the subprime mortgages it originated for securitization and using the proceeds from the sale of those whole loans to originate more loans. Due to their risky features or size, many of New Century's subprime loans did not qualify for purchase by Fannie Mae, Freddie Mac, or Ginnie Mae. Consequently, New Century relied predominantly on Wall Street and the private-label securitization market to securitize its loans.[114]

Under this private-label business model, Morgan Stanley was New Century's "number one relationship."[115] Craig Phillips, a managing director in Morgan Stanley's securitized product group, said that Morgan Stanley was "clearly" New Century's "largest and most important counterparty."[116]

In its capacity as New Century's largest and most important counterparty, Morgan Stanley provided three main forms of capital market financing to New Century:

> *Buyer of New Century's Whole Loans:* First, through 2001-2004 and again in 2006, Morgan Stanley was the largest purchaser of whole loans originated by New Century, with a "dominant market share."[117] Although Morgan Stanley's market share dropped in 2005, that year it remained one of the largest buyers of New Century whole loans.[118] Morgan Stanley bought New Century's whole loans for the purpose of securitizing them as subprime mortgage-backed securities issued by Morgan Stanley.[119] Morgan Stanley also created a secondary market for RMBS backed in whole or in part by New Century subprime mortgages to ensure liquidity for those securities.[120]
>
> *Warehouse Funder:* Second, Morgan Stanley provided New Century with the warehouse funding that it needed to originate mortgage loans and hold them pending securitization or sale. This relationship was so profitable for Morgan Stanley that New Century was the counterparty that generated the most revenue for the warehouse lending group from 2004 through 2007.[121]
>
> New Century used Morgan Stanley's warehouse line to finance its origination of the whole loans that were later used for collateral in mortgage-backed securitizations.[122]

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114 *See, e.g.*, New Century Financial Corp. 2005 10-K, at 53-54, 60.

115 Shapiro Depo. Exh. 6 at MS01791975.

116 Phillips Depo. 90-91; Phillips Depo. Exh. 1 at MS00834830.

117 Goodman Depo. Exh. 17, at MS00834909.

118 Shapiro Depo. 20; Shapiro Depo. Exh. 6 at MS01791975; Shapiro Exh. 8 at MS 00834838; New Century Financial Corp. 2004 10-K, at 72, F-22; New Century Financial Corp. 2005 10-K, at 60-61; Kaplan Depo. Exh. 11, at MS01260042.

119 Shapiro Depo. 20.

120 Shapiro Depo. Exh. 8 at MS 00834838; Phillips Depo. Exh. 5.

121 Neuberger Depo. 22-26, 43, 53, 67, 129-30; Neuberger Depo. Exhs. 2, 14; s*ee also* I Goodman Depo. 23-25, 63, 65-66; II Goodman Depo. 158-60; Goodman Depo. Exhs. 7, 17, at MS00834911.

122 Telesca Depo. 204; New Century Bankruptcy Examiner's Report at 62-63.

Morgan Stanley's warehouse role was so important that it was the number one warehouse lender for New Century's origination of subprime residential mortgage loans.[123] New Century's dependence on Morgan Stanley for warehouse funding to finance its growing loan production expanded so quickly that Morgan Stanley's warehouse line to New Century grew from $400 million in 2001 to $1.5 billion in December 2003 and hit $3 billion in August 2004.[124] Its need for warehouse funding was so great that New Century went back to Morgan Stanley fully seven times between January 2001 and August 2004 to increase that warehouse line. Morgan Stanley approved all seven of those requests.[125]

Securities Underwriter: Third, in something known as "agented offerings," Morgan Stanley served as underwriter on offerings of subprime RMBS issued directly by New Century.[126] Morgan Stanley earned millions of dollars in securitization fees on these deals.[127] Morgan Stanley had the largest market share of lead managed deals for New Century in 2004.[128] Once again, Morgan Stanley created a secondary market for New Century's RMBS in order to ensure liquidity for those securities.[129]

These three financing activities formed the heart of an integrated business strategy by Morgan Stanley to make sure it had continued access to a growing pipeline of whole subprime loans from New Century for securitization. Morgan Stanley used its warehouse line to entice New Century to continue to sell its pipeline of whole loans to Morgan Stanley instead of to other competitors.[130] In return, New Century became increasingly dependent on Morgan Stanley for its financial lifeblood.[131] "Morgan Stanley ha[d] consistently provided liquidity in difficult market conditions for New Century,"[132] deepening that dependence.

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123 Shapiro Depo. 118; Shapiro Depo. Exh. 8 at MS 00834839; New Century Financial Corp. 2004 10-K, at 88-89; New Century Financial Corp. 2005 10-K, at 77-78. On top of financing New Century's origination of subprime loans, Morgan Stanley also provided warehouse funding to New Century when New Century had to repurchase loans out of the loan pools it had sold to Morgan Stanley due to early payment defaults. New Century drew on its Morgan Stanley warehouse line to finance those repurchases. Shapiro Depo. 310-11; Shapiro Depo. Exh. 24; Telesca Depo. 29-30, 82; I Goodman Depo. 54; Neuberger Depo. 66-67, 155-56; Neuberger Depo. Exh. 20.

124 Kaplan Depo. Exh. 10, at MS00834839; Shapiro Depo. Exh. 8 at MS 00834839.

125 Kaplan Depo. Exh. 10, at MS00834839; *see also* Neuberger Depo. 118.

126 Shapiro Depo. 20; Shapiro Depo. Exh. 6 at MS01791975; Shapiro Depo. Exh. 8 at MS 00834838.

127 Goodman Depo. Exh. 7, at MS00834911.

128 Shapiro Depo. Exh. 11 at MS00885762.

129 Shapiro Depo. Exh. 8 at MS 00834838.

130 *See* Neuberger Depo. 51, 139-41, 144; Neuberger Depo. Exh. 3, at MS00834911; Neuberger Depo. Exh. 13, at MS02326743; Neuberger Depo. Exh. 16; Neuberger Depo. Exh. 17, at 5.

131 *See* New Century Financial Corp. 2004 10-K, at 43 ("We are dependent on the securitization market for the sale of our loans because we securitize loans directly and many of our whole loan buyers purchase our loans with the intention to securitize them."); *accord* New Century Financial Corp. 2005 10-K, at 31.

132 Shapiro Depo. 165-66; Shapiro Depo. Exh. 8 at MS 00834838; Shapiro Depo. Exh. 26. For example, New Century asked Morgan Stanley for an increase in its warehouse line sublimit in October 2006 for the purpose of financing putbacks of loans from its whole loan purchasers, to help it "during this turbulent time in the market." Neuberger Depo. Exh. 15. Similarly, in late February or early March 2007, after New Century announced it was restating its financial statements for the first three quarters of 2006, Morgan Stanley extended it two new lines of funding totaling almost $1 billion – one for $265 million and another for $710 million – to help prop up its operations. Neuberger Depo. 164-68; Neuberger Depo. Exhs. 22-23; *see* New Century Financial Corp., Form 8-K, Item 8.01 (dated March 2, 2007, filed March 8, 2007).

These many layers of leverage enabled Morgan Stanley to receive preferential treatment in whole loan purchases from New Century to the detriment of its competitors. For example, New Century gave Morgan Stanley exclusive opportunities to bid on loan pools from New Century.[133] Similarly, New Century gave preferential treatment to Morgan Stanley by selling it whole loans even when Morgan Stanley was not the top bid.[134] Finally, Morgan Stanley received the "last look" on many competitive New Century offerings.[135] Not only did these practices show how eager New Century was to continue its relationship with Morgan Stanley, they enabled Morgan Stanley to lock up continued supplies of New Century loans for securitization on preferential terms.

In addition, Morgan Stanley exercised leverage over New Century by inserting itself into New Century's day-to-day business decisions. An internal Morgan Stanley document dated October 4, 2004, stated that "Morgan Stanley is involved in almost every strategic decision that New Century makes in securitized products."[136] Echoing that statement, Craig Phillips, the then head of the Securitized Products Group at Morgan Stanley, sent an email to Steven Shapiro, the head of Morgan Stanley's trading desk, on November 23, 2004, about New Century saying: "They certainly are extremely open to our advice and involvement in all elements of their operation."[137]

As part of that involvement, Morgan Stanley exerted control over New Century's loan origination process in multiple ways. *See* Section D.1 *infra*. Morgan Stanley's assertion of control was even more pronounced for New Century's "forward settle" or "forward production" loan pools, also known as "indicative pools."[138] Commonly, forward settle pools contained loans that had not yet been originated.[139] These forward trade pools were "commonplace in the market" during the class period.[140] Unlike traditional "live" loan pools, where the loans often were already originated and the contents of the pools were set, forward settle pools gave Morgan

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By that point, New Century was spiraling downward too fast for Morgan Stanley to save it. Not long after, Morgan Stanley decided to withdraw its warehouse credit facility from New Century in spring 2007, which underscored the critical nature of Morgan Stanley's financing to New Century. Under the terms of that warehouse line, New Century had to observe covenants that required the company, among other things, to maintain stated liquidity levels, net worth ratios, and debt-to-equity levels. If New Century failed to comply with any of those covenants, Morgan Stanley had the right to terminate the facility and accelerate New Century's repayment obligation. In addition, if New Century defaulted under one of its facilities, that default would trigger a default under its other facilities. New Century Financial Corp. 2005 10-K, at 76-78; New Century Bankruptcy Examiner's Report at 61. That is exactly what happened in March 2007, when New Century went into default by failing to make a margin call on time. In response, Morgan Stanley accelerated its loans on March 9, 2007, and took possession of the collateral. New Century filed for bankruptcy within a month. II Goodman Depo. 130, 177-79, 216-27, 227-28; Neuberger Depo. 162; New Century Financial Corp., Form 8-K, Item 2.04 (dated March 7, 2007, filed March 12, 2007).

133 Shapiro Depo. 66-69, 128; Vanacker Depo. 83; Shapiro Depo. Exh. 1; Shapiro Depo. Exh. 6 at MS01791975; Vanacker Depo. Exh. 11; Telesca Depo. 174-78; Kaplan Depo. 132.

134 Shapiro Depo. 129-30; Shapiro Depo. Depo. Exh. 6 at MS01791975.

135 Shapiro Depo. 128; Shapiro Depo. Exh. 6 at MS01791975; *see also* Telesca Depo. 175-76.

136 Shapiro Depo. Exh. 11 at MS00885762.

137 Phillips Depo. 77; Phillips Depo. Exh. 1 at MS00834829.

138 Shapiro Depo. 53-55, 58-60, 64-66; Shapiro Depo. Exh. 8 at MS 00834838.

139 *See* Shapiro Depo. 51-55.

140 Vanacker Depo. 44; Telesca Depo. 72.

Stanley the opportunity to prescribe what it wanted to buy. Morgan Stanley took advantage of this opportunity and "reach[ed] out" to New Century to create forward loan pools for bid.[141]

The "blank slate" nature of forward settle pools gave Morgan Stanley even greater latitude to dictate the characteristics of New Century's loans. Since Morgan Stanley could "bid on anything," it would provide "bid stips" specifying what loan features it wanted in New Century's forward pools when it bid on those pools.[142] If the deal was struck, New Century was contractually obligated to deliver a loan pool with those characteristics.[143] Furthermore, if the pool that was delivered did not match those specifications, then Morgan Stanley would charge a penalty.[144]

Consequently, in its forward settle trades, Morgan Stanley used its bid terms to demand that New Century deliver loan pools with the profile of heightened risk features that Morgan Stanley desired. *See* Section D.1 *infra*. Morgan Stanley prized the leverage that forward trades gave it and stated in a 2004 draft marketing document that "New Century will continue to be the first call we make for forward purchases of loans."[145]

Once New Century delivered a loan pool, Morgan Stanley examined the loans in the pool to make sure that the loans conformed to the bid terms governing the trade.[146] If New Century delivered a loan pool that did not conform to the bid terms, Morgan Stanley exercised its right to remedies. Those remedies included the ability to reject the loan pool outright, to carve out the percentage of loans that adversely affected the bid stips, to reprice the loan pool, or to redress the imbalance in New Century's next loan pool delivery.[147] Morgan Stanley could and did use these remedies to ensure that New Century's loan pools contained weighted average coupons that were sufficiently high and a minimum high proportion of ARMs and prepayment penalties. *See* Section D.1 *infra*.

In conclusion, New Century's dependence on Morgan Stanley's financing for its financial existence gave Morgan Stanley leverage over New Century in multiple ways. Morgan Stanley used that leverage to ensure its continued access to New Century's pipeline of new loans – often on preferential terms – for re-engineering into RMBS. In addition, as the next section will discuss, Morgan Stanley exercised its sway over New Century to dictate the risk characteristics of its loans, both for "live" loan pools and for forward settle pools.

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141 Vanacker Depo. 43. Similarly, Morgan Stanley used reverse bids to dictate the terms of future loan pools. A reverse bid was a non-competitive offering in which Morgan Stanley would bid on collateral not in connection with a formal bid process. In a reverse bid, the loan seller would not provide information. Instead, the bid "would be instigated by Morgan Stanley and it would be based on a previously received pool of collateral." Telesca Depo. 55-56, 174.

142 Shapiro Depo. 56; *id*. at 60-61; Vanacker Depo. 41-42, 53-54.

143 Shapiro Depo. 62.

144 Shapiro Depo. 61.

145 Shapiro Depo. 165; Shapiro Depo. Exh. 8 at MS 00834838.

146 Shapiro Depo. 36.

147 Shapiro Depo. 188; Vanacker Depo. 144-47, 177-79; Vanacker Depo. Exhs. 14-15, 20, 28; Telesca Depo. 109, 115, 124; Telesca Depo. Exh. 5.

D. Morgan Stanley Aggressively Purchased And Financed Combined-Risk Loans From New Century And Exerted Control To Secure A Supply Of Loans With These Combined-Risk Features

During the class period, Morgan Stanley consciously structured its whole loan purchase and mortgage securitization business to specialize in the purchase and securitization of combined-risk loans from New Century and other subprime lenders. In New Century's case, Morgan Stanley exerted that leverage via its bid terms[148] to allow and in fact require New Century to include high quantities of loans with specific combined-risk features in the loan pools that it sold.

This leverage manifested itself in two ways. First, Morgan Stanley affirmatively required New Century to deliver loans with certain combined-risk features in order to increase its cash flows. In other words, Morgan Stanley paid more for New Century loans with certain combined-risk features, such as high interest rates, adjustable rates, and prepayment penalties. Second, Morgan Stanley's bid terms allowed New Century to include loans with other types of risk characteristics in the loan pools that Morgan Stanley bought. These Morgan Stanley bid terms – combined with Morgan Stanley's inadequate due diligence (*see* Section IV.E *infra*) – caused New Century to make toxic, combined-risk loans.

1. Morgan Stanley Aggressively Purchased New Century Loans With High Interest Rates, Adjustable Rates, And Prepayment Penalties Because They Generated Higher Cash Flows In Securitizations

According to Morgan Stanley, based on feedback from investors, certain risky loan features resulted in higher cash flows in the mortgage-backed securitizations that it issued.[149] First, a higher interest rate or "coupon" on the underlying loan could generate a higher cash flow on the security.[150] Second, adjustable-rate mortgages resulted in higher cash flows compared with fixed-rate mortgages because the adjustable-rate feature helped reduce interest-rate risk.[151] Third, a higher proportion of prepayment penalties in the loan pool improved Morgan Stanley's

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148 The bid terms were generated from the bid stipulations or "bid stips." The bid stips were generated by the trading desk and were the conditions or terms of the bid. The bid stips provided certain limitations or constraints on the trade, such as constraints on certain loan characteristics such as high-cost loans. Kaplan Depo. 153, 157-59, 161-63. The contract finance group received bid stips in connection with every pool that was being purchased by Morgan Stanley. Kaplan Depo. 170.

After the trading desk provided the contract finance group with the bid stips, typically those stips would make their way into the purchase price and terms agreement. Kaplan Depo. 159, 162, 169-71. The bid terms were attached to the purchase price and terms agreement between Morgan Stanley and New Century for individual purchases of pools of whole loans originated by New Century. Those terms set forth the negotiated price and certain other characteristics of the loans and the final loan pool agreed on by New Century and Morgan Stanley following due diligence. New Century was required to deliver a pool of loans to Morgan Stanley that complied with the bid terms. This was accomplished in part through a representation and warranty by New Century to the mortgage loan schedule, which embodied the bid terms. Peterson Depo. 72, 81; Kaplan Depo. 33-37, 72, 80, 104-06, 220-21; Kaplan Depo. Exh. 2, at MS01615360-68, MS01615390-94.

149 Vanacker Depo. 121; *see id*. at Vanacker 48, 126.

150 Vanacker Depo. 121-22; *see* Vanacker Depo. Exh. 32.

151 Shapiro Depo. 80-81; Vanacker Depo. 48-49, 121, 126-27.

cash flow.[152] Consequently, Morgan Stanley intentionally structured its whole loan purchases from New Century to emphasize loans with those combined-risk features.

One of Morgan Stanley's preferred risk features consisted of higher interest rates. Morgan Stanley paid more for loan pools with higher weighted average coupons than lower ones.[153] The higher the average interest rates paid by borrowers, the higher the weighted average coupon.[154] Accordingly, Morgan Stanley paid more for loans with higher interest rates, particularly for loans whose interest rates were high enough to qualify for reporting as high-cost loans for purposes of the Home Mortgage Disclosure Act.[155] Similarly, Morgan Stanley paid more as the weighted average spread increased between the underlying interest rate index and the interest rates paid by borrowers.[156] Morgan Stanley's bid terms dictated a suitably high return by specifying a minimum weighted average coupon for each pool it bought from New Century.[157] Morgan Stanley preferred buying loans with higher weighted average coupons even though it knew that first lien loans with a weighted average coupon of 8 percent or more posed a higher risk of foreclosure.[158]

Morgan Stanley also demanded as many adjustable-rate mortgages (ARMs) as possible in the loan pools that it purchased from New Century.[159] Morgan Stanley strongly preferred to buy adjustable-rate loans over fixed-rate loans.[160] Morgan Stanley was not concerned that there was too high a proportion of ARM loans in a pool.[161] Instead, it tried to "pare down the fixed" rate loans in a pool, as the bid terms demonstrated.[162] Morgan Stanley's bid terms for New Century typically specified that "[n]o less than" a specified proportion "of Mortgage Loans shall be ARMs" and "[n]o more than" a specified proportion "shall be Fixed Rate."[163] Under that standard bid term, New Century could supply a higher percentage of ARMs than the cutoff specified, but not less.[164] The percentage of fixed-rate loans in pools that New Century sold to

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152 Vanacker Depo. 137-39; Shapiro Depo. 329, 331.

153 Shapiro Depo. 76; Vanacker Depo. 122-24, 173; Vanacker Depo. Exh. 14; Vanacker Depo. Exh. 19 at MS01615362.

154 Shapiro Depo. 77.

155 Class Action Complaint ¶ 34; former 12 C.F.R. § 203.4(a) (2002).

156 Vanacker Depo. 174 (Morgan Stanley paid more for a higher weighted average gross margin); Vanacker Depo. Exh. 32 (same). Morgan Stanley generally used the London Interbank Offered Rate or LIBOR as the interest rate index for its whole loan purchases from New Century. *See* Shapiro Depo. 76, 284. The interest rates paid by borrowers would exceed LIBOR by some amount and that amount was called the "margin" or the "spread." The bigger the spread, the larger the cash flow.

157 *See* Kaplan Depo. 60-62; *see, e.g.*, Kaplan Depo. Exh. 2, at MS01615390 (stating that "[t]he weighted average gross coupon on the Mortgage Loans is no less than 7.40% with respect to the Mortgage Loans").

158 II Davis Depo. 311; Davis Depo. 28, at MS01252691.

159 Shapiro Depo. 80-81; Vanacker Depo. 48-49.

160 *See* Vanacker Depo. Exh. 15 (calling New Century's "overdelivery of fixed"-rate mortgages an "issue"); Vanacker Depo. 48 (saying that investors might refuse to buy a security "because the percentage of fixed rate loans in the deal [was] too high"); *see id.* at 126-27; Goodman Depo. Exh. 2, at MS01235621 (giving New Century a higher mark because its warehouse pool consisted of 83.24% ARM loans, compared to the Aegis pool, which only had 54.96% in ARM loans).

161 Shapiro Depo. 82-83; Telesca Depo. 281-82.

162 Vanacker Depo. Exh. 13 at MS1066391.

163 *See, e.g.*, Shapiro Depo. Exh. 27 at MS01615390; Kaplan Depo. Exh. 2, at MS01615390 (stating that "[n]o less than 77.91% of Mortgage Loans shall be ARMs. No more than 22.09% shall be Fixed Rate").

164 Shapiro Depo. 335; Kaplan Depo. 116-17; *see id.* at 112-15.

Morgan Stanley ranged from 16.4% to 26.3%. [165] By inference, then, ARMs made up the overwhelming percentage of the loan pools that Morgan Stanley bought from New Century.

Finally, Morgan Stanley demanded as many loans with prepayment penalties as possible in the loan pools that it purchased because those penalties allowed Morgan Stanley to still get its coupon if the loan did not prepay or get the prepayment penalty if the loan did prepay.[166] Consequently, Morgan Stanley sought to maximize the number of loans with prepayment penalties in the loan pools it bought from New Century.[167] It did so by specifying standard bid terms for New Century loans stating that loan pools had to contain a minimum percentage of prepayment penalties.[168] Under those provisions, New Century could deliver loan pools containing a higher, but not a lower, percentage of prepayment penalties.[169] The percentage of prepayment penalties in pools that New Century sold to Morgan Stanley ranged from 72.1% to 77%.[170]

To summarize, certain risky loan features – namely, higher interest rates, adjustable-rate terms, and prepayment penalties -- generated higher cash flows for Morgan Stanley when it securitized those loans.[171] Consequently, Morgan Stanley paid New Century and other sellers more for loans with those risky characteristics and structured its bid terms to require higher proportions of those loans in the loan pools that it bought and securitized.

2. Morgan Stanley's Bid Terms Allowed New Century To Include Substantial Quantities Of Other Types Of Risky Loan Features In The Loans It Sold To Morgan Stanley

Morgan Stanley also crafted its bid terms to allow New Century to sell Morgan Stanley loans with other risky features in addition to higher interest rates adjustable-rates, and prepayment penalties. Under those bid terms, Morgan Stanley permitted New Century to include interest-only loans, stated documentation loans, other limited documentation loans, loans with combined loan-to-value ratios of up to 100%, and even loans that were 30 days delinquent in its loan pools.

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165 Vanacker Depo. 57, 59, 61; Vanacker Depo. Exhs. 5-7.

166 Shapiro Depo. 329, 331; Vanacker Depo. 139-40; Telesca Depo. 229.

167 *See* Vanacker Depo. Exh. 15 (describing 80% of prepayment penalties in a loan pool as opposed to 77% as "better").

168 *See, e.g.*, Shapiro Depo. Exh. 27 at MS01615390 (no less than 72%).

169 Shapiro Depo. 333-35; Telesca Depo. 282-84; Telesca Depo. Exh. 14 at MS00205348 (requiring New Century to substitute $35 million of loans with prepayment penalties for loans without those penalties).

170 Vanacker Depo. 56, 58; Vanacker Depo. Exhs. 5-6.

171 In another instance, Morgan Stanley affirmatively "pushed" New Century toward other forms of high risk loans. In a telling incident, New Century made a request to Morgan Stanley to buy a new 40-year amortizing loan product in 2005. Steven Shapiro on Morgan Stanley's trading desk instructed his colleagues instead to "push[]" New Century toward a 30-year loan amortizing over 40 years (resulting in a balloon payment at year 30) because investors preferred that product. Shapiro Depo. Exh. 23 at MS00966075; *see also* Shapiro Depo. 299-302. This increased the risk to borrowers with those loans because they would face a large balloon payment at the end of the loan term. New Century acquiesced to Shapiro's request. *See* Q3 2005 New Century Financial Corporation Earnings Conference Call – Final, FD (Fair Disclosure) Wire, Nov. 3, 2005 ("our 40-year has the 30-year balloon payment, so the way it's set up is comfortable to the secondary market").

In addition, Morgan Stanley's bid terms allowed New Century to deliver loan pools with low weighted average FICO (credit) scores of around 620 or 625.[172]

As the next section discusses, Morgan Stanley's increasingly lax due diligence magnified the impact of these bid terms by allowing even higher volumes of combined-risk loans to remain in New Century pools that Morgan Stanley securitized. Morgan Stanley's senior management increased the volume of New Century loans available for purchase by reining in its due diligence processes for those loans and overrode those processes regularly to ensure that more, risky New Century loans stayed in the loan pools that it purchased. This led to the routine purchase of loans with other combined-risk terms, such as excessive loan-to-value and debt-to-income ratios, stated income requirements, or interest-only features. Together, these methods worked to ensure that Morgan Stanley had a continued supply of lucrative New Century loans with combined-risk features.

E. Morgan Stanley Restricted And Overrode Its Own Internal Controls In Order To Buy And Finance Combined-Risk Loans From New Century

Throughout the relevant period, Morgan Stanley was on repeated notice that the default and foreclosure risk associated with New Century loans was conspicuously high and growing. These warning signs should have caused Morgan Stanley to tighten its due diligence controls or cut back on its purchases of New Century loans. Instead, Morgan Stanley handicapped the effectiveness of its due diligence procedures and overrode those procedures repeatedly in order to step up its purchases of even more dangerous combined-risk loans from New Century. This breakdown in Morgan Stanley's internal controls resulted from the fact that Morgan Stanley gave its "trading desk" or "prop desk"– otherwise known as the mortgage finance team – ultimate power over all decisions affecting the purchase and securitization of New Century loans.

1. Morgan Stanley Gave Its Trading Desk Supremacy Over Decisions Regarding The Purchase, Securitization, And Financing Of Subprime Loans In Order To Maximize Volume And Cash Flow

Five different offices of Morgan Stanley – the trading desk (mortgage finance), contract finance,[173] collateral analysis, due diligence, and warehouse lending – had a leading role in the events in this case. All five offices were part of Morgan Stanley's Securitized Products Group

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172 *See, e.g.*, Shapiro Depo. Exh. 27 at MS01615390; Vanacker Depo. 58-59; Vanacker Depo. Exhs. 5-6, 10; Telesca Depo. Exh. 3; Telesca Depo. 192, 209-10; Peterson Depo. 290, 337-38; Peterson Depo. Exh. 26, at MS00528872.

A weighted average FICO consisted of the average FICO score for the borrowers in the loan pool, weighted by the amount of the principal balance of each of their loans. Kaplan Depo. 123-24.

173 The trading desk was assisted in its work by the contract finance group, which was headed by Eric Kaplan. It was the contract finance group's job to oversee the execution of a trade and ensure that the transaction progressed from beginning to end. Kaplan Depo. 23-25. If a question arose about changing a representation and warranty in a New Century deal, Kaplan would consult the trading desk, particularly if there were profit and loss implications. Kaplan Depo. 228-30, 237-44; Kaplan Depo. Exh. 9.

(SPG), which in turn was located within the Fixed Income Division of Morgan Stanley. The Fixed Income Division was part of the Institutional Securities Group business segment of Morgan Stanley.[174]

Of these offices, the trading desk, which was located in New York, was the nerve center of Morgan Stanley's business relationship with New Century. Formally, the trading desk was responsible for coordinating whole loan purchases from New Century with the securitization of those loans on the capital markets.[175] In reality, the trading desk's importance was much more pronounced. That was because the "desk," as it was called, had final say in all decisions that could potentially affect the volume and risk profile of the New Century loans sold to Morgan Stanley.[176] Steven Shapiro, as the head of the trading desk, and Frank Telesca, who ran the trading desk on a day-to-day business under Shapiro's supervision,[177] were the ones who exercised this final say.

Under Morgan Stanley's business model, the trading desk was charged with managing the New Century business relationship centrally. Strikingly, every single Morgan Stanley deponent who was asked in this case agreed that the trading desk made the final decisions about the New Century relationship. Most importantly, that included final decisions about which New Century loans to buy, even for loans that failed due diligence.[178] The trading desk also set the bid terms and purchase agreement terms for those loans.[179] The trading desk's decisions were not the workings of some lone, rogue employees. Instead, it was essential to Morgan Stanley's *business model* to vest the trading desk with the ultimate power to decide which loans to buy – regardless of their quality – because doing so maximized the supply of New Century loans and the cash flow from those loans.

The trading desk exercised its supremacy in myriad ways that allowed it to centralize its control over the New Century relationship and its pipeline of loans. This control was especially ironclad when it came to Morgan Stanley's due diligence operation. It was important to Morgan Stanley to keep due diligence in check because otherwise due diligence could seriously interfere with and possibly jeopardize the flow of New Century loans. Consequently, the trading desk hamstrung

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174 *See* Letter from Noah Levine, Esq., to Rachel Goodman, Esq., dated January 8, 2014, at 4; Defendants' Written Responses and Objections to Plaintiffs' Notice of 30(b)(6) Deposition and Request for the Production of Documents Regarding Defendants' Corporate Organization 7-14 (Oct. 30, 2013). In about April 2006, the individuals in Mortgage Finance moved to the newly formed Global Proprietary Credit Group ("GPCG"). *Id.* at 9-10. This report will refer to Mortgage Finance and GPCG together as "Mortgage Finance" or the "trading desk."

175 *See* Shapiro Depo. 23, 27-34, 136; *see also* Kaplan Depo. 39, 55.

176 *See, e.g.*, Steven M. Davidoff, Alan D. Morrison & William H. Wilhelm, Jr., *The SEC v. Goldman Sachs: Reputation, Trust, and Fiduciary Duties in Investment Banking*, 37 J. CORP. L. 529, 534 (2011-2012) (within Wall Street investment banks, "the power base" has shifted "from the advisory function to the trading room"); *see also id.* at 543-46. The term "advisory function" refers to the historical role of investment banks as securities underwriters and brokers. *See id.* at 532-34.

177 Shapiro Depo. 22-23.

178 *See* Shapiro Depo. 23, 27-34, 136; *see also* Kaplan Depo. 39; Barrow Depo. 64, 217-18, 220-21, 273-75; Barrow Depo. Exhs. 15, 22-23; Peterson Depo. 203-04; Defendants' Written Responses and Objections to Plaintiffs' Notice of 30(b)(6) Deposition and Request for the Production of Documents Regarding Defendants' Corporate Organization 13 (Oct. 30, 2013).

179 Defendants' Written Responses and Objections to Plaintiffs' Notice of 30(b)(6) Deposition and Request for the Production of Documents Regarding Defendants' Corporate Organization 13 (Oct. 30, 2013).

and countermanded due diligence in the following ways in order to keep risky New Century loans flowing:

- By exercising the power to override recommendations by the due diligence team to reject loans from New Century's loan pools for credit problems or lack of legal compliance; [180]
- By exerting control and final say over the policies that the due diligence team applied;[181]
- By requiring its approval for all significant changes in due diligence procedures;[182]
- By intervening in the sample selection design and sample size used by due diligence;[183]
- By opposing due diligence's requests for New Century documents; [184]
- By pressuring due diligence to reduce the number of loans rejected from New Century loan pools;[185] and
- By participating in the performance evaluations of the head of due diligence.[186]

The trading desk's influence was not limited to due diligence, but extended to warehouse lending as well. The warehouse group consulted with Shapiro or Telesca on what collateral to accept on the New Century's warehouse line.[187] Shapiro even prepared presentations to the credit committee to increase New Century's warehouse line.[188]

This section will describe in further detail how the trading desk exercised its authority in multiple ways to restrict due diligence on the New Century loans that it purchased and to override that due diligence when necessary to buy risky New Century loans. All of this occurred against the backdrop of an increasingly alarming risk profile associated with New Century loans.

2. Due Diligence Was The Most Important Safeguard Against The Purchase And Securitization Of Overly Risky New Century Loans

As Section IV.E.4 discusses in greater detail below, Morgan Stanley had due diligence procedures that were responsible for ensuring that the company refrained from buying dangerously risky New Century loans. These procedures had three important purposes. First, due diligence checked loan pools that New Century offered to Morgan Stanley for sale, using sampling techniques, to determine whether New Century was complying with its own underwriting procedures. Second, due diligence checked those same loan pools to ascertain whether the loans met the added safety requirements (known as "overlays") that Morgan Stanley's guidelines applied to New Century loans. Finally, Morgan Stanley's compliance officers were supposed to check for New Century's compliance with applicable federal and state

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180 Barrow Depo. 64, 220-21; Barrow Depo. Exh. 15; Kaplan Depo. 39; Peterson Depo. 203-04.
181 *See* I Davis Depo. 134-35, 144-45; II Davis Depo. 312-15; Shapiro Depo. 221; Peterson Depo. 256.
182 II Davis Depo. 312-315.
183 *See* Section IV.E.5 *infra.*
184 Kaplan Depo. Exh. 11; *see* Kaplan Depo. 260-64.
185 *See* Section IV.E.6 *infra.*
186 Barrow Depo. 51.
187 Goodman Depo. Exhs. 23-24, 26; II Goodman Depo. 191-97, 201-03; Neuberger Depo. 128-32, 137-39, 144-46; Neuberger Depo. Exh. 14.
188 Goodman Depo. Exhs. 23-24, 26; II Goodman Depo. 191-97, 201-03; Neuberger Depo. 128-32, 137-39, 144-46; Neuberger Depo. Exh. 14.

laws, including fair lending laws.[189] While these procedures were designed to protect investors, meaningful due diligence was also a necessary condition to safeguard borrowers.

These due diligence procedures were the most important safeguard against the proclivity of the trading desk to pack New Century loan pools with dangerous, combined-risk loans in order to increase the volume of loans that Morgan Stanley securitized. Consequently, if the trading desk weakened or overrode Morgan Stanley's due diligence procedures, that would remove a crucial brake on Morgan Stanley's purchase and securitization of New Century combined-risk loans. As the remainder of this Section discusses, the trading desk was well aware of rising risk levels in New Century loans. Despite that knowledge, the trading desk succeeded in impairing Morgan Stanley's due diligence procedures and in countermanding those procedures when necessary to pack more dangerous loans into New Century loan pools.

3. Morgan Stanley Knew That New Century Loans Were Becoming Increasingly Risky During The Relevant Time Period

As early as 2004, Morgan Stanley was aware that New Century's lending practices were deteriorating, posing increasingly higher risk to borrowers from foreclosure. That awareness steadily grew as New Century's loan quality became worse and worse. Despite its mounting knowledge of the erosion in New Century's lending standards, Morgan Stanley did not curtail its purchases of New Century combined-risk loans in the period leading up to New Century's bankruptcy.[190]

Senior Morgan Stanley officials received warning signs of trouble at New Century as early as February 2004, via an analysis of the high January 2004 kickout rate for New Century loans. That analysis attributed the high kickout rate to three factors: (1) "discrepancies between [New Century's] underwriting matrices and their written policy guidelines"; (2) "more exceptions based on missing documentation"; and (3) "a deterioration in appraisal quality."[191] These problems were especially disturbing because Morgan Stanley did not have its own loan origination guidelines for the subprime loans it bought from New Century.[192] Instead, Morgan Stanley depended on New Century to originate its loans in accordance with New Century's underwriting guidelines.[193] Accordingly, this early analysis put Morgan Stanley's senior management on notice that New Century was dispensing with its underwriting guidelines entirely in certain respects for the loans it offered for sale to Morgan Stanley. The related

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189 Peterson Depo. 187-92.

190 As Aaron Brown, a former risk manager at Morgan Stanley told a reporter for the *New York Times*:

> You absolutely could see it coming. You could see the risks rising. However, in the two years before the crisis hit, instead of preparing for it, the opposite took place to an extreme degree. The real trouble we got into today is because of things that took place in the two years before, when the risk measures were saying things were getting bad.

Joe Nocera, *Risk Mismanagement*, THE NEW YORK TIMES, Jan. 4, 2009.

191 Davis Depo. Exh. 12.

192 Peterson Depo. 164-68; Peterson Depo. Exh. 9; Kaplan Depo. 266-69.

193 Peterson Depo. 329-31; Kaplan Depo. 266-69; *see also* I Goodman Depo. 28-29 (same for New Century mortgages that were pledged as collateral for Morgan Stanley warehouse loans).

problems with missing documentation and declining appraisal quality further boosted the risk of those loans and meant that Morgan Stanley could not actually determine how bad the credit quality of those loans was. Together, all three problems placed borrowers with those New Century loans at heightened risk of default.

During the remainder of the class period, Morgan Stanley's senior management received repeated, escalating warnings that New Century's lending practices were continuing to deteriorate, to the detriment of borrowers. This deterioration manifested itself in a number of ways, including rising foreclosures, deteriorating appraisals, and the growing presence of combined-risk factors in New Century loans. Together, these problems put New Century's borrowers at increasing risk of default and foreclosure with every passing year.

Escalating Delinquencies and Foreclosure Rates in New Century Loans: Morgan Stanley became acutely aware that New Century loans were experiencing increasing delinquency rates as early as spring 2005.[194] That trend worsened throughout the class period. According to Frank Telesca on the trading desk, "in general, delinquencies in 2005 were greater than in 2004, and that in each subsequent vintage, delinquencies in general increased."[195] Due to concerns over growing delinquencies, Anton Peterson, Morgan Stanley's head of credit and compliance due diligence, testified that due diligence recommended declining an increasing number of New Century loans "in our subprime pools" in late 2005 into early 2006.[196]

In an internal email dated April 14, 2006, Steven Shapiro, the head of Morgan Stanley's trading desk, predicted growing numbers of subprime foreclosures: "[W]e should expect . . . a good percentage of the borrowers going into extended delinquency/liquidation," in other words, foreclosure.[197] Instead of "a low 2% cumulative loss scenario," Shapiro projected "a 3.5-4.0 scenario" going forward, "double of what we had been modeling" foreclosures.[198]

A few months later, on September 26, 2006, Shapiro sent an email to his counterparts at New Century, Kevin Cloyd and Warren Licata, saying "Fellas. We need to talk about the performance of your 2006 loans. 6 months into the deals foreclosures are already 4%. Our phones are ringing off the hook with investors wanting to know why ?????"[199] Nevertheless, after sending this email, Shapiro did not take steps to curtail Morgan Stanley's purchases of New Century loans. [200]

On January 25, 2007, Steven Shapiro again emailed Cloyd, Licata, and Karl Weiss at New Century, reporting that in one New Century securitization in 2006, for loans ten months out after origination, their foreclosure rate was a "high" 7%. Shapiro asked, "What is going on with these loans ??????????" Weiss replied: "You mean besides borrowers who apparently don't have the

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194 *See, e.g.*, I Davis Depo. 77-83, 94-95, 147; Davis Depo. Exh. 1 at MS01385690; Telesca Depo. Exh. 9 at MS00194857, MS00194859.

195 Telesca Depo. 215, 296; *see also* Neuberger Depo. 95 (the delinquency rate for New Century loans on the warehouse line rose in late 2006 and early 2007).

196 Peterson Depo. 262.

197 Shapiro Depo. 190; Shapiro Depo. Exh. 12 at MS00121395.

198 Shapiro Depo. 192; Shapiro Depo. Exh. 12 at MS00121395.

199 Shapiro Depo. Exh. 13; *see also* Vanacker Depo. 260.

200 Shapiro Depo. 199.

money to make their mortgage payments? (Sorry to be flip…)" Shapiro wrote back: "I did not think you lent to people that did not have money to make their payments. Hey I need a total headcount for dinner on Monday. Let me know."[201] Once again, Shapiro took no action to reduce the trading desk's purchases of New Century loans.[202]

During this time period, Morgan Stanley was also on notice of the direct link between the risk profile of New Century's loans and its lending activities in certain geographic areas, including Detroit. Thus, Brad Davis noted in an email to Adrienne Dicker in Morgan Stanley's contract finance group that New Century's loans received high risk scores due "to high risk loans that New Century continues to originate." According to Davis, "because [New Century] lend[s] in . . . high risk markets such as Detroit, we will continue to see a high number of" high risk scores on New Century loans.[203] Davis considered Detroit to be a high-risk city because of its rising mortgage default rate and the increased likelihood of overvaluing properties in Detroit.[204] Nevertheless, Morgan Stanley did not change its purchase, securitization, or warehouse lending practices as a result of its concerns about Detroit.[205]

Deteriorating Appraisals: During the housing bubble, one of the ways that New Century and other lenders responded to Wall Street's demands to step up the volume of subprime loans was through sloppy and fraudulent appraisals that inflated the value of many homes securing loans. These inflated appraisals allowed lenders to approve quantities of loans that otherwise never would have "appraised," while allowing the principal balance of those loans (and the resulting debt burden to the borrowers) to be larger.[206] In addition, inflated appraisals perniciously made loan-to-value ratios seem to be lower, causing those loans to appear safer than they really were.

Over the class period, the quality of New Century's appraisals continued to erode, thereby inflating the value of many of the properties securing New Century's loans. Morgan Stanley was acutely aware of this problem as early as 2005. Throughout that year, Morgan Stanley's valuation due diligence group was on notice of systematic problems with and defects in New Century appraisals.[207] But the valuation due diligence group took no action in response.[208]

These appraisal problems at New Century continued to worsen, so much so that by March 2006, Brad Davis informed senior Morgan Stanley officials that New Century had agreed to a high amount of immediate kickouts at the most recent tie-out because its "appraisals stunk."[209] During 2006, the quality of New Century's appraisals continued to slide and there were growing signs of appraisal fraud. On December 1, 2006, in response to an email string discussing

201 Shapiro Depo. 201-02; Shapiro Depo. Exh. 14 at MS00221634.

202 Shapiro Depo. 202-05.

203 Davis Depo. Exh. 18; I Davis Depo. 245.

204 I Davis Depo. 247, 249-50; *see also* Barrow Depo. 178-85; Neuberger Depo. Exh. 10, on page immediately after MS02329674.

205 Barrow Depo. 315; Neuberger Depo. 102.

206 *See* THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 91 (2011).

207 *See, e.g.*, Davis Depo. Exh. 20; I Davis Depo. 266-70; Barrow Depo. 202-03; Barrow Depo. Exh. 11 (New Century was "pushing the envelope a bit" in terms of property values).

208 I Davis Depo. 167-68; Davis Depo. Exh. 6.

209 II Davis Depo. 275-76; Davis Depo. Exh. 22; *see also* Kaplan Depo. Exh. 16 (New Century's "valuation team also felt that the quality of the appraisals was terrible").

suspected fraud with a New Century loan, Brad Davis emailed one of his managers saying that he wished his counterpart Kelly Robson at New Century "would understand that the quality of [New Century's] product is not top shelf any more, and there are issues with a large number of their loans."[210] According to Davis, the appraisal quality of New Century's loans "was slipping," either because they involved unsupported values or poor condition properties.[211]

During the same time period, Brad Davis circulated a report on kickout drivers for New Century's appraisals to Eric Kaplan in the contract finance group. Kaplan, in turned, forwarded the report to Frank Telesca on the trading desk. The report listed multiple problems with New Century's appraisal processes, including that New Century overrode lower values determined by internal appraisal reviews and went ahead and funded those loans anyway based on the higher values in the original appraisals.[212] But Davis did not know if anyone transmitted that concern to New Century or if New Century took any steps to correct the problem.[213]

The Effect on Combined-Risk Factors on Default Risk: By early 2005, Morgan Stanley was focusing on the combined-risk factors presented by New Century's loans and the negative effect those factors had on the default risk of those loans.

Morgan Stanley was aware that the documentation level (i.e., full-documentation, stated-income, or limited-documentation) of the loans it bought from sellers such as New Century, the purpose of those loans (i.e., cash out refinance, no cash-out refinance, or purchase), the occupancy status (owner or tenant) and the debt-to-income ratios of the borrowers were extra risk factors that affected the default propensity of those loans. For this reason, Morgan Stanley instructed its valuation due diligence group in March 2005 to consider those risk factors when "determin[ing] whether to go to the maximum" loan-to-value ratio for those loans.[214] Implicitly, this represented a policy decision that Morgan Stanley would simply require stricter loan-to-value ratios for loans with specific risk factors, including stated income documentation or high debt-to-income ratios, instead of kicking those loans out of the loan pools altogether.

This decision showed that Morgan Stanley was indifferent to the ability to repay of borrowers who had high debt-to-income ratios and/or low-documentation loans. Morgan Stanley did not plan to ensure the repayment of their loans through a history of successful payment. Rather, it planned on full repayment by making sure their homes were worth enough to pay off their loans in case those borrowers defaulted and ended up in foreclosure.[215] Brad Davis, Morgan Stanley's head of valuation due diligence, referred to this approach as a "collateral lending philosophy."[216] But as a senior Morgan Stanley due diligence supervisor, Pamela Barrow, testified at her

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210 Davis Depo. Exh. 29; II Davis Depo. 322-25.

211 II Davis Depo. 323-24.

212 Davis Depo. Exhs. 31-32; II Davis Depo. 349-350.

213 II Davis Depo. 354; *see also id*. at 402-04.

214 Davis Depo. Exh. 1 at MS01385690; I Davis Depo. 94-95, 147 ("these factors are helping us do is say, when it's gray and you've got a lot of poor factors, then, you know what, be conservative within that range"); *id*. at 146-47 (explaining that valuation data are "gray" when "there is not a lot of good comps or not a lot of good data").

215 *See* I Davis Depo. 81-82 ("The weaker the borrowers, the better the collateral has to be because if you have to foreclose, make sure you have something to go back on").

216 I Davis Depo. 81-83.

deposition, a loan "becomes predatory . . . if you see that the person doesn't have any future of [*sic*] ability to pay the loan . . ."[217]

In April 2005, an internal Morgan Stanley report focused on yet another risk factor – prepayment penalties – and its link with the propensity to default. That report analyzed New Century whole loans that later became 90 days delinquent and concluded that almost 77 percent of those loans had prepayment penalties.[218]

Later, in the fall of 2005, Robert Travis, a Morgan Stanley diligence manager who worked primarily on New Century projects, apprised his superiors in writing that New Century's loans were presenting even more hazardous combinations of risk factors than before, with a concomitant increase in default risk. On October 7, 2005, Travis sent an email to Pamela Barrow and other Morgan Stanley officials expressing concern about "the quality of [New Century's loan] files and the product that the borrowers are being placed" in. Travis noted that Clayton Holdings, Morgan Stanley's outside due diligence vendor, had given more than half of the New Century loan files it reviewed the worst due diligence score of a 3. According to Travis, the loan pool contained "[h]igh risk loans with first time homebuyers, meeting credit grade requirements, but purchasing high end properties at 100% CLTV Stated. Large loan amount exceptions, heavy payment shock, and N/O/O [non owner-occupied] exceptions." "Overall," he concluded, the "loans are riskier than I have seen in the past."[219]

Steven Shapiro on the trading desk received a copy of Travis' email and asked him "[i]f there are specific things causing the kickouts to be higher or if it is just credit across the entire pool"? Travis replied:

> Steven,
>
> There are typical missing docs and credit issues that are just "missed". Specifically what I have been seeing that I am not comfortable with is the borrower with light credit, a qualifying FICO score, buying a high priced home on a stated income loan program. By light credit I mean less than $2500 credit lines for 24 months. Additionally there are more LTV/CLTV exceptions than I remember seeing, and many of those are being made on non-owner occupied properties. Several of those borrowers have accumulated a number of N/O/O properties over the last year without a history of being able to manage that type of debt load. What adds to my concern is that many of these loans are stated income, and the amount if income stated is just not reasonable for the credit profile. Bottom line, there is not a lot of "common sense" being used when approving these loans.[220]

Subsequently, on October 31, 2005, Travis' superior, Anton Peterson, sent an email to Michael Atadika on Morgan Stanley's contract finance team and identified "credit characteristics we would like to discuss with New Century." Those underwriting issues involved combined-risk

217 Barrow Depo. 149.
218 Telesca Depo. Exh. 9 at MS00194857, MS00194859.
219 Peterson Depo. Exh. 17.
220 Peterson Depo. Exh. 18, at MS00218918-19.

features and included many of the problems that Travis had noted in his October 7 email.[221] The problems with New Century loans did not improve, however, and by early 2006, Morgan Stanley's due diligence department started to perform analyses on closed New Century trades due to an increase in the recommended kickout rate.[222]

In sum, Morgan Stanley's senior management received mounting warning signs as early as 2004 that New Century was ignoring its underwriting guidelines, inflating appraisals, and making increasing numbers of combined-risk loans to borrowers with weak credit scores. Those higher-ups were also acutely aware of rising default and foreclosure rates on New Century loans. All of this should have caused Morgan Stanley to ramp up due diligence or scale back purchases. But it did neither. In fact, it increased its purchases after 2005.

4. Morgan Stanley Limited The Due Diligence It Conducted On New Century's Loan Pools

a) Overview Of Collateral Analytics And Due Diligence At Morgan Stanley

Morgan Stanley had two groups – collateral analytics and due diligence – that scrutinized the loan pools that New Century offered to Morgan Stanley before the trading desk made a final decision about a sale. When New Century proposed a trade, it provided Morgan Stanley with a loan tape that contained data on a large number of characteristics about every loan in the loan pool. These characteristics included information such as the interest rate, the loan-to-value ratio, the loan type (fixed-rate or ARM), and any prepayment penalty, etc. Collateral analytics compared the data on the tape to the bid terms for the pool and analyzed any discrepancies between the two. Collateral analytics also performed other analyses on the loan pool, known as "stratifications" or "strats."[223] In performing those analyses, collateral analytics only worked with the tape, not with the underlying loan files.[224]

After collateral analytics completed its work, the trading desk decided whether to continue processing the deal and send the loan pool to due diligence for further scrutiny.[225] In the due diligence section, the credit and compliance due diligence group examined a sample of the loans in the loan pool for compliance with New Century's underwriting standards and Morgan Stanley's risk overlays. The same group sampled the loan pool for compliance with state and federal regulatory requirements. Meanwhile, the valuation due diligence group scrutinized a sample of the loans to make sure the property securing the loan was properly valued.[226] During the period at issue, most of these procedures were not written down; Morgan Stanley did not

221 Peterson Depo. Exh. 19.
222 Peterson Depo. 276; Peterson Depo. Exh. 23.
223 Peterson Depo. 49-50, 72, 98, 188, 334-35, 339-40.
224 Kaplan Depo. 108.
225 Telesca Depo. 140-43; *see also* Peterson Depo. Exh. 20.
226 Peterson Depo. 187-92, 198-99; I Davis Depo. 28-34.

have written policies or procedures for due diligence on subprime loans until late 2007, after New Century went bankrupt.[227]

Kris Gilly was the head of collateral analytics. Anton ("Tony") Peterson headed the credit and compliance due diligence group, while Brad Davis headed the valuation due diligence group. For most of the class period, Peterson and Davis reported to Pamela Barrow, who was a senior due diligence supervisor from 2005 through at least sometime in 2007. The due diligence operation was located in Boca Raton, Florida.[228]

b) Morgan Stanley's Limited Due Diligence of New Century Loans

Morgan Stanley did not perform due diligence on every loan in the loan pools that New Century presented to it for sale. Although they could have done so, Clayton Holdings and Morgan Stanley's credit and compliance due diligence group did not examine the data or the original documents for every loan in the loan pool.[229]

Instead, Morgan Stanley's credit and compliance due diligence group only did diligence on a sample of the loans in New Century loan pools. Furthermore, most of those samples were non-random in nature. As a result, those samples were not representative of the loan pool[230] and so they were not statistically valid.[231]

In part due to these sampling flaws, the loans outside of the sample could violate New Century's underwriting standards, Morgan Stanley's risk overlays, or regulatory requirements without ever being detected by Clayton or the due diligence team. Because Morgan Stanley did not conduct due diligence on 100% of a loan pool, it did not look at loans outside of the sample.[232] Thus, it was possible that some loans that did not undergo due diligence had compliance violations or credit flaws and still ended up being purchased.[233] For that reason, Anton Peterson testified that "I don't know that I would be surprised" if Morgan Stanley had purchased New Century loans with debt-to-income ratios of 60% or higher, even though that violated Morgan Stanley's risk overlay standards. [234]

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227 Peterson Depo. 81.

228 Peterson Depo. 256.

229 While Morgan Stanley's credit and compliance due diligence group and its outside due diligence vendor, Clayton Holdings, had access to data on the bid tape from New Century for all of the loans in the loan pool, they did not usually consult the bid tape. Peterson Depo. 49, 335.

230 Peterson Depo. 206-07. *Cf.* I Davis Depo. 149-51 (describing why non-random sampling was not representative of pools of warehouse loans).

231 *See, e.g.*, GEORGE CASELLA & ROGER L. BERGER, STATISTICAL INFERENCE 207-11 (2d ed. 2002); DAVID FREEDMAN, ROBERT PISANI & ROGER PURVESI, STATISTICS 333-354 (3d ed. 1978); DOUGLAS C. MONTGOMERY & GEORGE C. RUNGER, APPLIED STATISTICS AND PROBABILITY FOR ENGINEERS 261-65 (2d ed. 1999).

232 Barrow Depo. 132-33.

233 Peterson Depo. 204, 311; Barrow Depo. 149-51, 218; Barrow Depo. Exh. 14, at MS02698001 (Barrow noted that "kicking doesn't take care of non-sampled loans").

234 Peterson Depo. 332.

On the credit and compliance due diligence side, Clayton Holdings performed due diligence on a sample of loans, which originally was as high as 35% but in 2004 was cut to 25% of the loan pool.[235] Clayton's personnel spent about an hour reviewing each loan in the sample.[236] In conducting its analysis, Clayton compared the characteristics of the sampled loans against New Century's underwriting guidelines and identified any exceptions to the guidelines present in the loans. Clayton scored each loan either as a 1 (no exceptions), a 2 (non-material exceptions), or a 3 (material exceptions).[237] A loan could also receive a 3 due to violation of one of Morgan Stanley's risk overlays, missing documentation, or a valuation issue. Morgan Stanley's due diligence team also instructed Clayton to look for layering of risk and to assign those loans the lowest score of 3 if it saw "a combination of features that cause[d it] concern."[238] Clayton recommended that any loan that received a final score of a 3 be "kicked out" of the loan pool. These loans were known as "kickouts."[239]

After Clayton was done, within the same sample of loans, Morgan Stanley's credit and compliance due diligence group then performed due diligence on the 3s and on a subsample of the loans that Clayton scored a 1 or a 2.[240] The due diligence team could change the score that Clayton originally assigned and sometimes it did.[241] Conversely, if the due diligence team agreed with Clayton about problems with certain loans, that did not lead to additional sampling of the rest of the pool.[242] Morgan Stanley's due diligence team spent as little as five to twenty minutes reviewing each loan that Clayton elevated for review.[243]

Access to underlying documentation was sometimes a problem. Although due diligence and Clayton were supposed to have access to the original loan files for loans in the sample, New Century did not always provide them with those files.[244] On another occasion when New Century refused to provide servicing records on seasoned loans that Morgan Stanley's due diligence team had requested, the trading desk pushed back hard on that request.[245] Telesca

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235 Peterson Depo. 272; Barrow Depo. 129-31, 143-44; Barrow Depo. Exh. 7, at MS00738705. *See also* Barrow Depo. 232-38 (discussing due diligence's process for deciding which adversely selected loans would not be sampled). Morgan Stanley did even less due diligence on the loans securing its warehouse line to New Century than on the whole loans that it purchased. Morgan Stanley's valuation due diligence group used a smaller sample size and dispensed with Hansen PRO automated valuation reviews for warehouse loans. In addition, the sample for warehouse loans was non-random and was limited to loans with features raising concern such as high loan-to-value ratios or certain geographic locations. As a result, that sampling methodology did not allow Morgan Stanley to reach a conclusion that would apply more broadly to a particular warehouse line. I Davis Depo. 149-51; *see also* II Goodman Depo. 141-44; Goodman Depo. Exh. 15, at MS01595031 (sample size was greater of 5% or 150 loans). Sometimes Morgan Stanley even just relied on the results of acquisition due diligence for the warehouse loans it funded. I Goodman Depo. 105-07; II Goodman Depo. 145-46; Goodman Depo. Exh. 16.

236 Peterson Depo. 244.

237 Peterson Depo. 328.

238 Peterson Depo. 226; *id.* at 224, 227-28.

239 *See generally* Peterson Depo. 187-92, 198-99, 328, 340-41; Kaplan Depo. 105-06.

240 Peterson Depo. 328, 340-41.

241 Peterson Depo. 190-92, 229-35; Peterson Depo. Exh. 14; *see also* Barrow Depo. Exh. 15 (Frank Telesca on the trading desk overturned a Clayton score of 3).

242 *See* Peterson Depo. 205-06.

243 Peterson Depo. 244.

244 Peterson Depo. 48-50; Barrow Depo. 64-65.

245 Frank Telesca on the trading desk complained that "our diligence team is making a bigger deal about this than it should." Kaplan Depo. Exh. 11; *see* Kaplan Depo. 260-64.

continued to resist the diligence team's request, even though Eric Kaplan in contract finance commented in the email thread that "it's very uncool to play a game of hide the ball" and later said, "New Century's reluctance . . . sets my Spidey-sense tingling."[246]

On the valuation side, Morgan Stanley used an outside vendor named Hansen to analyze the valuation of every loan that New Century presented to Morgan Stanley for purchase using an automated valuation model called "PRO."[247] For all loans that Hansen PRO flagged as presenting a high risk of being overvalued , the valuation group commissioned a brokers' price opinion (BPO) on the loan. The valuation group also ordered BPOs on a sample of the remaining loans.[248] If the BPO was lower than the original New Century appraisal, then the loan went into mitigation, where valuation due diligence attempted to reconcile the BPO with the original appraisal. The valuation group had the discretion to disregard the BPO and keep the loan in the loan pool.[249]

Morgan Stanley's outside due diligence vendor, Clayton Holdings, also flagged New Century loan files that presented questionable appraisal issues as "Credit 8s" for Morgan Stanley's valuation due diligence group. Morgan Stanley's due diligence team exercised discretion about whether those Credit 8 loans should be kept in the loan pool, despite Clayton's concerns about the appraisals.[250]

There were other respects in which valuation due diligence was limited for New Century loans. New Century had written appraisal or valuation guidelines for the loans that it originated. However, Brad Davis did not know whether Morgan Stanley considered it relevant whether New Century was adhering to those guidelines and did not know whether anyone at Morgan Stanley ever gave feedback to people at New Century about how they conducted appraisals in their loan origination process.[251] Similarly, Morgan Stanley did not track the quality of the appraisers that New Century used on its loans or give New Century feedback on the quality of its appraisers.[252] On both the valuation side and the credit and compliance side, after due diligence completed its review and identified any loans that should be kicked out of the loan pool because they did not meet Morgan Stanley's criteria for purchase, members of the due diligence team held a "tie-out" meeting with New Century staff members. At the tie-out meeting, Morgan Stanley identified the loans that it was considering kicking out of the loan pool being evaluated for purchase. New Century then had an opportunity at that meeting to try to persuade Morgan Stanley's due diligence team why contested loans that went to tie-out deserved to remain in the loan pool. After Morgan Stanley reviewed the data that New Century presented, the traders would make a final determination whether the contested loans should remain in the loan pool.[253]

There was one more way in which Morgan Stanley's due diligence process for subprime New Century loans was limited, compared to its process for prime and Alt-A loans. Morgan Stanley

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246 Kaplan Depo. Exh. 11; *see* Kaplan Depo. 260-64.
247 I Davis Depo. 193-194; Davis Depo. Exhs. 10-11.
248 I Davis Depo. 31-34.
249 I Davis Depo. 32.
250 I Davis Depo. 116-121.
251 I Davis Depo. 164.
252 I Davis Depo. 218-20.
253 *See* Shapiro Depo. 23, 27-34, 136; *see also* Barrow Depo. Exhs. 22-23; Peterson Depo. 203-04.

augmented its due diligence procedures by conducting post-purchase quality control for prime and Alt-A loans. However, Morgan Stanley did not conduct post-purchase quality control of subprime loans during the class period, even though subprime loans were riskier in nature.[254]

To compound these problems, Pamela Barrow, a senior due diligence supervisor, came down hard on workers who aired blunt criticisms about New Century combined-risk loans directly to the trading desk. This happened to Bernard Zahn, who was a contract employee of Morgan Stanley working with Kris Gilly's collateral analytics group from at least 2004 through 2007.[255] Zahn also worked with the valuation diligence group on valuation mitigation and the tie-outs from 2004 through November 1, 2006. There, he compared brokers' price opinions to appraisals and reviewed files to determine proper valuations, just the same as members of the valuation group. He also represented Morgan Stanley at tie-outs.[256]

On November 1, 2006, Zahn wrote an email raising concerns about "the incredible runup in valuations, meteoric increases by any standard, without any explanation," in property values in Jacksonville. Instead of addressing his email to his direct superiors, Zahn sent it directly to Shapiro and Frank Telesca on the trading desk. In the email, Zahn pointed out the "odd combinations of owners/borrowers" on three New Century loans and the use of out-of-area comps in the appraisals. He further observed that the loans all involved combined-risk features, because they involved "Investor properties, Stated Docs, Cash Out loans" with higher actual debt-to-income ratios than the loan files indicated.[257]

That same day, Zahn forwarded that email to Pamela Barrow, a senior due diligence supervisor at Morgan Stanley, notifying her of "some questionable issues on some of the loans" he had reviewed.[258] Barrow sent an email response to Zahn, with a cc to Brad Davis, saying:

> Thank you so much for your help and willingness to think outside of the box and dive deeper – this is awesome!!
> You did a good job on the risk review and we all appreciate it very much – good find on the fraud :)
> Unfortunately, I don't think we will be able to utilize you or any other third party individual in the valuation department any longer due to some changes that Rudner wants to make. . . .[259]

Then Brad Davis sent an email to his subprime manager, Mary Jewell, saying "I will call you on the way home. Do not share this with anyone!"[260]

Thereafter, Zahn never again worked for the valuation due diligence group, even though other third-party contract employees continued to work for that group and even though Davis thought that Zahn made good valuation diligence decisions. Instead, Zahn went back to work solely for

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254 Peterson Depo. 78-80, 333.
255 II Davis Depo. 404-05.
256 II Davis Depo. 379-80, 405-07.
257 Davis Depo. Exh. 40, at MS00794986-87.
258 Davis Depo. Exh. 40, at MS00794985-86.
259 Davis Depo. Exh. 40, at MS00794985.
260 Davis Depo. Exh. 40, at MS00794985.

Kris Gilly in collateral analytics.[261] Meanwhile, Shapiro did nothing to follow up on Zahn's allegations.[262]

Soon afterwards, on November 16, 2006, Bernard Zahn sent an email to Kris Gilly questioning loans approved by the valuation due diligence group in the previous year. According to Zahn's analysis, the valuation group had approved loans with excessive loan-to-value ratios (exceeding 100%), excessive variances, and other "issues the team seems to overlook when deciding to buy loans at tieout (it happens thousands of times). Zahn said: "Some of the loans are on the variance spreadsheet just to show the absolutely sloppy recordkeeping that's being done and how easy it is to buy loans that we know nothing about" due to "missing data." He continued:

> These were supposed to be valuation "final results" files but they look as bad as or worse than the initial tapes we get from clients for bid. There are some loans that don't even stipulate if they're in or out, just blanks. These are, only the ones we caught. This should give Shippy [Steven Shapiro] an idea how regular this type of practice is. It isn't "just a couple of typos" or "mistakes" as it was suggested. The more we dig, the more we find. This is SOP.[263]

However, Morgan Stanley never took steps to revise its valuation diligence policies or practices in response to Zahn's allegations.[264]

In short, Morgan Stanley was not interested in robust due diligence or blunt appraisals of New Century's loan quality. To the contrary, Morgan Stanley limited the due diligence it performed on New Century's loan pools. Even if Morgan Stanley's sampling procedures had been fully implemented, those procedures would have provided only limited protection against the inclusion of New Century loans with combined-risk features, such as high debt-to-income ratios, high loan-to-value ratios, stated income documentation, or interest-only schedules, in the pools that Morgan Stanley bought and securitized. As discussed below, however, even those weak due diligence procedures were diluted and actively circumvented by Morgan Stanley's trading desk in practice.

5. The Trading Desk Interfered With The Sample Size And Sampling Procedures For The Due Diligence Performed On New Century Loans

The sampling methodology and limited sample size conducted by due diligence was not an accident. Rather, the trading desk had input into that decision and sometimes countermanded proposals for increased sample sizes. Due diligence could not increase the sample size without the trading desk's permission. With respect to New Century, no such permission was granted.

The trading desk had input into the criteria for selection of the sample and also may have stipulated the sample size.[265] Meanwhile, due diligence never increased the sample size without

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261 II Davis Depo. 419, 423; Barrow Depo. 100. *See also* Shapiro Depo. Exh. 21; Shapiro Depo. 263-79; Telesca Depo. 211.

262 Shapiro Depo. 263-79.

263 Davis Depo. Exh. 41; II Davis Depo. 430-31; Barrow Depo. Exh. 4.

264 II Davis Depo. 431-33.

at least consulting Pamela Barrow, a senior due diligence supervisor, and contract finance. There were two or three times between 2003 and 2007 when the credit and compliance due diligence group submitted a request to increase its sample size, including at least once for New Century loans. Other than that, due diligence never advocated increasing the sample sizes as a general matter, despite the declining quality of the loans it was seeing.[266]

During one instance when collateral analytics proposed expanding the sample size for New Century loans, the trading desk overruled that request. In October 2005, James Supple in collateral analytics noted $30 million worth of a new interest-only loan product in a New Century loan pool and said that if the loans stayed in the loan pool, "I will add as many as I can to the sample." Steven Shapiro on the trading desk replied, "keep. sample like normal io [interest only]."[267] Shapiro commanded Supple not to increase the sample size even though Shapiro admitted at his deposition that he had no relevant expertise in the determination of statistically valid sample sizes.[268]

In the spring of 2006, the trading desk took the initiative to become even more involved in the due diligence process.[269] That involvement included altering the diligence script and the sampling protocols.[270] The purpose of that intervention was to hold down kickout rates. This was evident from an April 2006 memo in which Frank Telesca said with respect to an upcoming meeting to examine the due diligence process: "we want to determine how we can increase pull-through[271] without compromising the integrity or effectiveness of our diligence."[272]

As these events show, the trading desk took an active interest in limiting the size of the sample used for New Century loans and actively intervened to ensure that the sample size did not increase. The purpose and effect was to allow more New Century loans with credit quality, appraisal, and compliance problems to escape scrutiny and thereby stay in the loan pools that Morgan Stanley bought and securitized.

6. Morgan Stanley's Trading Desk Put High Priority On Reducing The Kickout Rates For New Century's Loan Pools And Pressured Due Diligence To Reduce Those Kickout Rates

In a related vein, Morgan Stanley's trading desk was deeply concerned about the high kickout rates for New Century loans being recommended by due diligence because the desk needed to preserve its relationship with New Century in order to keep a large volume of loans coming through the pipeline. Steven Shapiro, the head of trading desk, conveyed his concerns through

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265 Peterson Depo. 245-50; *see also* Telesca Depo. 130-31; Telesca Depo. Exh. 5; Peterson Depo. Exh. 16, at MS01257510; Peterson Depo. Exh. 8, at MS01257501; Barrow Depo. 234.

266 Peterson Depo. 45-47, 50-54, 311.

267 Shapiro Depo. 224; Shapiro Depo. Exh. 15 at MS01889710.

268 Shapiro Depo. 207-08, 223-25.

269 Shapiro Depo. 37; Telesca Depo. 85-87, 213-14; Telesca Depo. Exh. 16.

270 Shapiro Depo. 38-40; Telesca Depo. 85-87.

271 "Pull-through" refers to the percentage of the total amount of loans actually purchased from a loan pool. Peterson Depo. 277.

272 Telesca Depo. 306-07; Telesca Depo. Exh. 17 at MS01258938.

regular, direct communications in which he pressured due diligence – sometimes explicitly, sometimes implicitly – to lower the kickout rates. Pamela Barrow, a senior due diligence supervisor, reinforced his message by telling her staff that she expected "team participation" in reducing kickout rates.[273] In all likelihood, Barrow acted as Shapiro's messenger because he was involved in her personnel evaluations.[274] Thus, in these ways, the due diligence team received regular signals from the top to reduce the number of New Century loans that they recommended for kickout. In the process, increasing "pull-through" on New Century loans became an end in itself at Morgan Stanley, regardless of the questionable nature of many of those loans.

Morgan Stanley's trading desk transmitted its concerns about high kickout rates through regular conversations with the due diligence staff. In some of those conversations, the trading desk pressed due diligence to justify high kickout rates on New Century loan pools, including on occasions when New Century complained.[275] Shapiro personally questioned members of the due diligence team about the reason for high New Century kickout rates.[276] In the meantime, the trading desk never suggested to due diligence that declining loan performance required stricter underwriting of the loans under review.[277]

Pamela Barrow vested Shapiro's communications with authority by referring to Shapiro as "the boss."[278] Given the key importance of RMBS to Morgan Stanley's bottom line, Barrow, Shapiro, and other senior Morgan Stanley managers were under constant pressure to keep securitization volumes up by reducing kick-out rates and keeping New Century loans flowing to Morgan Stanley.[279] Consequently, Barrow actively encouraged her managers to keep Shapiro and Telesca in the loop regarding concerns that could result in high kickout rates for New Century loan pools.[280] On one occasion, Barrow praised Robert Travis, the due diligence manager for New Century projects, for informing internal groups at Morgan Stanley about kickout trends in the middle of due diligence, "rather than our getting into a difficult situation with due dil folks on-site and causing later surprise to both teams," because "it helps Steve [Shapiro] manage the client relationship."[281] Travis forwarded her email to his team, saying: "I have seen the benefit of keeping New York and Boca in the loop and I would suggest that if there are any issues on your deals you might do the same."[282]

Barrow also came down hard for lack of "team participation" in increasing pull-throughs. In 2006, Barrow reprimanded Anton Peterson for sending an email in which he argued that Morgan

[273] Peterson Depo. Exh. 30.

[274] Barrow Depo. 51. Barrow's eagerness to keep Shapiro happy recalls the criticism leveled by Inspector General of the Securities & Exchange Commission at Bear Stearns for "a proximity of risk managers to traders suggesting a lack of independence." THE FINANCIAL CRISIS INQUIRY COMMISSION, THE FINANCIAL CRISIS INQUIRY REPORT 283 (2011).

[275] Vanacker Depo. Exh. 30; Vanacker Depo. 249.

[276] Shapiro Depo. 236-37; Shapiro Depo. Exh. 17; *see also* Telesca Depo. 306-07; Telesca Depo. Exh. 17 at MS01258938; Barrow Depo. 238-39; Barrow Depo. Exh. 17.

[277] Peterson Depo. Exh. 254-55.

[278] Shapiro Depo. Exh. 19 at MS_FHFA_004948777; *see also* Peterson Depo. Exh. 4, p. 8.

[279] *See* Barrow Depo. Exh. 20.

[280] *See* Barrow Depo. 78-80, 87-88.

[281] Peterson Depo. Exh. 17, at MS00454528; Peterson Depo. 253-55; Barrow Depo. 207-08; Barrow Depo. Exh. 12.

[282] Peterson Depo. Exh. 17, at MS00454528.

Stanley should not purchase some New Century loans with curable compliance violations without being previously cured. She responded to his email by exhorting him to lower the kickout rate:

> Wrong answer.
> Yes, we are going to say no to probably all, but we will look again just for team participation in trying to improve pull-through. :) Know what I mean.[283]

Barrow's reproach to Peterson was one more example of her efforts to censor and punish frank appraisals of the problems with New Century loans.

These communications – both directly from the trading desk and also through Barrow – were part of a larger pattern in which Shapiro and Telesca in New York kept tabs on the due diligence team in order to keep the kickout rates down on New Century loans. Throughout the class period, Shapiro repeatedly spoke with members of the due diligence team at Morgan Stanley, including Pamela Barrow, Brad Davis, Anton Peterson, and Rob Travis, about kickout rates.[284]

Meanwhile, senior members of the due diligence team regularly briefed Shapiro and Frank Telesca on the trading desk about trends in New Century's kickout rates.[285] In addition to these oral communications, the due diligence team regularly briefed the trading desk in writing on the reasons for high kickout rates for New Century loans starting in 2006.[286] The trading desk did not change the way it did business or New Century's lending processes in response to these communications from due diligence.[287] Instead, it continued to exert pressure on due diligence to keep kickout rates down.

This sequence of events demonstrates that Morgan Stanley's trading desk, with the complicity of Pamela Barrow, a senior Morgan Stanley due diligence supervisor, put repeated pressure on Morgan Stanley's due diligence staff to minimize the kickouts from New Century's loan pools.

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283 Peterson Depo. Exh. 30; *see* Peterson Depo. 310, 311-14.

284 Shapiro Depo. 212-215; Peterson Depo. 258-60.

285 For instance, Brad Davis, the head of valuation due diligence, advised Shapiro of feedback he was getting from New Century as well as changes in the market. Usually that New Century feedback involved kickout rates and why those rates were increasing. Similarly, Davis alerted Shapiro in advance during the valuation due diligence process whenever he saw "that the kick-out rate [was] going to increase." The purpose of those alerts was to "prep[]" Shapiro "for a phone call that he's going to get from the seller." I Davis Depo. 138, 140-42; *see also id*. at 233; II Davis Depo. 396; *see also id*. at 397.

Davis became so enamored of doing what he could to reduce the kickout rate that he bragged in an email in May 2004, that "in light of the extremely high kickout ratio [New Century] had from the other sellers last month, we are very easy to deal with." Davis Depo. Exh. 17. While Davis referred to "other sellers," he clarified in his deposition that actually meant to refer to other *buyers* of New Century whole loans. I Davis Depo. 237-38.

286 *See* Peterson Depo. 276-78; Peterson Depo. Exh. 23; Shapiro Depo. Exh. 18, 243; Davis Depo. Exhs. 31-32; II Davis Depo. 338-42.

287 Barrow Depo. 89-90, 154-56, 220-21; *cf.* Neuberger Depo. 88-89 (the same for warehouse lending).

7. Morgan Stanley's Due Diligence Team Routinely Took Action To Reduce The Number Of New Century Loans That Were Kicked Out Of The Loan Pools

Morgan Stanley's due diligence team operated in an environment in which it regularly received messages from the top to keep kickout rates down. Given that environment, it is not surprising that the due diligence team regularly took steps to lower the number of New Century loans that were kicked out of loan pools. These steps allowed New Century loans with poor credit underwriting and inflated appraisals to be sold to Morgan Stanley for later securitization for investors.

One way that Morgan Stanley's credit and compliance due diligence group lowered the kickout rate was by overturning Clayton Holdings' recommendations to remove loans from the loan pool. The due diligence team did so at times by raising the grades of loans that Clayton Holdings had assigned the worst due diligence score of a 3. Morgan Stanley was more likely to raise grades of loans that Clayton had downgraded due to credit quality, as opposed to compliance concerns.[288] These overrides had the effect of permitting Morgan Stanley to purchase and securitize poorly underwritten New Century loans with elevated default risk.

These efforts to minimize the kickout rate were even more pronounced on the valuation side. The purpose of valuation due diligence was to assure that the home securing the loan was properly valued and that the loan-to-value ratio of the loan was as low as New Century said it was. This was important, among other things, because the higher the loan-to-value ratio, the higher the default risk on the loan.

Nevertheless, during the class period, Brad Davis, the head of valuation due diligence, took multiple steps to water down the valuation process in order to reduce the number of kickouts. Davis started by reducing the number of brokers' price opinions that came in under New Century's appraisals. To that end, in or about 2004, in part at Davis' instigation, Morgan Stanley replaced Hansen, the outside vendor it used to provide brokers' price opinions (BPOs), because Hansen's BPOs were lower than New Century's appraisals too often.[289]

Davis also heavily managed the mitigation process to avoid being too tough on New Century and to reduce the number of loans his group recommended for kickout. Davis communicated his intentions to his superiors in July 2004, when he unveiled a new monthly report on the results of the tie-outs with each of its sellers, including New Century. The report was circulated to Steven Shapiro on the trading desk and Adrienne Dicker in contract finance. Davis compiled the report "to show actual numbers to avoid our customers [*sic*] assumptions that we are too tough or bringing too much at tie out." He observed that "through very heavy mitigation efforts prior to the tie out, we are actually trending down on the overall percentage of loans that go to tie out, and the number of declined loans vs accepted loans at tie out have increased, showing we have narrowed down the tie out to issue loans."[290]

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288 Peterson Depo. 190-92, 229-35; Peterson Depo. Exh. 14.

289 I Davis Depo. 186-91, 254-56; Davis Depo. Exhs. 9, 19.

290 Davis Depo. Exh. 18.

Davis sought to reduce kickouts on valuation grounds in a number of ways. First, he ran the mitigation process for the purpose of "remov[ing] loans from tie-out that pass valuation once the appraisal and BPO have been reconciled" so that due diligence was "not sending . . . too many loans [to tie-out] that you don't want to waste the seller's time on."[291] As part of that process, Davis took action to restrict the amount of information his group requested of New Century to information that was "necessary." In his opinion, his group "had issues sometimes of asking the seller for information that we really didn't need to form a conclusion" as to valuation.[292] Accordingly, he amended the written policies and procedures for Morgan Stanley's valuation due diligence group to expressly instruct the members of his group to "make every effort to determine the validity of the value and avoid delays by only asking for necessary conditions."[293]

Second, Davis and his group used the mitigation process to resolve discrepancies between the original appraisals and the BPOs in favor of the original appraisals. For instance, it was Morgan Stanley's stated policy not to securitize loans with loan-to-value ratios or combined loan-to-value ratios of greater than 100%.[294] Nevertheless, Brad Davis testified that in some Morgan Stanley securitizations, he "would not be surprised" if Morgan Stanley purchased and securitized numerous loans where the LTV or CLTV based on the BPO-checked value rather than the initial appraisal exceeded 100%.[295] In a previous case against Morgan Stanley, the Massachusetts Attorney General's office had alleged, with respect to those values:

> In Morgan Stanley's securitizations during 2006 and 2007, 60% of the New Century loans with CLTVs based on the BPO-checked values over 100% had ratios greater than 105% on that basis, and about 19% of such loans had ratios greater than 120% on that basis.[296]

Brad Davis was not aware of any information to suggest that that sentence was untrue. [297]

Third, when Davis' staff members recommended sending New Century loans to tie-out due to problems with the appraisal, Davis and his managers used their authority to overturn some of those decisions.[298] One way Davis and his managers did so was by taking a second look at their spreadsheets designating New Century loans for tie-out to see if they could remove some loans from the tie-out list and keep those loans in the loan pool.[299] Davis and his group, however, never did second looks to determine whether New Century loans had passed valuation due diligence mistakenly and instead should be sent to tie-out.[300]

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291 I Davis Depo. 49; Davis Depo. Exh. 1 at MS01385685; *see also* Barrow Depo. 200-02; Barrow Depo. Exh. 11 (Robert Travis said, "I have worked with Mary [Jewell] to clear as many borderline loans as possible").
292 I Davis Depo. 65-66.
293 Davis Depo. Exh. 1 at MS01385685.
294 II Davis Depo. 448; Davis Depo. Exh. 44, p. 11, ¶ 34.
295 II Davis Depo. 449; Davis Depo. Exh. 44, p. 11, ¶ 34.
296 Davis Depo. Exh. 44, p. 12, ¶ 34.
297 II Davis Depo. 450.
298 I Davis Depo. 53-54; II Davis Depo. 442.
299 II Davis Depo. 282-90; Davis Depo. Exh. 23.
300 II Davis Depo. 288; *see also* Davis Depo. Exh. 23, at MS01252823 ("We can consider this the 'worst case scenario', as we will not add any loans to this list, but only remove them").

To summarize, at Pamela Barrow's urging, the due diligence team repeatedly overturned their own negative findings and approved New Century loans with major credit quality or valuation problems for purchase by Morgan Stanley. The purpose of these overrides was to reduce the number of New Century loans that were kicked out of loan pools. In turn, this allowed Morgan Stanley to purchase and securitize New Century loans with combined-risk features.

F. Morgan Stanley Took No Steps To Avoid Adverse Racial Impact

Based on my experience as a scholar and a regulator, I reviewed evidence relating to Morgan Stanley's fair lending compliance to determine whether it was sufficient to safeguard against harmful racial disparities. In order for a purchaser of home loans to avoid adverse racial impact, the firm must do more than recite the law in a company handbook or guidelines. In addition, it must take appropriate steps to actually avoid having negative disparate effect. To that end, it should seek legal advice on what the law requires. Beyond that, it should conduct training to ensure that the company's employees and sellers understand their legal obligations and how to avoid having an adverse disparate effect on racial minorities. The firm should also put specific protocols in place to help avoid adverse disparate impact or intentional discrimination. Meanwhile, the company's compliance team or a fair lending officer should be tasked with the responsibility for evaluating the company's performance and that of its loan sellers for adverse discriminatory impact. In addition, the company must test for potential disparate impact by analyzing data regarding the effect of its own purchasing and securitization practices and of its sellers' lending practices on protected groups.

Morgan Stanley was barely cognizant of its fair lending compliance obligations and therefore made no attempt to test for adverse disparate impact and virtually no attempt to comply with state and federal fair lending laws. Morgan Stanley's 30(b)(6) witness on point was Anton Peterson, the head of Morgan Stanley's credit and compliance due diligence group. In Peterson's words, "I don't think there was an understanding or a thought that it [the sale or securitization of loans] had any impact on Fair Housing."[301] Consequently, Peterson knew of no attempt by Morgan Stanley to comply with the portion of the Fair Housing Act and its regulations that govern the securitization of loans or to seek legal advice about how to comply.[302]

Peterson knew of no one at Morgan Stanley who looked at whether the firm was complying with the Fair Housing Act in its sale or securitization of loans.[303] Specifically, he was not aware of:

- any efforts by Morgan Stanley to avoid disparate impact in its securitization practices;[304]
- any adverse impact analysis by Morgan Stanley of the impact on its securitization practices on protected groups;[305] or
- any compliance reviews with Clayton Holdings or discussions with Clayton about the Fair Housing Act or the Equal Credit Opportunity Act.[306]

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301 Peterson Depo. 109, 134-35; *see also id*. at 108, 138-39.
302 Peterson Depo. at 109, 134-35.
303 Peterson Depo. 107-109, 132-35, 139.
304 Peterson Depo. 171.
305 Peterson Depo. 109.

Furthermore, Peterson confirmed that Morgan Stanley's due diligence team never examined or analyzed race data on New Century loans for any purpose, even though Clayton collected those data and put them on Morgan Stanley's shared drive.[307] No one ever instructed Morgan Stanley's due diligence team to look for racial patterns in lending.[308]

The only guidance that Morgan Stanley's written procedures provided to Morgan Stanley's staff on how to comply with the fair lending laws was this statement: "It is illegal to discourage, decline a request for, terminate a loan or transact in the secondary markets based on" prohibited factors, including race.[309] But Peterson recalled no training for Morgan Stanley's employees on how to comply with this provision.[310]

While Morgan Stanley did conduct some due diligence on New Century's compliance with the fair lending laws, that due diligence was superficial. Morgan Stanley limited its fair lending due diligence to two inquiries. First, Morgan Stanley required New Century to make representations and warranties about any investigations, litigations, or other matters concerning its compliance with fair lending laws. Those representations and warranties became worthless, however, when New Century went bankrupt. Second, Morgan Stanley's corporate review examined New Century's seller's guidelines and origination process to ascertain whether the underwriting process was based on objective criteria. However, while this corporate review may have sampled New Century's loans generally for adherence with the seller's guidelines and regulatory compliance, Morgan Stanley did not look at the race of the borrowers or obtain race data for the loans when it did that sampling.[311] Accordingly, that corporate review was not designed to detect actual instances of fair lending violations by New Century.

Morgan Stanley did nothing else to ensure that New Century was actually complying with the fair lending laws. Specifically, Morgan Stanley:

- Did not give New Century any information on how to comply with those laws;[312]
- Made no attempt to test New Century's compliance with the fair lending laws;[313]
- Did not ask New Century whether it was performing any adverse impact analysis of its loan originations;[314] and
- Never asked New Century to monitor for adverse impact.[315]

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306 Peterson Depo. 161; Barrow Depo. 123-24; *see* II Goodman Depo. at 139-40; Neuberger Depo. 103-04.
307 Peterson Depo. 176-79, 186; Barrow Depo. 123-24.
308 Barrow Depo. 96.
309 Peterson Depo. Exh. 6, at MS00637100; Peterson Depo. 144-47.
310 Peterson Depo. 143; *see also* Telesca Depo. 251-52.
311 Peterson Depo. 105-06, 109-21, 125, 127-29, 140, 151, 164, 169, 186-87; II Goodman Depo. 139-40.
312 Peterson Depo. 169, 186. In contrast, Morgan Stanley did give guidance to New Century on how to comply with other types of laws and regulatory policies, including the treatment of loans in areas affected by Hurricane Katrina and state and local high-cost and anti-predatory lending laws. Kaplan Depo. 353-67; Kaplan Depo. Exh. 20; Kaplan Depo. Exh. 21, at MS00380384-85.
313 Peterson Depo. 112-17, 119-20.
314 Peterson Depo. 119-20, 140.
315 Peterson Depo. 119-20, 140.

In sum, Morgan Stanley did virtually nothing to guard against adverse racial impact in its mortgage funding and securitization activities. It did not seek legal advice on how to comply with state and federal fair lending laws. Nor did it train its employees or those at New Century on how to avoid adverse disparate impact. It did not institute protocols for avoiding discrimination. It did not instruct the compliance team to check for patterns of adverse discrimination. Similarly, it never tested its securitization activities for adverse racial impact, even though it had the relevant race data for New Century loans on its shared drive. As for New Century's lending activities, Morgan Stanley simply relied on a facial review of New Century's lending guidelines and processes plus representations and warranties to discharge its fair lending responsibilities, without ever examining whether New Century's lending actually had an adverse racial impact on the plaintiff class.

V. Relevant Publications

I have authored the following publications that are relevant to my opinion and the issues in this case:

Books

THE SUBPRIME VIRUS: RECKLESS CREDIT, REGULATORY FAILURE, AND NEXT STEPS (Oxford University Press, 2011) (with Kathleen C. Engel).

FINANCIAL MODERNIZATION AFTER GRAMM-LEACH-BLILEY (Patricia A. McCoy ed., Lexis 2002).

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The CRA Implications of Predatory Lending, 29 FORDHAM URB. L.J. 1571 (2002) (with Kathleen C. Engel).

Working Papers

The Performance of New Private-Label Mortgage Loan Modifications After 2009 (working paper, May 31, 2012) (with Arthur Acoca, Ren Essene, Min Hwang, Jake Liebschutz, Jessica Russell & Susan Wachter.

Respectfully submitted,

Patricia A. McCoy

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Dated: June 23, 2014

APPENDIX I

EXPERT RESUME OF PATRICIA A. McCOY

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EMPLOYMENT

Liberty Mutual Professor of Law, starting fall 2014, Boston College Law School.

Connecticut Mutual Professor of Law and Director of the Insurance Law Center, 2010-present, University of Connecticut School of Law. George J. & Helen M. England Professor of Law, 2006-2010. Professor of Law, 2002-2006. Visiting Professor, Spring 2000.

- As Director of the Insurance Law Center, have convened research, organized annual interdisciplinary symposia on topics in financial services law and insurance, administered the LL.M. Program in Insurance Law, established scholarly collaborative efforts with academic counterparts in Britain, China, France, Italy, and South Africa, and served as faculty editor of the peer-reviewed *Connecticut Insurance Law Journal*.

- Courses Taught: Business Organizations, Banking Regulation, Securities Regulation, Regulation of Mutual Funds, Consumer Finance Law, Retirement Security Law, Principles of Insurance Law, Cybercommerce Law.

- Dean Search Committee (search coordinator); Faculty Appointments Committee; Chair, Personnel Action Committee; Academic Support Committee; Computer Committee.

- Guest Lecturer, University of International Business and Economics, Beijing, May 2005 and June 2007; Hong Kong Polytechnic University, June 2007.

Assistant Director for Mortgage Markets, Consumer Financial Protection Bureau, Washington, D.C., January-December 2011.

- As founder of the Mortgage Markets division, directed all policy analysis of the Bureau's mortgage initiatives, including ability to repay, simplified mortgage disclosures, mortgage servicing, alternative mortgages, high-cost loans, reverse mortgages, service members' relief, and mortgage data collection under the Home Mortgage Disclosure Act and related statutes. Conducted interagency initiatives for the Bureau on mortgage rulemakings, mortgage data, and the joint state-federal mortgage servicing settlement. Established risk analytics function for mortgages, including acquisition of major loan-level mortgage datasets and IT infrastructure necessary for empirical analysis. Spearheaded development of web-based interactive tools to assist consumer decision-making and advised on the development of the consumer response function for mortgages, including foreclosure prevention.

Consultant, Consumer Financial Protection Bureau, U.S. Department of the Treasury, Washington, D.C., October-December 2010.

- Advised Professor Elizabeth Warren on mortgage disclosure simplification under the Truth in Lending Act and the Real Estate Settlement Procedures Act.

Guest Professor, University of Pretoria, Faculty of Law, Department of Mercantile Law, Pretoria, South Africa, 2011-2013.

Honorary Guest Professor, University of International Business and Economics, Beijing, China, 2007-date. Co-chair of the Law and Economics Program.

Visiting Scholar, Massachusetts Institute of Technology, Department of Economics, 2002-2003.

- Graduate course work in microeconomics, behavioral economics, public finance, and corporate finance.

Professor of Law, Cleveland-Marshall College of Law, Cleveland State University, 2001-2002. Associate Professor of Law with tenure, 1997-2001. Assistant Professor of Law, 1992-1997.

- Faculty member, Summer Law Institute in St. Petersburg, Russia, Summers 1995 and 2002. Taught Comparative Financial Services Regulation.

- Guest Lecturer, St. Petersburg State University, Moscow State University, and Volgograd State University, Russia, Spring 1994.

Partner, Mayer Brown, Washington, D.C., 1991-1992. Associate, 1984-1990. Summer associate, Summer 1983.

- Specialized in complex banking, securities fraud, constitutional and general business law litigation at the trial and appellate levels. Represented numerous *pro bono* plaintiffs in housing and employment discrimination cases in conjunction with the Washington Lawyers' Committee for Civil Rights.

- Named Pro Bono Attorney of the Year for 1991-1992 by the District of Columbia Bar.

Law Clerk to the late Hon. Robert S. Vance, United States Court of Appeals for the Eleventh Circuit, 1983-1984.

Summer associate, Shaw, Pittman, Potts & Trowbridge, Washington, D.C., Summer 1982.

Summer associate, U.S. Nuclear Regulatory Commission, Bethesda, Maryland, Summer 1981.

Earlier positions: Legal assistant, McCutchen, Doyle, Brown and Enersen, San Francisco, California (1979-1980); Legal assistant, Kansas Legal Services, Pottawatomi and Kickapoo

Nations (1977-1979); Research analyst for U.S. Commissioner of Education Terrel H. Bell, Washington, D.C. (1974-1975); Intern, Rep. William Roy (D-Kan.), U.S. House of Representatives, Washington, D.C. (1974); Intern, Common Cause, Washington, D.C. (1973).

EDUCATION

Case Western Reserve University. Non-degree course work in mathematics, probability, and statistical analysis, 1998-2002.

University of California (Berkeley) School of Law. J.D. 1983.

- *Industrial Relations Law Journal* (now the *Berkeley Journal of Employment and Labor Law*). Editor-in-Chief, 1982-1983; Managing Editor, 1981-1982.

Ludwig Maximilians University (University of Munich) and Bavarian Film Academy, Germany. Graduate studies, 1976-1977.

- German Marshall Fund (Deutscher Akademischer Austauschdienst) Scholar.

Oberlin College. B.A. 1976, Government.

EDITORSHIPS AND RESEARCH APPOINTMENTS

Member, Editorial Board, *Journal of Financial Perspectives*.

Member, Editorial Advisory Board, *The Journal of Accounting, Economics and Law – A Convivium*.

Fellow, Center for Law, Economics & Finance, The George Washington University Law School.

Adjunct Research Scholar, National State Attorneys General Program, Columbia Law School, 2009-2010.

Member, Editorial Advisory Board, Cambridge Series on Law, Finance, and Economics, Oxford University Press.

Symposium Co-Guest Editor, *Special Issue on Market Failures and Predatory Lending*, 15 HOUSING POL'Y DEBATE Issue 3 (2004).

PUBLICATIONS

Books

THE SUBPRIME VIRUS: RECKLESS CREDIT, REGULATORY FAILURE, AND NEXT STEPS (Oxford University Press, 2011) (with Kathleen C. Engel).

- Named Best Book on Consumer Financial Services of 2011 by the American College of Consumer Financial Services Lawyers.

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A Tale of Three Markets Revisited, 82 TEX. L. REV. 439 (Dec. 2003) (with Kathleen C. Engel).

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A Tale of Three Markets: The Law and Economics of Predatory Lending, 80 TEX. L. REV. 1255 (2002) (with Kathleen C. Engel).

- Termed "groundbreaking" and "required reading for any policy analyst interest in the subject of predatory lending." James H. Carr, *New Industry Developments, in* CHANGING FINANCIAL MARKETS AND COMMUNITY DEVELOPMENT 170, 172 (Federal Reserve System

2001).

- Front page of the *Wall Street Journal* cited the article's suitability proposal and called suitability a "promising approach" that is "worth exploring." David Wessel, *An Inner-City Predator Needs a New Leash*, WALL ST. J., Apr. 19, 2001, at A1.

- Congress adopted the article's ability to repay proposal in Title XIV of the Dodd-Frank Act.

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Musings on the Seeming Inevitability of Global Convergence in the Regulation of Banking Law, 7 CONN. INS. L.J. 433 (2000-2001).

THE DEMISE OF THE COMMON-LAW DOCTRINE IN *D'OENCH, DUHME* (Matthew Bender 1998).

Levers of Law Reform: Public Goods and Russian Banking, 30 CORNELL INT'L L.J. 45 (1997).

A Political Economy of the Business Judgment Rule in Banking: Implications for Corporate Law, 47 CASE W. RES. L. REV. 1 (1996).

The Notional Business Judgment Rule In Banking, 44 CATH. U.L. REV. 1031 (1995).

Co-author with John Pearson, *Footprints of a Just Man: The Case Law of Judge Robert S. Vance*, 42 ALA. L. REV. 987 (1991).

Book Review

Review, *International Banking* by Michael P. Malloy, 12 THE TRANSNAT'L LAWYER 129 (1999).

Online, Newsletter, and Newspaper Publications

Op Ed, *Another View: The Best Way to Protect Borrowers*, THE NEW YORK TIMES DEALBOOK, March 8, 2010.

Accounting for Subprime Losses: The Impact of FAS 157, EY FACULTY CONNECTION, Issue 20 (Dec. 2007), available at http://www.ey.com/global/content.nsf/US/EY_Faculty_Connection_(Issue_20) (with Amy Dunbar).

Interview panelist in *Perspectives on Assessing CRA's Impact, Effectiveness, and Applicability for the Future*, CR (COMMUNITY REINVESTMENT) REPORT (Fed. Res. Bank of Cleveland, Summer 2007), available at http://www.clevelandfed.org/CommAffairs/CR_Reports/CRReport_summer07.pdf.

Guest Author (with Kathleen C. Engel), *Credit Slips* blog, Dec. 11-15, 2006, www. creditslips.org/.

Op Ed titled *Mortgage rate disparities hurt borrowers, communities* in THE PLAIN DEALER (Cleveland), Sept. 29, 2006 (with Kathleen C. Engel).

Banking on Bad Credit: New Research on the Subprime Home Mortgage Market, published online in the Proceedings of the Third Federal Reserve System Conference (titled "Promises and Pitfalls: As Consumer Finance Options Multiply, Who Is Being Served and at What Cost?), 2005, available at http://www.chicagofed.org/cedric/files/2005_conf_discussant_session1_mccoy.pdf.

OTHER PROFESSIONAL ACTIVITIES

Member, Federal Deposit Insurance Corporation Advisory Committee on Economic Inclusion, 2014 – date.

Member, American Law Institute, 2013 to date.

Adviser, *Restatement of the Law Third, Consumer Contracts* (American Law Institute), 2012 to date.

Member, Advisory Committee on Improving Low-Income and Minority Access to Mortgage Credit after the Housing Bust, Harvard University Joint Center on Housing Studies, 2011-2013 (funded by the Ford Foundation).

James W. Cooper Fellow and Director, Connecticut Bar Foundation, 2009-2010.

Adviser, Congressional Oversight Committee on TARP (headed by Elizabeth Warren), 2009.

Adviser, Obama Transition Team, 2008.

Adviser, Obama Presidential Campaign, 2007-2008.

Member, Advisory Committee on Ford Foundation Subprime Crisis Project, Harvard University Joint Center for Housing Studies, 2008.

Director, Insurance Marketplace Standards Association, 2003-2008. Member, Audit Committee.

Member, Blue Ribbon Committee, Harvard University Joint Center for Housing Studies, 2006-2007 (advised on study titled *Race or Risk: From Dueling Data to Systemic Solutions*, funded by the Ford Foundation).

Member, Demos: A Network for Ideas and Action, The Debt and Assets Working Group, January 2006 (sponsored by the Rockefeller Foundation).

Member, Research Committee, Center for Responsible Lending, Washington, D.C., 2005-2010.

Consultant, Subprime Mortgage Database Project (in tandem with the National Consumer Law Center, funded by the Ford Foundation), 2004-2008.

Member, Consumer Advisory Council, Federal Reserve Board of Governors, 2002-2004. Chair, Consumer Credit Committee, 2004-2005.

- Advised Federal Reserve governors and staff on needed reforms to federal consumer protection laws and regulations on home mortgages, credit cards, other consumer loans, real estate settlement procedures, credit reporting, lending discrimination, community reinvestment, financial privacy, and home mortgage data reporting.

Director, Connecticut Bar Foundation, 2008. Member, Audit and Finance Committees.

Director and Treasurer, Connecticut Fair Housing Center, 2004-2007. Member, Executive Committee.

Member, Research Working Group, National Consumer Law Center, 2003-2004.

Chair, Association of American Law Schools, Section on Financial Institutions and Consumer Financial Services, 2000-2001; Program Chair, 2006; Executive Committee, 2009.

Consultant, Ohio Public School Finance Reform Project, 1999-2000.

Consultant on Bulgarian banking reforms for Chemonics International, Sofia, Bulgaria, May 1997.

Commentator on the draft of Part I of the Russian Civil Code under the auspices of the Institute for Reform in the Informal Sector (IRIS), University of Maryland, Spring 1994.

Director, Washington Council of Lawyers, 1986-1992.

Member, District of Columbia Bar (admitted 1984).

<u>LEGISLATIVE AND AGENCY TESTIMONY</u>

Testified before the Consumer Financial Protection Bureau on Truth in Lending Disclosures, November 20, 2013, Boston, Massachusetts.

Testified before the Federal Reserve Board at hearing on the Home Mortgage Disclosure Act, September 24, 2010, Washington, D.C.

Testified before the Subcommittee on Securities, Insurance, and Investment of the U.S. Senate Committee on Banking, Housing, and Urban Affairs at hearing titled "Securitization of Assets: Problems and Solutions," October 7, 2009, Washington, D.C.

Testified before the Subcommittee on Domestic Monetary Policy and Technology of the U.S. House Committee on Financial Services at hearing titled "Regulatory Restructuring: Safeguarding Consumer Protection and the Role of the Federal Reserve," July 16, 2009, Washington, D.C.

Testified before the U.S. Senate Committee on Banking, Housing, and Urban Affairs at a hearing titled "Consumer Protections in Financial Services: Past Problems, Future Solutions," on March 3, 2009, Washington, D.C.

Testified before the Committee on Banks, Connecticut General Assembly, in hearing on mortgage lending bills, February 28, 2008.

Testified before the Federal Reserve Board at hearing titled "Building Sustainable Homeownership: Responsible Lending and Informed Consumer Choice," on July 11, 2006, Atlanta, Georgia.

APPENDIX II

EXPERT LITIGATION ENGAGEMENTS OF PATRICIA A. McCOY

EXPERT LITIGATION ENGAGEMENTS

Expert for plaintiff borrowers in *Yarger v. ING Bank, FSB,* Case No.: 1:11-cv-00154-LPS (D. Del.): provided initial expert report and rebuttal expert report in home mortgage origination advertising case.

Expert for plaintiff in *Chestnut v. Whitehaven Income Fund I, LLC*, Civil Action No. 12-CV-8854 (PAC) (S.D.N.Y.): provided expert report in litigation lending case.

Expert for plaintiff United States of America in *U.S. v. GFI Mortgage Bankers, Inc.*, 12-CV-02502 (S.D.N.Y.): provided expert consultation prior to settlement in mortgage lending discrimination case

Expert for plaintiff borrowers in *Barrett, et al. v. Option One Mortgage Corporation, et al.*, C.A. No. 08-10157 (D. Mass): filed expert rebuttal report in mortgage lending discrimination case.

Expert for plaintiff borrowers in *Ramirez, et al. v. GreenPoint Mortgage Funding, Inc.*, Case No. 3:08-cv-00369-TEH (N.D. Cal.): filed expert rebuttal report in mortgage lending discrimination case.

Expert for defendant title insurance company in *Mesa Bank v. Alexander*, No. CV2008-019063 (Maricopa County, Arizona, Superior Court): filed expert report, testified at expert deposition, and testified at trial deposition in mortgage fraud case. The court qualified me as an expert at trial.

Expert for plaintiff borrowers in *In re Ameriquest Mortgage Co. Mortgage Lending Practices Litigation*, MDL No. 1715, Lead Case No. 05-cv-07097 (N.D. Ill.): filed expert report in support of settlement and distribution plan.

Expert for defendant title insurance company in *Rubin v. Coppenger et al.,* No. CV-2006-07-4229 (Summit County, Ohio, Court of Common Pleas): filed expert report in mortgage fraud case.

Expert for defendant title insurance company in *Countrywide Home Loans, Inc. vs. LandAmerica American Title Company et al.*, Cause No. 07-14386-I (Dallas County, Texas, District Court: 162d Jud. District): provided background consultation in mortgage fraud case.

Expert for defendant title insurance company in bankruptcy proceeding titled *Credit Suisse Financial Corporation, et al. v. Parish Marketing & Development Corporation, et al.*, C.A. 0:08-cv-01038-DWF-SRN, Claim #F34052233, F34052083, and F34052229 (D. Minn.): provided background consultation in mortgage fraud case.

Expert witness for defendant title insurance companies in *Countrywide Home Loans, Inc. v. National Land Title of Tarrant, Inc. et al.*, Cause No. 06-11971-H (Dallas County, Texas, District Court: 160th Jud. District) and related litigation: filed expert report in mortgage fraud case.

Expert witness for defendant title insurance companies in *Ohio Savings Bank v. Commonwealth Land Title Insurance Co. et al.*, Cause No. 2006-32092 (Harris County, Texas, District Court: 295th Jud. District): filed expert report in mortgage fraud case.

Expert witness for defendant title insurance company in *ABN AMRO Mortgage Group, Inc. v. The Mortgage Zone, Inc.*, Case No. 05-74150 (E.D. Mich.): filed expert report in predatory mortgage lending case.

Expert witness for defendant title insurance company in *ABN-AMRO Mortgage Group, Inc. v. New Partners Mortgage Company,* Case No. 1:05 CV 1167 (N.D. Ohio): filed expert report in predatory mortgage lending case.

Expert witness for plaintiffs in *State of Connecticut v. Approved Mortgages, Inc. et al.*, Docket No. HHD-X09-CV-05-40097378-S (Connecticut Superior Ct., Jud. District of Hartford): testified at expert deposition in predatory mortgage lending case.

Expert witness for plaintiff in *Devlin v. Northeast Mortgage Corp.*, original Docket No. X01-CV-03-0178670-S (Connecticut Superior Ct., Jud. District of Waterbury), later transferred to U.S. Bankruptcy Court: testified at expert deposition in predatory mortgage lending case.

Expert witness for plaintiffs in *State of Connecticut v. GRZ, LLC*, Docket No. CV 03 0829985S (Connecticut Superior Ct., Jud. District of Waterbury Complex Litigation): filed expert report and testified at expert deposition in predatory mortgage lending case.

Expert witness for plaintiff in *Heaton v. Monogram Credit Card Bank of Georgia*, Civil Action No: 98-1823 c/w 99-2603 Section: "J" (1) (U.S. District Court for the Eastern District of Louisiana): filed expert report in challenge to a claim of federal preemption by a credit card bank.