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FEDERAL HOUSING FINANCE AGENCY

12 CFR Part 1238

[No. 2013-N-17]

Orders: Reporting by Regulated Entities of Stress Testing Results as of September 30, 2013; Revision and Amendments to Summary Instructions and Guidance

AGENCY: Federal Housing Finance Agency.

ACTION: Orders.

SUMMARY: In this document, the Federal Housing Finance Agency (FHFA) is issuing Orders to further supplement the final rule implementing section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), and appeared in the Federal Register of September 26, 2013, at 78 FR 59219. FHFA also is amending the Summary Instructions and Guidance, which accompanied the Orders.

DATES: Each Order is effective November 26, 2013**.**

FOR FURTHER INFORMATION CONTACT: Naa Awaa Tagoe, Senior Associate Director, Office of Financial Analysis, Modeling and Simulations, (202) 649-3140, naaawaa.tagoe@fhfa.gov; Stefan Szilagyi, Examination Manager, FHLBank Modeling, FHLBank Risk Modeling Branch, (202) 649-3515, stefan.szilagy@fhfa.gov; or Mark D. Laponsky, Deputy General Counsel, Office of General Counsel, (202) 649-3054 (these are not toll-free numbers), mark.laponsky@fhfa.gov. The telephone number for the Telecommunications Device for the Hearing Impaired is (800) 877-8339.

SUPPLEMENTARY INFORMATION:

I. Background

FHFA is responsible for ensuring that the regulated entities operate in a safe and sound manner, including the maintenance of adequate capital and internal controls, that their operations and activities foster liquid, efficient, competitive, and resilient national housing finance markets, and that they carry out their public policy missions through authorized activities. See 12 U.S.C. 4513. These Orders are being issued under 12 U.S.C. 4514(a), which authorizes the Director of FHFA to require by Order that the regulated entities submit regular or special reports to FHFA and establishes remedies and procedures for failing to make reports required by Order. The Orders prescribe for the regulated entities the scenarios to be used for stress testing. The Summary Instructions and Guidance accompanying each Order provides to the regulated entities advice concerning the content and format of reports required by the Order and rule.

These Orders communicate to the regulated entities their reporting requirements under the framework established by the final rule, and the revised and amended Summary Instructions and Guidance that accompany each Order. These Orders also advise the regulated entities of the scenarios to be used for the stress testing.

II. Order, Summary Instructions and Guidance

For the convenience of the affected parties, the text of the Orders follows below in its entirety. You may access these Orders from FHFA's Web site at http://www.fhfa.gov/Default.aspx?Page=43. The Orders and Summary Instructions and Guidance will be available for public inspection and copying at the Federal Housing Finance Agency, Eighth Floor, 400 Seventh St., SW, Washington, DC 20024. To make an appointment, call (202) 649-3804.

The text of the Orders and the Summary Instructions and Guidance, as amended, is as follows:

Federal Housing Finance Agency

Order Nos. 2013-OR-B-2, 2013-OR-FNMA-2, and 2013-OR-FHLMC-2

REPORTING BY REGULATED ENTITIES OF STRESS TESTING RESULTS AS OF SEPTEMBER 30, 2013

Whereas, section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") requires certain financial companies with total consolidated assets of more than $10 billion, and which are regulated by a primary Federal financial regulatory agency, to conduct annual stress tests to determine whether the companies have the capital necessary to absorb losses as a result of adverse economic conditions;

Whereas, FHFA's rule implementing section 165(i)(2) of the Dodd-Frank Act is codified as 12 CFR part 1238 and requires that "[e]ach regulated entity must file a report in the manner and form established by FHFA." 12 CFR 1238.5(b);

Whereas, The Board of Governors of the Federal Reserve System issued stress testing scenarios on November 1, 2013, corrected on November 7, 2013, and supplemented on November 14, 2013; and

Whereas, section 1314 of the Safety and Soundness Act, 12 U.S.C. 4514(a) authorizes the Director of FHFA to require regulated entities, by general or specific order, to submit such reports on their management, activities, and operation as the Director considers appropriate.

Now therefore, it is hereby ordered as follows:

Each regulated entity shall report to FHFA and to the Board of Governors of the Federal Reserve System the results of stress testing as required by 12 CFR part 1238, in the form and with the content described therein and in the Summary Instructions and Guidance accompanying this Order and dated November 26, 2013, which replaces, amends, and supersedes the Summary Instructions and Guidance issued on September 9, 2013, to this Order, and using the scenarios provided in Appendices 1 through 10 to this Order.

This Order is effective immediately.

Signed at Washington, DC, this 26th day of November, 2013.

Sandra Thompson,
Deputy Director for Housing Mission and Goals By delegation.

______________________________________ December 2, 2013
Edward J. DeMarco, Date
Acting Director, Federal Housing Finance Agency.

The Appendices to this order and amended Summary Instructions and Guidance are as follows:

Appendix 1: Baseline Scenarios – Domestic

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	112.4	140.8	32.8
Q2 2001	2.1	5.0	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	114.5	140.0	34.7
Q3 2001	-1.2	0.1	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	116.7	143.7	43.7
Q4 2001	1.0	2.2	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.1	137.9	35.3
Q1 2002	3.8	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	121.3	139.7	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	124.3	137.4	28.4
Q3 2002	1.9	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	127.8	140.9	45.1
Q4 2002	0.2	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	130.4	144.2	42.6
Q1 2003	2.0	4.6	1.2	4.1	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	133.3	148.7	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	136.0	151.2	29.1
Q3 2003	6.9	9.4	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	139.7	152.2	22.7
Q4 2003	4.6	6.7	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	144.3	150.1	21.1
Q1 2004	2.4	6.0	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	149.9	155.8	21.6
Q2 2004	3.1	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	156.2	162.6	20.0
Q3 2004	3.6	6.2	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	161.9	173.9	19.3
Q4 2004	3.4	6.4	5.1	8.4	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	167.5	178.4	16.6
Q1 2005	4.4	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	175.7	179.6	14.6
Q2 2005	2.2	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	183.3	186.5	17.7
Q3 2005	3.3	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	189.5	190.8	14.2
Q4 2005	2.2	5.5	3.3	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	194.4	199.6	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.9	203.0	14.6
Q2 2006	1.3	4.6	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	199.0	211.9	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.9	224.2	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	197.3	221.1	12.7
Q1 2007	0.3	4.8	2.7	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	195.6	233.3	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	191.3	241.5	18.9
Q3 2007	2.7	4.1	1.0	3.3	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	185.9	257.8	30.8
Q4 2007	1.5	3.3	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	180.2	260.2	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	174.1	253.6	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	166.3	242.1	24.1
Q3 2008	-2.0	0.7	-8.8	-5.0	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	159.6	246.8	46.7
Q4 2008	-8.3	-7.8	2.5	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	152.0	231.9	80.9

Appendix 1: Baseline Scenarios – Domestic (Cont.)

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2009	-5.4	-4.5	-1.4	-3.6	8.3	-2.6	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	144.3	211.2	56.7
Q2 2009	-0.4	-1.1	3.0	4.9	9.3	2.0	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.3	175.4	42.3
Q3 2009	1.3	1.2	-4.0	-1.6	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	143.8	158.7	31.3
Q4 2009	3.9	5.1	-0.1	2.6	9.9	3.1	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	144.6	158.0	30.7
Q1 2010	1.6	3.0	0.3	1.7	9.8	0.7	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.3	153.2	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	-0.2	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	145.3	168.8	45.8
Q3 2010	2.8	4.7	1.9	3.1	9.5	1.4	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	142.3	171.1	32.9
Q4 2010	2.8	4.9	2.6	4.8	9.5	3.0	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.2	177.8	23.5
Q1 2011	-1.3	0.3	5.0	8.2	9.0	4.4	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.9	184.8	29.4
Q2 2011	3.2	5.9	-0.4	3.3	9.0	4.7	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.5	181.8	22.7
Q3 2011	1.4	3.9	1.6	3.9	9.0	2.9	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.2	182.0	48.0
Q4 2011	4.9	5.4	-0.6	0.8	8.7	1.4	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	136.3	195.2	45.5
Q1 2012	3.7	5.8	4.6	6.9	8.3	2.3	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	138.5	193.5	23.0
Q2 2012	1.2	3.0	1.8	2.9	8.2	1.0	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	141.4	193.7	26.7
Q3 2012	2.8	4.9	-0.6	1.1	8.0	2.1	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	143.9	201.1	20.5
Q4 2012	0.1	1.6	9.0	10.7	7.8	2.2	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	146.8	203.2	22.7
Q1 2013	1.1	2.8	-7.9	-7.0	7.7	1.4	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	152.6	205.4	19.0
Q2 2013	2.5	3.1	3.5	3.4	7.6	0.0	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	157.8	214.3	20.5
Q3 2013	2.0	4.7	1.7	4.3	7.3	2.3	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	158.8	217.0	17.0
Q4 2013	2.4	3.8	2.4	3.8	7.3	1.7	0.1	1.8	2.8	5.0	4.5	3.2	17169.2	159.7	219.7	19.0
Q1 2014	2.6	4.7	2.6	4.2	7.1	1.9	0.1	2.0	2.9	4.9	4.6	3.2	17386.8	160.7	222.4	17.0
Q2 2014	2.8	4.3	2.6	4.2	7.0	1.9	0.1	2.1	3.0	5.0	4.7	3.2	17594.4	161.8	225.2	18.1
Q3 2014	2.9	4.8	2.7	4.6	6.9	2.1	0.1	2.2	3.1	5.1	4.8	3.2	17822.3	162.8	228.1	18.0
Q4 2014	2.9	4.8	2.7	4.6	6.8	2.1	0.2	2.3	3.3	5.2	5.0	3.3	18054.1	163.8	230.9	18.3
Q1 2015	2.9	5.0	3.1	5.2	6.7	2.3	0.4	2.4	3.4	5.3	5.0	3.5	18298.6	165.0	232.7	18.2
Q2 2015	2.9	4.9	2.9	4.9	6.6	2.2	0.6	2.6	3.5	5.4	5.2	3.7	18540.8	166.3	234.4	18.9
Q3 2015	2.9	5.0	2.8	4.9	6.4	2.3	0.8	2.7	3.7	5.5	5.3	3.9	18790.7	167.5	236.2	19.0
Q4 2015	2.9	5.1	2.8	4.9	6.3	2.3	1.1	2.8	3.8	5.6	5.5	4.2	19045.8	168.8	238.0	19.2
Q1 2016	2.8	5.0	2.7	4.9	6.2	2.3	1.6	2.9	4.0	5.8	5.7	4.7	19301.5	170.0	239.8	19.5
Q2 2016	2.8	5.0	2.8	5.0	6.1	2.3	1.9	3.1	4.2	5.9	5.8	5.0	19560.6	171.3	241.6	19.8
Q3 2016	2.8	5.0	2.8	5.0	6.1	2.4	2.2	3.1	4.3	6.0	5.9	5.3	19825.7	172.6	243.4	20.0
Q4 2016	2.8	5.1	2.8	5.0	6.0	2.4	2.4	3.2	4.4	6.1	6.0	5.5	20096.0	173.9	245.2	20.1

Appendix 2: Baseline Scenarios – International

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2001	3.7	1.1	0.9	3.9	1.6	105.9	2.7	-1.2	125.5	3.1	0.1	1.4
Q2 2001	0.3	4.1	0.8	6.0	2.0	106.0	-0.9	-0.3	124.7	2.7	3.1	1.4
Q3 2001	0.4	1.4	0.9	4.7	1.3	106.3	-4.3	-1.1	119.2	1.9	1.0	1.5
Q4 2001	0.7	1.7	0.9	7.0	-0.2	106.7	-0.5	-1.4	131.0	0.5	0.0	1.5
Q1 2002	0.5	3.0	0.9	7.4	0.3	107.2	-0.7	-2.7	132.7	2.2	1.9	1.4
Q2 2002	2.3	2.0	1.0	9.0	0.7	104.7	4.0	1.7	119.9	3.0	0.9	1.5
Q3 2002	1.1	1.6	1.0	4.9	1.5	105.4	2.6	-0.7	121.7	3.4	1.4	1.6
Q4 2002	0.2	2.4	1.0	6.4	0.7	104.4	1.6	-0.4	118.8	4.3	1.9	1.6
Q1 2003	-0.3	3.3	1.1	7.0	3.2	105.4	-2.1	-1.6	118.1	2.1	1.6	1.6
Q2 2003	0.3	0.3	1.2	2.8	1.2	103.9	4.9	1.7	119.9	5.4	0.3	1.7
Q3 2003	1.8	2.2	1.2	13.4	0.1	102.6	1.7	-0.7	111.4	5.2	1.7	1.7
Q4 2003	2.9	2.2	1.3	11.9	5.5	103.3	4.3	-0.6	107.1	5.3	1.7	1.8
Q1 2004	2.0	2.3	1.2	4.6	4.2	101.4	4.3	-0.9	104.2	2.7	1.3	1.8
Q2 2004	2.2	2.4	1.2	6.2	3.9	102.7	-0.3	1.1	109.4	1.8	1.0	1.8
Q3 2004	1.5	2.0	1.2	8.7	4.0	102.7	0.6	0.1	110.2	0.3	1.1	1.8
Q4 2004	1.3	2.4	1.4	8.1	0.7	99.0	-1.0	1.7	102.7	2.7	2.4	1.9
Q1 2005	0.9	1.5	1.3	7.9	2.9	98.7	0.9	-2.7	107.2	3.1	2.6	1.9
Q2 2005	2.8	2.2	1.2	7.3	1.6	99.0	5.2	-1.3	110.9	5.3	1.9	1.8
Q3 2005	2.6	3.2	1.2	9.8	2.6	98.6	1.5	-1.1	113.3	3.9	2.7	1.8
Q4 2005	2.6	2.5	1.2	10.8	1.7	98.1	0.7	0.6	117.9	5.3	1.4	1.7
Q1 2006	3.7	1.7	1.2	12.0	2.4	96.8	1.8	1.3	117.5	1.5	1.9	1.7
Q2 2006	4.5	2.5	1.3	7.9	3.3	96.8	1.6	-0.1	114.5	1.4	3.0	1.8
Q3 2006	2.6	2.0	1.3	8.7	2.0	96.4	-0.2	0.5	118.0	1.0	3.3	1.9
Q4 2006	4.4	0.9	1.3	11.0	4.0	94.6	5.2	-0.4	119.0	3.1	2.6	2.0
Q1 2007	3.2	2.2	1.3	14.7	3.7	94.0	4.1	-0.2	117.6	4.0	2.6	2.0
Q2 2007	1.9	2.3	1.4	10.0	5.1	92.0	0.5	0.0	123.4	5.3	1.6	2.0
Q3 2007	2.4	2.1	1.4	8.9	7.6	90.7	-1.4	0.1	115.0	5.0	0.3	2.0
Q4 2007	1.6	4.9	1.5	10.7	5.8	89.4	3.4	2.2	111.7	0.4	4.0	2.0
Q1 2008	2.3	4.2	1.6	8.6	7.9	88.0	2.7	1.3	99.9	0.6	3.7	2.0
Q2 2008	-1.6	3.2	1.6	7.5	6.2	88.6	-4.8	1.4	106.2	-3.6	5.5	2.0
Q3 2008	-2.4	3.2	1.4	3.8	2.8	91.3	-4.0	3.8	105.9	-5.6	5.9	1.8
Q4 2008	-6.7	-1.4	1.4	0.4	-0.6	92.0	-12.4	-2.2	90.8	-8.3	0.6	1.5

Appendix 2: Baseline Scenarios – International (Cont.)

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2009	-10.9	-1.1	1.3	3.4	-1.2	94.0	-15.0	-3.6	99.2	-9.5	-0.1	1.4
Q2 2009	-1.1	0.0	1.4	15.9	2.4	92.1	6.7	-1.7	96.4	-1.7	2.0	1.6
Q3 2009	1.6	1.2	1.5	12.8	4.9	91.1	0.4	-1.2	89.5	0.0	3.7	1.6
Q4 2009	1.8	1.6	1.4	8.4	5.2	90.5	7.5	-1.5	93.1	1.7	3.1	1.6
Q1 2010	1.6	1.7	1.4	9.2	5.0	89.7	5.9	0.7	93.4	2.1	4.0	1.5
Q2 2010	3.6	2.0	1.2	9.3	3.4	90.8	3.7	-1.0	88.5	4.1	3.0	1.5
Q3 2010	1.7	1.8	1.4	8.7	3.9	88.2	6.0	-1.7	83.5	1.6	2.6	1.6
Q4 2010	2.1	2.5	1.3	8.3	7.8	87.3	-1.3	1.2	81.7	-0.8	4.0	1.5
Q1 2011	3.1	3.5	1.4	9.4	6.4	86.4	-7.6	-0.8	82.8	1.9	6.6	1.6
Q2 2011	0.3	3.2	1.5	6.8	5.9	85.2	-3.4	-0.5	80.6	0.4	4.4	1.6
Q3 2011	0.3	1.7	1.3	7.2	5.9	87.2	10.7	0.7	77.0	2.4	4.2	1.6
Q4 2011	-0.8	3.3	1.3	5.9	2.9	87.1	1.4	-0.4	77.0	-0.4	3.4	1.6
Q1 2012	-0.4	2.5	1.3	5.8	2.8	86.2	5.0	1.2	82.4	0.0	1.8	1.6
Q2 2012	-1.2	2.4	1.3	6.5	4.0	87.9	-1.2	-0.7	79.8	-1.8	1.7	1.6
Q3 2012	-0.5	2.1	1.3	6.6	2.7	86.1	-3.5	-1.5	77.9	2.5	3.0	1.6
Q4 2012	-2.0	2.2	1.3	6.8	3.5	85.8	1.1	0.0	86.6	-1.2	4.0	1.6
Q1 2013	-0.9	0.7	1.3	5.5	3.9	86.1	4.1	-0.4	94.2	1.5	2.3	1.5
Q2 2013	1.1	0.6	1.3	6.3	3.0	87.0	3.8	0.8	99.2	2.7	1.5	1.5
Q3 2013	0.6	1.9	1.4	6.5	3.9	87.2	2.6	3.1	98.3	3.2	3.1	1.6
Q4 2013	0.9	1.5	1.3	6.5	3.4	87.9	2.4	1.8	101.2	2.1	2.5	1.5
Q1 2014	1.0	1.5	1.3	6.5	3.6	88.1	2.0	2.1	103.2	2.2	2.4	1.5
Q2 2014	1.1	1.4	1.3	6.5	3.8	88.2	1.7	2.2	104.9	2.2	2.2	1.4
Q3 2014	1.2	1.4	1.3	6.5	3.8	88.1	1.4	2.2	106.4	2.2	2.1	1.5
Q4 2014	1.3	1.4	1.3	6.5	3.7	88.0	1.3	2.0	107.8	2.1	2.1	1.5
Q1 2015	1.5	1.4	1.3	6.5	3.5	86.6	1.3	1.8	107.8	2.1	2.0	1.5
Q2 2015	1.6	1.5	1.2	6.6	3.3	85.1	1.3	1.5	107.8	2.0	2.0	1.5
Q3 2015	1.6	1.5	1.2	6.6	3.2	83.7	1.4	1.4	107.8	2.0	2.0	1.5
Q4 2015	1.7	1.5	1.2	6.6	3.2	82.4	1.4	1.4	107.8	2.0	2.0	1.5
Q1 2016	1.6	1.5	1.2	6.6	3.3	82.0	1.4	1.5	107.4	2.0	2.0	1.5
Q2 2016	1.6	1.5	1.3	6.6	3.4	81.7	1.3	1.6	107.0	2.0	1.9	1.5
Q3 2016	1.6	1.5	1.3	6.6	3.4	81.4	1.3	1.7	106.5	2.1	2.0	1.5
Q4 2016	1.6	1.6	1.3	6.6	3.4	81.2	1.3	1.7	106.1	2.1	2.0	1.5

Appendix 3: Adverse Scenarios – Domestic

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	112.4	140.8	32.8
Q2 2001	2.1	5.0	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	114.5	140.0	34.7
Q3 2001	-1.2	0.1	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	116.7	143.7	43.7
Q4 2001	1.0	2.2	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.1	137.9	35.3
Q1 2002	3.8	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	121.3	139.7	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	124.3	137.4	28.4
Q3 2002	1.9	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	127.8	140.9	45.1
Q4 2002	0.2	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	130.4	144.2	42.6
Q1 2003	2.0	4.6	1.2	4.1	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	133.3	148.7	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	136.0	151.2	29.1
Q3 2003	6.9	9.4	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	139.7	152.2	22.7
Q4 2003	4.6	6.7	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	144.3	150.1	21.1
Q1 2004	2.4	6.0	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	149.9	155.8	21.6
Q2 2004	3.1	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	156.2	162.6	20.0
Q3 2004	3.6	6.2	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	161.9	173.9	19.3
Q4 2004	3.4	6.4	5.1	8.4	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	167.5	178.4	16.6
Q1 2005	4.4	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	175.7	179.6	14.6
Q2 2005	2.2	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	183.3	186.5	17.7
Q3 2005	3.3	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	189.5	190.8	14.2
Q4 2005	2.2	5.5	3.3	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	194.4	199.6	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.9	203.0	14.6
Q2 2006	1.3	4.6	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	199.0	211.9	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.9	224.2	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	197.3	221.1	12.7
Q1 2007	0.3	4.8	2.7	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	195.6	233.3	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	191.3	241.5	18.9
Q3 2007	2.7	4.1	1.0	3.3	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	185.9	257.8	30.8
Q4 2007	1.5	3.3	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	180.2	260.2	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	174.1	253.6	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	166.3	242.1	24.1
Q3 2008	-2.0	0.7	-8.8	-5.0	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	159.6	246.8	46.7
Q4 2008	-8.3	-7.8	2.5	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	152.0	231.9	80.9

Appendix 3: Adverse Scenarios – Domestic (Cont.)

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2009	-5.4	-4.5	-1.4	-3.6	8.3	-2.6	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	144.3	211.2	56.7
Q2 2009	-0.4	-1.1	3.0	4.9	9.3	2.0	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.3	175.4	42.3
Q3 2009	1.3	1.2	-4.0	-1.6	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	143.8	158.7	31.3
Q4 2009	3.9	5.1	-0.1	2.6	9.9	3.1	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	144.6	158.0	30.7
Q1 2010	1.6	3.0	0.3	1.7	9.8	0.7	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.3	153.2	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	-0.2	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	145.3	168.8	45.8
Q3 2010	2.8	4.7	1.9	3.1	9.5	1.4	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	142.3	171.1	32.9
Q4 2010	2.8	4.9	2.6	4.8	9.5	3.0	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.2	177.8	23.5
Q1 2011	-1.3	0.3	5.0	8.2	9.0	4.4	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.9	184.8	29.4
Q2 2011	3.2	5.9	-0.4	3.3	9.0	4.7	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.5	181.8	22.7
Q3 2011	1.4	3.9	1.6	3.9	9.0	2.9	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.2	182.0	48.0
Q4 2011	4.9	5.4	-0.6	0.8	8.7	1.4	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	136.3	195.2	45.5
Q1 2012	3.7	5.8	4.6	6.9	8.3	2.3	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	138.5	193.5	23.0
Q2 2012	1.2	3.0	1.8	2.9	8.2	1.0	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	141.4	193.7	26.7
Q3 2012	2.8	4.9	-0.6	1.1	8.0	2.1	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	143.9	201.1	20.5
Q4 2012	0.1	1.6	9.0	10.7	7.8	2.2	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	146.8	203.2	22.7
Q1 2013	1.1	2.8	-7.9	-7.0	7.7	1.4	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	152.6	205.4	19.0
Q2 2013	2.5	3.1	3.5	3.4	7.6	0.0	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	157.8	214.3	20.5
Q3 2013	2.0	4.7	1.7	4.3	7.3	2.3	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	158.8	217.0	17.0
Q4 2013	-1.0	0.7	2.7	3.7	7.7	1.1	0.1	2.7	3.5	6.5	5.4	3.3	15605.5	157.6	219.7	35.3
Q1 2014	-2.1	0.0	1.6	2.7	8.3	1.1	0.1	3.3	4.2	7.5	6.3	3.3	14216.2	155.0	216.7	31.7
Q2 2014	-0.6	0.8	2.4	3.6	8.6	1.3	0.1	3.9	5.0	8.4	7.0	3.3	12815.7	152.0	208.0	33.7
Q3 2014	-1.0	0.7	1.3	2.6	9.0	1.4	0.1	4.5	5.7	9.2	7.8	3.3	11402.7	148.7	198.5	31.4
Q4 2014	0.3	1.8	0.4	1.8	9.2	1.6	0.1	4.6	5.8	9.1	7.8	3.3	12099.4	145.5	189.5	27.2
Q1 2015	1.7	3.4	0.7	2.4	9.2	1.9	0.1	4.5	5.7	8.8	7.8	3.3	12786.4	142.5	182.2	24.6
Q2 2015	1.7	3.1	0.4	2.0	9.3	1.9	0.1	4.4	5.5	8.5	7.6	3.3	13475.9	139.9	176.4	22.6
Q3 2015	2.6	4.1	0.6	2.3	9.2	2.0	0.1	4.2	5.3	8.1	7.4	3.3	14249.3	138.4	175.2	20.2
Q4 2015	2.6	4.1	0.7	2.4	9.2	1.9	0.1	4.0	5.1	7.7	7.2	3.3	14916.7	137.3	175.3	19.2
Q1 2016	3.0	4.6	0.9	2.6	9.1	2.0	0.1	3.7	4.9	7.5	7.1	3.3	15490.6	137.1	175.9	18.7
Q2 2016	3.0	4.5	1.2	2.9	9.0	2.0	0.1	3.5	4.8	7.3	6.9	3.3	15952.9	137.3	177.3	18.8
Q3 2016	3.0	4.5	1.2	2.9	8.9	2.0	0.1	3.4	4.7	7.0	6.8	3.3	16601.7	137.9	179.0	17.5
Q4 2016	3.0	4.6	1.3	3.0	8.8	2.0	0.1	3.2	4.6	6.8	6.6	3.3	17139.0	138.7	180.9	17.4

Appendix 4: Adverse Scenarios – International

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2001	3.7	1.1	0.9	3.9	1.6	105.9	2.7	-1.2	125.5	3.1	0.1	1.4
Q2 2001	0.3	4.1	0.8	6.0	2.0	106.0	-0.9	-0.3	124.7	2.7	3.1	1.4
Q3 2001	0.4	1.4	0.9	4.7	1.3	106.3	-4.3	-1.1	119.2	1.9	1.0	1.5
Q4 2001	0.7	1.7	0.9	7.0	-0.2	106.7	-0.5	-1.4	131.0	0.5	0.0	1.5
Q1 2002	0.5	3.0	0.9	7.4	0.3	107.2	-0.7	-2.7	132.7	2.2	1.9	1.4
Q2 2002	2.3	2.0	1.0	9.0	0.7	104.7	4.0	1.7	119.9	3.0	0.9	1.5
Q3 2002	1.1	1.6	1.0	4.9	1.5	105.4	2.6	-0.7	121.7	3.4	1.4	1.6
Q4 2002	0.2	2.4	1.0	6.4	0.7	104.4	1.6	-0.4	118.8	4.3	1.9	1.6
Q1 2003	-0.3	3.3	1.1	7.0	3.2	105.4	-2.1	-1.6	118.1	2.1	1.6	1.6
Q2 2003	0.3	0.3	1.2	2.8	1.2	103.9	4.9	1.7	119.9	5.4	0.3	1.7
Q3 2003	1.8	2.2	1.2	13.4	0.1	102.6	1.7	-0.7	111.4	5.2	1.7	1.7
Q4 2003	2.9	2.2	1.3	11.9	5.5	103.3	4.3	-0.6	107.1	5.3	1.7	1.8
Q1 2004	2.0	2.3	1.2	4.6	4.2	101.4	4.3	-0.9	104.2	2.7	1.3	1.8
Q2 2004	2.2	2.4	1.2	6.2	3.9	102.7	-0.3	1.1	109.4	1.8	1.0	1.8
Q3 2004	1.5	2.0	1.2	8.7	4.0	102.7	0.6	0.1	110.2	0.3	1.1	1.8
Q4 2004	1.3	2.4	1.4	8.1	0.7	99.0	-1.0	1.7	102.7	2.7	2.4	1.9
Q1 2005	0.9	1.5	1.3	7.9	2.9	98.7	0.9	-2.7	107.2	3.1	2.6	1.9
Q2 2005	2.8	2.2	1.2	7.3	1.6	99.0	5.2	-1.3	110.9	5.3	1.9	1.8
Q3 2005	2.6	3.2	1.2	9.8	2.6	98.6	1.5	-1.1	113.3	3.9	2.7	1.8
Q4 2005	2.6	2.5	1.2	10.8	1.7	98.1	0.7	0.6	117.9	5.3	1.4	1.7
Q1 2006	3.7	1.7	1.2	12.0	2.4	96.8	1.8	1.3	117.5	1.5	1.9	1.7
Q2 2006	4.5	2.5	1.3	7.9	3.3	96.8	1.6	-0.1	114.5	1.4	3.0	1.8
Q3 2006	2.6	2.0	1.3	8.7	2.0	96.4	-0.2	0.5	118.0	1.0	3.3	1.9
Q4 2006	4.4	0.9	1.3	11.0	4.0	94.6	5.2	-0.4	119.0	3.1	2.6	2.0
Q1 2007	3.2	2.2	1.3	14.7	3.7	94.0	4.1	-0.2	117.6	4.0	2.6	2.0
Q2 2007	1.9	2.3	1.4	10.0	5.1	92.0	0.5	0.0	123.4	5.3	1.6	2.0
Q3 2007	2.4	2.1	1.4	8.9	7.6	90.7	-1.4	0.1	115.0	5.0	0.3	2.0
Q4 2007	1.6	4.9	1.5	10.7	5.8	89.4	3.4	2.2	111.7	0.4	4.0	2.0
Q1 2008	2.3	4.2	1.6	8.6	7.9	88.0	2.7	1.3	99.9	0.6	3.7	2.0
Q2 2008	-1.6	3.2	1.6	7.5	6.2	88.6	-4.8	1.4	106.2	-3.6	5.5	2.0
Q3 2008	-2.4	3.2	1.4	3.8	2.8	91.3	-4.0	3.8	105.9	-5.6	5.9	1.8
Q4 2008	-6.7	-1.4	1.4	0.4	-0.6	92.0	-12.4	-2.2	90.8	-8.3	0.6	1.5

Appendix 4: Adverse Scenarios – International (Cont.)

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2009	-10.9	-1.1	1.3	3.4	-1.2	94.0	-15.0	-3.6	99.2	-9.5	-0.1	1.4
Q2 2009	-1.1	0.0	1.4	15.9	2.4	92.1	6.7	-1.7	96.4	-1.7	2.0	1.6
Q3 2009	1.6	1.2	1.5	12.8	4.9	91.1	0.4	-1.2	89.5	0.0	3.7	1.6
Q4 2009	1.8	1.6	1.4	8.4	5.2	90.5	7.5	-1.5	93.1	1.7	3.1	1.6
Q1 2010	1.6	1.7	1.4	9.2	5.0	89.7	5.9	0.7	93.4	2.1	4.0	1.5
Q2 2010	3.6	2.0	1.2	9.3	3.4	90.8	3.7	-1.0	88.5	4.1	3.0	1.5
Q3 2010	1.7	1.8	1.4	8.7	3.9	88.2	6.0	-1.7	83.5	1.6	2.6	1.6
Q4 2010	2.1	2.5	1.3	8.3	7.8	87.3	-1.3	1.2	81.7	-0.8	4.0	1.5
Q1 2011	3.1	3.5	1.4	9.4	6.4	86.4	-7.6	-0.8	82.8	1.9	6.6	1.6
Q2 2011	0.3	3.2	1.5	6.8	5.9	85.2	-3.4	-0.5	80.6	0.4	4.4	1.6
Q3 2011	0.3	1.7	1.3	7.2	5.9	87.2	10.7	0.7	77.0	2.4	4.2	1.6
Q4 2011	-0.8	3.3	1.3	5.9	2.9	87.1	1.4	-0.4	77.0	-0.4	3.4	1.6
Q1 2012	-0.4	2.5	1.3	5.8	2.8	86.2	5.0	1.2	82.4	0.0	1.8	1.6
Q2 2012	-1.2	2.4	1.3	6.5	4.0	87.9	-1.2	-0.7	79.8	-1.8	1.7	1.6
Q3 2012	-0.5	2.1	1.3	6.6	2.7	86.1	-3.5	-1.5	77.9	2.5	3.0	1.6
Q4 2012	-2.0	2.2	1.3	6.8	3.5	85.8	1.1	0.0	86.6	-1.2	4.0	1.6
Q1 2013	-0.9	0.7	1.3	5.5	3.9	86.1	4.1	-0.4	94.2	1.5	2.3	1.5
Q2 2013	1.1	0.6	1.3	6.3	3.0	87.0	3.8	0.8	99.2	2.7	1.5	1.5
Q3 2013	0.6	1.9	1.4	6.5	3.9	87.2	2.6	3.1	98.3	3.2	3.1	1.6
Q4 2013	-4.2	0.1	1.2	1.4	2.3	96.9	-3.3	-1.9	97.9	-0.8	0.9	1.4
Q1 2014	-3.4	0.0	1.2	3.8	1.9	96.9	-5.0	-1.2	99.7	-1.0	0.7	1.4
Q2 2014	-2.0	-0.1	1.2	5.6	1.8	96.5	-4.3	-1.2	101.2	-0.5	0.6	1.4
Q3 2014	-0.8	0.1	1.2	6.4	1.8	96.0	-3.3	-1.0	102.5	0.1	0.7	1.4
Q4 2014	0.1	0.3	1.2	6.7	1.8	95.2	-2.2	-0.8	103.7	0.6	0.8	1.4
Q1 2015	0.9	0.5	1.2	6.8	1.7	93.1	-1.2	-0.7	103.6	1.1	1.0	1.4
Q2 2015	1.4	0.7	1.2	6.8	1.7	91.0	-0.3	-0.6	103.5	1.5	1.2	1.4
Q3 2015	1.8	0.9	1.2	6.8	1.7	88.9	0.4	-0.4	103.4	1.9	1.4	1.4
Q4 2015	1.9	1.0	1.2	6.8	1.9	87.1	0.9	-0.1	103.4	2.1	1.5	1.4
Q1 2016	2.0	1.1	1.2	6.9	2.1	86.2	1.3	0.2	103.0	2.3	1.6	1.4
Q2 2016	2.0	1.1	1.2	6.9	2.3	85.5	1.5	0.5	102.7	2.4	1.7	1.4
Q3 2016	1.9	1.2	1.2	7.0	2.5	85.0	1.7	0.7	102.4	2.5	1.7	1.4
Q4 2016	1.9	1.3	1.2	7.1	2.6	84.5	1.8	0.9	102.1	2.5	1.8	1.4

Appendix 5: Severely Adverse Scenarios – Domestic

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	112.4	140.8	32.8
Q2 2001	2.1	5.0	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	114.5	140.0	34.7
Q3 2001	-1.2	0.1	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	116.7	143.7	43.7
Q4 2001	1.0	2.2	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.1	137.9	35.3
Q1 2002	3.8	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	121.3	139.7	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	124.3	137.4	28.4
Q3 2002	1.9	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	127.8	140.9	45.1
Q4 2002	0.2	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	130.4	144.2	42.6
Q1 2003	2.0	4.6	1.2	4.1	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	133.3	148.7	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	136.0	151.2	29.1
Q3 2003	6.9	9.4	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	139.7	152.2	22.7
Q4 2003	4.6	6.7	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	144.3	150.1	21.1
Q1 2004	2.4	6.0	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	149.9	155.8	21.6
Q2 2004	3.1	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	156.2	162.6	20.0
Q3 2004	3.6	6.2	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	161.9	173.9	19.3
Q4 2004	3.4	6.4	5.1	8.4	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	167.5	178.4	16.6
Q1 2005	4.4	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	175.7	179.6	14.6
Q2 2005	2.2	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	183.3	186.5	17.7
Q3 2005	3.3	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	189.5	190.8	14.2
Q4 2005	2.2	5.5	3.3	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	194.4	199.6	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.9	203.0	14.6
Q2 2006	1.3	4.6	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	199.0	211.9	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.9	224.2	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	197.3	221.1	12.7
Q1 2007	0.3	4.8	2.7	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	195.6	233.3	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	191.3	241.5	18.9
Q3 2007	2.7	4.1	1.0	3.3	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	185.9	257.8	30.8
Q4 2007	1.5	3.3	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	180.2	260.2	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	174.1	253.6	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	166.3	242.1	24.1
Q3 2008	-2.0	0.7	-8.8	-5.0	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	159.6	246.8	46.7
Q4 2008	-8.3	-7.8	2.5	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	152.0	231.9	80.9

Appendix 5: Severely Adverse Scenarios – Domestic (Cont.)

OBS	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury yield	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2009	-5.4	-4.5	-1.4	-3.6	8.3	-2.6	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	144.3	211.2	56.7
Q2 2009	-0.4	-1.1	3.0	4.9	9.3	2.0	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.3	175.4	42.3
Q3 2009	1.3	1.2	-4.0	-1.6	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	143.8	158.7	31.3
Q4 2009	3.9	5.1	-0.1	2.6	9.9	3.1	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	144.6	158.0	30.7
Q1 2010	1.6	3.0	0.3	1.7	9.8	0.7	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.3	153.2	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	-0.2	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	145.3	168.8	45.8
Q3 2010	2.8	4.7	1.9	3.1	9.5	1.4	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	142.3	171.1	32.9
Q4 2010	2.8	4.9	2.6	4.8	9.5	3.0	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.2	177.8	23.5
Q1 2011	-1.3	0.3	5.0	8.2	9.0	4.4	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.9	184.8	29.4
Q2 2011	3.2	5.9	-0.4	3.3	9.0	4.7	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.5	181.8	22.7
Q3 2011	1.4	3.9	1.6	3.9	9.0	2.9	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.2	182.0	48.0
Q4 2011	4.9	5.4	-0.6	0.8	8.7	1.4	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	136.3	195.2	45.5
Q1 2012	3.7	5.8	4.6	6.9	8.3	2.3	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	138.5	193.5	23.0
Q2 2012	1.2	3.0	1.8	2.9	8.2	1.0	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	141.4	193.7	26.7
Q3 2012	2.8	4.9	-0.6	1.1	8.0	2.1	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	143.9	201.1	20.5
Q4 2012	0.1	1.6	9.0	10.7	7.8	2.2	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	146.8	203.2	22.7
Q1 2013	1.1	2.8	-7.9	-7.0	7.7	1.4	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	152.6	205.4	19.0
Q2 2013	2.5	3.1	3.5	3.4	7.6	0.0	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	157.8	214.3	20.5
Q3 2013	2.0	4.7	1.7	4.3	7.3	2.3	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	158.8	217.0	17.0
Q4 2013	-3.9	-2.0	-0.5	0.1	8.1	0.5	0.1	0.8	1.0	5.0	4.4	3.3	13016.5	156.4	219.7	67.9
Q1 2014	-6.1	-4.0	-2.4	-1.9	9.2	0.4	0.1	0.6	1.0	5.8	4.4	3.3	11402.6	151.3	211.2	61.3
Q2 2014	-3.2	-1.9	0.1	0.8	9.9	0.8	0.1	0.6	1.1	6.1	4.4	3.3	9769.1	145.4	194.5	65.7
Q3 2014	-4.0	-2.6	-1.1	-0.2	10.7	0.8	0.1	0.6	1.1	6.2	4.4	3.3	8943.3	139.1	175.5	57.9
Q4 2014	-1.5	-0.3	-0.5	0.5	11.1	1.1	0.1	0.6	1.3	6.1	4.4	3.3	9616.9	133.2	161.3	42.1
Q1 2015	1.2	2.5	1.2	2.5	11.2	1.5	0.1	0.6	1.3	5.8	4.3	3.3	10314.4	127.7	150.3	34.1
Q2 2015	1.1	2.2	1.0	2.2	11.3	1.4	0.1	0.6	1.4	5.6	4.3	3.3	11061.2	123.0	143.9	27.7
Q3 2015	3.0	4.1	1.4	2.8	11.2	1.6	0.1	0.6	1.5	5.3	4.2	3.3	11987.2	120.3	141.6	21.8
Q4 2015	3.0	4.0	1.6	2.9	11.1	1.6	0.1	0.6	1.6	5.1	4.2	3.3	12775.4	118.5	141.5	19.3
Q1 2016	3.9	4.9	2.0	3.2	10.9	1.6	0.1	0.6	1.7	5.1	4.3	3.3	13434.8	118.0	142.3	17.9
Q2 2016	3.9	4.8	2.2	3.4	10.8	1.6	0.1	0.6	1.8	5.1	4.3	3.3	13927.1	118.5	144.5	17.8
Q3 2016	3.9	4.8	1.8	3.0	10.6	1.6	0.1	0.6	1.9	4.9	4.3	3.3	14769.2	119.5	147.2	15.2
Q4 2016	3.9	4.7	2.0	3.1	10.4	1.5	0.1	0.6	2.0	4.8	4.3	3.3	15436.8	120.8	150.2	14.9

Appendix 6: Severely Adverse Scenarios – International

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2001	3.7	1.1	0.9	3.9	1.6	105.9	2.7	-1.2	125.5	3.1	0.1	1.4
Q2 2001	0.3	4.1	0.8	6.0	2.0	106.0	-0.9	-0.3	124.7	2.7	3.1	1.4
Q3 2001	0.4	1.4	0.9	4.7	1.3	106.3	-4.3	-1.1	119.2	1.9	1.0	1.5
Q4 2001	0.7	1.7	0.9	7.0	-0.2	106.7	-0.5	-1.4	131.0	0.5	0.0	1.5
Q1 2002	0.5	3.0	0.9	7.4	0.3	107.2	-0.7	-2.7	132.7	2.2	1.9	1.4
Q2 2002	2.3	2.0	1.0	9.0	0.7	104.7	4.0	1.7	119.9	3.0	0.9	1.5
Q3 2002	1.1	1.6	1.0	4.9	1.5	105.4	2.6	-0.7	121.7	3.4	1.4	1.6
Q4 2002	0.2	2.4	1.0	6.4	0.7	104.4	1.6	-0.4	118.8	4.3	1.9	1.6
Q1 2003	-0.3	3.3	1.1	7.0	3.2	105.4	-2.1	-1.6	118.1	2.1	1.6	1.6
Q2 2003	0.3	0.3	1.2	2.8	1.2	103.9	4.9	1.7	119.9	5.4	0.3	1.7
Q3 2003	1.8	2.2	1.2	13.4	0.1	102.6	1.7	-0.7	111.4	5.2	1.7	1.7
Q4 2003	2.9	2.2	1.3	11.9	5.5	103.3	4.3	-0.6	107.1	5.3	1.7	1.8
Q1 2004	2.0	2.3	1.2	4.6	4.2	101.4	4.3	-0.9	104.2	2.7	1.3	1.8
Q2 2004	2.2	2.4	1.2	6.2	3.9	102.7	-0.3	1.1	109.4	1.8	1.0	1.8
Q3 2004	1.5	2.0	1.2	8.7	4.0	102.7	0.6	0.1	110.2	0.3	1.1	1.8
Q4 2004	1.3	2.4	1.4	8.1	0.7	99.0	-1.0	1.7	102.7	2.7	2.4	1.9
Q1 2005	0.9	1.5	1.3	7.9	2.9	98.7	0.9	-2.7	107.2	3.1	2.6	1.9
Q2 2005	2.8	2.2	1.2	7.3	1.6	99.0	5.2	-1.3	110.9	5.3	1.9	1.8
Q3 2005	2.6	3.2	1.2	9.8	2.6	98.6	1.5	-1.1	113.3	3.9	2.7	1.8
Q4 2005	2.6	2.5	1.2	10.8	1.7	98.1	0.7	0.6	117.9	5.3	1.4	1.7
Q1 2006	3.7	1.7	1.2	12.0	2.4	96.8	1.8	1.3	117.5	1.5	1.9	1.7
Q2 2006	4.5	2.5	1.3	7.9	3.3	96.8	1.6	-0.1	114.5	1.4	3.0	1.8
Q3 2006	2.6	2.0	1.3	8.7	2.0	96.4	-0.2	0.5	118.0	1.0	3.3	1.9
Q4 2006	4.4	0.9	1.3	11.0	4.0	94.6	5.2	-0.4	119.0	3.1	2.6	2.0
Q1 2007	3.2	2.2	1.3	14.7	3.7	94.0	4.1	-0.2	117.6	4.0	2.6	2.0
Q2 2007	1.9	2.3	1.4	10.0	5.1	92.0	0.5	0.0	123.4	5.3	1.6	2.0
Q3 2007	2.4	2.1	1.4	8.9	7.6	90.7	-1.4	0.1	115.0	5.0	0.3	2.0
Q4 2007	1.6	4.9	1.5	10.7	5.8	89.4	3.4	2.2	111.7	0.4	4.0	2.0
Q1 2008	2.3	4.2	1.6	8.6	7.9	88.0	2.7	1.3	99.9	0.6	3.7	2.0
Q2 2008	-1.6	3.2	1.6	7.5	6.2	88.6	-4.8	1.4	106.2	-3.6	5.5	2.0
Q3 2008	-2.4	3.2	1.4	3.8	2.8	91.3	-4.0	3.8	105.9	-5.6	5.9	1.8
Q4 2008	-6.7	-1.4	1.4	0.4	-0.6	92.0	-12.4	-2.2	90.8	-8.3	0.6	1.5

Appendix 6: Severely Adverse Scenarios – International (Cont.)

OBS	Euro Area Real GDP Growth	Euro Area Inflation	Euro Area Bilateral Dollar Exchange Rate (USD/Euro)	Developing Asia Real GDP Growth	Developing Asia Inflation	Developing Asia Bilateral Dollar Exchange Rate (F/USD, Index, Base = 2000 Q1)	Japan Real GDP Growth	Japan Inflation	Japan Bilateral Dollar Exchange Rate (Yen/USD)	UK Real GDP Growth	UK Inflation	UK Bilateral Dollar Exchange Rate (USD/Pound)
Q1 2009	-10.9	-1.1	1.3	3.4	-1.2	94.0	-15.0	-3.6	99.2	-9.5	-0.1	1.4
Q2 2009	-1.1	0.0	1.4	15.9	2.4	92.1	6.7	-1.7	96.4	-1.7	2.0	1.6
Q3 2009	1.6	1.2	1.5	12.8	4.9	91.1	0.4	-1.2	89.5	0.0	3.7	1.6
Q4 2009	1.8	1.6	1.4	8.4	5.2	90.5	7.5	-1.5	93.1	1.7	3.1	1.6
Q1 2010	1.6	1.7	1.4	9.2	5.0	89.7	5.9	0.7	93.4	2.1	4.0	1.5
Q2 2010	3.6	2.0	1.2	9.3	3.4	90.8	3.7	-1.0	88.5	4.1	3.0	1.5
Q3 2010	1.7	1.8	1.4	8.7	3.9	88.2	6.0	-1.7	83.5	1.6	2.6	1.6
Q4 2010	2.1	2.5	1.3	8.3	7.8	87.3	-1.3	1.2	81.7	-0.8	4.0	1.5
Q1 2011	3.1	3.5	1.4	9.4	6.4	86.4	-7.6	-0.8	82.8	1.9	6.6	1.6
Q2 2011	0.3	3.2	1.5	6.8	5.9	85.2	-3.4	-0.5	80.6	0.4	4.4	1.6
Q3 2011	0.3	1.7	1.3	7.2	5.9	87.2	10.7	0.7	77.0	2.4	4.2	1.6
Q4 2011	-0.8	3.3	1.3	5.9	2.9	87.1	1.4	-0.4	77.0	-0.4	3.4	1.6
Q1 2012	-0.4	2.5	1.3	5.8	2.8	86.2	5.0	1.2	82.4	0.0	1.8	1.6
Q2 2012	-1.2	2.4	1.3	6.5	4.0	87.9	-1.2	-0.7	79.8	-1.8	1.7	1.6
Q3 2012	-0.5	2.1	1.3	6.6	2.7	86.1	-3.5	-1.5	77.9	2.5	3.0	1.6
Q4 2012	-2.0	2.2	1.3	6.8	3.5	85.8	1.1	0.0	86.6	-1.2	4.0	1.6
Q1 2013	-0.9	0.7	1.3	5.5	3.9	86.1	4.1	-0.4	94.2	1.5	2.3	1.5
Q2 2013	1.1	0.6	1.3	6.3	3.0	87.0	3.8	0.8	99.2	2.7	1.5	1.5
Q3 2013	0.6	1.9	1.4	6.5	3.9	87.2	2.6	3.1	98.3	3.2	3.1	1.6
Q4 2013	-8.3	-1.0	1.2	-2.8	1.4	105.0	-8.0	-4.9	95.3	-3.2	-0.4	1.4
Q1 2014	-7.0	-1.2	1.1	1.6	0.5	104.7	-10.8	-3.9	96.9	-3.6	-0.6	1.4
Q2 2014	-4.5	-1.3	1.1	4.9	0.2	103.9	-9.1	-3.9	98.2	-2.6	-0.7	1.4
Q3 2014	-2.5	-1.0	1.1	6.4	0.2	102.9	-7.1	-3.5	99.4	-1.6	-0.5	1.4
Q4 2014	-0.9	-0.6	1.1	6.8	0.2	101.6	-5.1	-3.1	100.5	-0.6	-0.2	1.4
Q1 2015	0.4	-0.3	1.1	7.0	0.2	98.8	-3.2	-2.7	100.3	0.4	0.2	1.4
Q2 2015	1.3	0.1	1.1	7.0	0.3	96.1	-1.6	-2.4	100.1	1.1	0.5	1.4
Q3 2015	1.9	0.3	1.1	7.0	0.5	93.5	-0.4	-1.9	100.0	1.7	0.8	1.4
Q4 2015	2.2	0.5	1.1	7.0	0.8	91.1	0.5	-1.4	99.9	2.2	1.1	1.4
Q1 2016	2.3	0.7	1.1	7.1	1.2	89.8	1.2	-0.9	99.6	2.5	1.3	1.4
Q2 2016	2.3	0.8	1.2	7.2	1.5	88.8	1.7	-0.4	99.4	2.7	1.4	1.4
Q3 2016	2.2	0.9	1.2	7.3	1.8	88.0	2.0	-0.1	99.2	2.8	1.5	1.4
Q4 2016	2.2	1.0	1.2	7.4	2.0	87.3	2.2	0.2	99.0	2.9	1.7	1.4

Appendix 7: Global Market Shock – Securitized Products (Adverse)

	RMBS														
	Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified
Relative MV Shock Based on Current Rating (%)															
AAA Total															
Pre 2006	-7.8%	-7.1%	-19.3%	-7.8%	-19.3%	-9.7%	-9.7%	-14.3%	-19.3%	-14.3%	-9.7%	-7.8%	-7.1%	-8.4%	-19.3%
2006	-10.5%	-8.9%	-23.7%	-10.5%	-23.7%	-15.7%	-9.7%	-19.2%	-23.7%	-19.2%	-9.7%	-10.5%	-8.9%	-8.4%	-23.7%
2007	-13.8%	-11.2%	-23.7%	-13.8%	-14.7%	-14.7%	-9.7%	-19.2%	-14.7%	-19.2%	-9.7%	-13.8%	-11.2%	-8.4%	-14.7%
Post 2007	-7.8%	-7.1%	-19.3%	-7.8%	-19.3%	-9.7%	-9.7%	-14.3%	-19.3%	-14.3%	-9.7%	-7.8%	-7.1%	-8.4%	-19.3%
Unspecified Vintage	-13.8%	-11.2%	-23.7%	-13.8%	-14.7%	-14.7%	-9.7%	-19.2%	-14.7%	-19.2%	-9.7%	-13.8%	-11.2%	-8.4%	-14.7%
AA Total															
Pre 2006	-29.5%	-19.1%	-35.3%	-29.5%	-35.3%	-20.1%	-18.9%	-14.3%	-35.3%	-14.3%	-18.9%	-29.5%	-19.1%	-17.3%	-35.3%
2006	-35.2%	-18.1%	-42.3%	-35.2%	-42.3%	-39.8%	-18.9%	-19.2%	-42.3%	-19.2%	-18.9%	-35.2%	-18.1%	-17.3%	-42.3%
2007	-35.2%	-18.1%	-42.3%	-35.2%	-39.8%	-39.8%	-18.9%	-19.2%	-39.8%	-19.2%	-18.9%	-35.2%	-18.1%	-17.3%	-39.8%
Post 2007	-29.5%	-19.1%	-35.3%	-29.5%	-35.3%	-20.1%	-18.9%	-14.3%	-35.3%	-14.3%	-18.9%	-29.5%	-19.1%	-17.3%	-35.3%
Unspecified Vintage	-35.2%	-18.1%	-42.3%	-35.2%	-39.8%	-39.8%	-18.9%	-19.2%	-39.8%	-19.2%	-18.9%	-35.2%	-18.1%	-17.3%	-39.8%
A Total															
Pre 2006	-34.7%	-20.6%	-41.7%	-34.7%	-41.7%	-24.3%	-23.9%	-14.3%	-41.7%	-14.3%	-23.9%	-34.7%	-20.6%	-24.1%	-41.7%
2006	-37.5%	-20.0%	-45.0%	-37.5%	-45.0%	-39.8%	-23.9%	-19.2%	-45.0%	-19.2%	-23.9%	-37.5%	-20.0%	-24.1%	-45.0%
2007	-37.5%	-19.7%	-45.0%	-37.5%	-39.8%	-39.8%	-23.9%	-19.2%	-39.8%	-19.2%	-23.9%	-37.5%	-19.7%	-24.1%	-39.8%
Post 2007	-34.7%	-20.6%	-41.7%	-34.7%	-41.7%	-24.3%	-23.9%	-14.3%	-41.7%	-14.3%	-23.9%	-34.7%	-20.6%	-24.1%	-41.7%
Unspecified Vintage	-37.5%	-19.7%	-45.0%	-37.5%	-39.8%	-39.8%	-23.9%	-19.2%	-39.8%	-19.2%	-23.9%	-37.5%	-19.7%	-24.1%	-39.8%
BBB Total															
Pre 2006	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.9%	-14.3%	-41.5%	-14.3%	-20.9%	-34.5%	-27.3%	-21.2%	-41.5%
2006	-38.1%	-26.7%	-45.7%	-38.1%	-45.7%	-39.8%	-20.9%	-19.2%	-45.7%	-19.2%	-20.9%	-38.1%	-27.3%	-21.2%	-45.7%
2007	-38.1%	-26.7%	-45.7%	-38.1%	-39.8%	-39.8%	-20.9%	-19.2%	-39.8%	-19.2%	-20.9%	-38.1%	-26.7%	-21.2%	-39.8%
Post 2007	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.9%	-14.3%	-41.5%	-14.3%	-20.9%	-34.5%	-27.3%	-21.2%	-41.5%
Unspecified Vintage	-38.1%	-26.7%	-45.7%	-38.1%	-39.8%	-39.8%	-20.9%	-19.2%	-39.8%	-19.2%	-20.9%	-38.1%	-27.3%	-21.2%	-39.8%
BB Total															
Pre 2006	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
2006	-38.1%	-27.3%	-45.7%	-38.1%	-45.7%	-39.8%	-20.2%	-19.2%	-45.7%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-45.7%
2007	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
Post 2007	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
Unspecified Vintage	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
B Total															
Pre 2006	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
2006	-38.1%	-27.3%	-45.7%	-38.1%	-45.7%	-39.8%	-20.2%	-19.2%	-45.7%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-45.7%
2007	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
Post 2007	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
Unspecified Vintage	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
<B Total															
Pre 2006	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
2006	-38.1%	-27.3%	-45.7%	-38.1%	-45.7%	-39.8%	-20.2%	-19.2%	-45.7%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-45.7%
2007	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
Post 2007	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
Unspecified Vintage	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
NR Total															
Pre 2006	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
2006	-38.1%	-27.3%	-45.7%	-38.1%	-45.7%	-39.8%	-20.2%	-19.2%	-45.7%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-45.7%
2007	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%
Post 2007	-34.5%	-27.3%	-41.5%	-34.5%	-41.5%	-28.4%	-20.2%	-14.3%	-41.5%	-14.3%	-20.2%	-34.5%	-27.3%	-21.2%	-41.5%
Unspecified Vintage	-38.1%	-27.3%	-45.7%	-38.1%	-39.8%	-39.8%	-20.2%	-19.2%	-39.8%	-19.2%	-20.2%	-38.1%	-27.3%	-21.2%	-39.8%

Appendix 7: Global Market Shock – Securitized Products (Adverse) (Cont.)

	ABS							CMBS						
	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified
Relative MV Shock Based on Current Rating (%)														
AAA Total														
Pre 2006	-3.7%	-6.9%	-8.9%	-8.9%	-8.9%	-4.0%	-8.9%	-9.4%	-13.2%	-17.1%	-13.2%	-13.2%	-9.2%	-17.1%
2006	-3.7%	-6.9%	-9.3%	-9.3%	-9.3%	-4.0%	-9.3%	-9.4%	-13.2%	-17.1%	-13.2%	-13.2%	-11.0%	-17.1%
2007	-3.9%	-9.2%	-9.9%	-9.9%	-9.9%	-4.0%	-9.9%	-9.4%	-13.2%	-17.1%	-13.2%	-13.2%	-11.0%	-17.1%
Post 2007	-3.7%	-6.9%	-8.9%	-8.9%	-8.9%	-4.0%	-8.9%	-9.4%	-13.2%	-17.1%	-13.2%	-13.2%	-9.2%	-17.1%
Unspecified Vintage	-3.9%	-9.2%	-9.9%	-9.9%	-9.9%	-4.0%	-9.9%	-9.4%	-13.2%	-17.1%	-13.2%	-13.2%	-11.0%	-17.1%
AA Total														
Pre 2006	-8.9%	-16.6%	-14.5%	-16.6%	-16.6%	-4.0%	-16.6%	-24.0%	-29.2%	-38.0%	-29.2%	-29.2%	-9.2%	-38.0%
2006	-8.9%	-16.6%	-19.0%	-19.0%	-19.0%	-4.0%	-19.0%	-24.0%	-29.2%	-38.0%	-29.2%	-29.2%	-11.0%	-38.0%
2007	-9.5%	-19.7%	-19.1%	-19.7%	-19.7%	-4.0%	-19.7%	-24.0%	-29.2%	-38.0%	-29.2%	-29.2%	-11.0%	-38.0%
Post 2007	-8.9%	-16.6%	-14.5%	-16.6%	-16.6%	-4.0%	-16.6%	-24.0%	-29.2%	-38.0%	-29.2%	-29.2%	-9.2%	-38.0%
Unspecified Vintage	-9.5%	-19.7%	-19.1%	-19.7%	-19.7%	-4.0%	-19.7%	-24.0%	-29.2%	-38.0%	-29.2%	-29.2%	-11.0%	-38.0%
A Total														
Pre 2006	-9.7%	-16.8%	-17.7%	-17.7%	-17.7%	-4.0%	-17.7%	-29.8%	-29.0%	-37.8%	-29.0%	-29.0%	-9.2%	-37.8%
2006	-9.7%	-16.8%	-18.7%	-18.7%	-18.7%	-4.0%	-18.7%	-29.8%	-29.0%	-37.8%	-29.0%	-29.0%	-11.0%	-37.8%
2007	-10.4%	-20.0%	-22.8%	-22.8%	-22.8%	-4.0%	-22.8%	-29.8%	-29.0%	-37.8%	-29.0%	-29.0%	-11.0%	-37.8%
Post 2007	-9.7%	-16.8%	-17.7%	-17.7%	-17.7%	-4.0%	-17.7%	-29.8%	-29.0%	-37.8%	-29.0%	-29.0%	-9.2%	-37.8%
Unspecified Vintage	-10.4%	-20.0%	-22.8%	-22.8%	-22.8%	-4.0%	-22.8%	-29.8%	-29.0%	-37.8%	-29.0%	-29.0%	-11.0%	-37.8%
BBB Total														
Pre 2006	-9.3%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
2006	-9.3%	-23.2%	-18.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
2007	-10.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
Post 2007	-9.3%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
Unspecified Vintage	-10.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
BB Total														
Pre 2006	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
2006	-13.1%	-23.2%	-18.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
2007	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
Post 2007	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
Unspecified Vintage	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
B Total														
Pre 2006	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
2006	-13.1%	-23.2%	-18.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
2007	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
Post 2007	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
Unspecified Vintage	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
<B Total														
Pre 2006	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
2006	-13.1%	-23.2%	-18.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
2007	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
Post 2007	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
Unspecified Vintage	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
NR Total														
Pre 2006	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
2006	-13.1%	-23.2%	-18.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
2007	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%
Post 2007	-13.1%	-23.2%	-17.7%	-23.2%	-23.2%	-4.0%	-23.2%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-9.2%	-38.8%
Unspecified Vintage	-14.0%	-27.5%	-22.8%	-27.5%	-27.5%	-4.0%	-27.5%	-32.6%	-29.8%	-38.8%	-29.8%	-29.8%	-11.0%	-38.8%

Appendix 7: Global Market Shock – Securitized Products (Adverse) (Cont.)

	Corporate CDO / CLO		Warehouse		
	CLO	Other / Unspecified	Total Size	Total Protection	Other / Unspecified
Relative MV Shock Based on Current Rating (%)					
AAA Total					
Pre 2006	-8.9%	-1.3%	-9.2%	9.2%	-1.3%
2006	-8.9%	-1.3%	-11.0%	11.0%	-1.3%
2007	-8.9%	-1.3%	-11.0%	11.0%	-1.3%
Post 2007	-8.9%	-1.3%	-9.2%	9.2%	-1.3%
Unspecified Vintage	-8.9%	-1.3%	-11.0%	11.0%	-1.3%
AA Total					
Pre 2006	-28.0%	-1.3%	-9.2%	9.2%	-1.3%
2006	-28.0%	-1.3%	-11.0%	11.0%	-1.3%
2007	-28.0%	-1.3%	-11.0%	11.0%	-1.3%
Post 2007	-28.0%	-1.3%	-9.2%	9.2%	-1.3%
Unspecified Vintage	-28.0%	-1.3%	-11.0%	11.0%	-1.3%
A Total					
Pre 2006	-41.2%	-1.3%	-9.2%	9.2%	-1.3%
2006	-41.2%	-1.3%	-11.0%	11.0%	-1.3%
2007	-41.2%	-1.3%	-11.0%	11.0%	-1.3%
Post 2007	-41.2%	-1.3%	-9.2%	9.2%	-1.3%
Unspecified Vintage	-41.2%	-1.3%	-11.0%	11.0%	-1.3%
BBB Total					
Pre 2006	-43.0%	-22.0%	-9.2%	9.2%	-22.0%
2006	-43.0%	-22.0%	-11.0%	11.0%	-22.0%
2007	-43.0%	-22.0%	-11.0%	11.0%	-22.0%
Post 2007	-43.0%	-22.0%	-9.2%	9.2%	-22.0%
Unspecified Vintage	-43.0%	-22.0%	-11.0%	11.0%	-22.0%
BB Total					
Pre 2006	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
2006	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
2007	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
Post 2007	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
Unspecified Vintage	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
B Total					
Pre 2006	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
2006	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
2007	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
Post 2007	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
Unspecified Vintage	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
<B Total					
Pre 2006	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
2006	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
2007	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
Post 2007	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
Unspecified Vintage	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
NR Total					
Pre 2006	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
2006	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
2007	-43.7%	-22.0%	-11.0%	11.0%	-22.0%
Post 2007	-43.7%	-22.0%	-9.2%	9.2%	-22.0%
Unspecified Vintage	-43.7%	-22.0%	-11.0%	11.0%	-22.0%

Appendix 7: Global Market Shock – Municipals (Adverse)

	Spread Widening (bps)
Bonds	
AAA	1.5
AA	11.5
A	53.5
BBB	138.5
BB	138.5
B	138.5
<B	138.5
NR	138.5
Loans	
AAA	1.5
AA	11.5
A	53.5
BBB	138.5
BB	138.5
B	138.5
<B	138.5
NR	138.5
CDS	
AAA	1.5
AA	11.5
A	53.5
BBB	138.5
BB	138.5
B	138.5
<B	138.5
NR	138.5
Indices	
AAA	92.8
AA	92.8
A	92.8
BBB	92.8
BB	92.8
B	92.8
<B	92.8
NR	92.8
Other / Unspecified Munis	
AAA	1.5
AA	11.5
A	53.5
BBB	138.5
BB	138.5
B	138.5
<B	138.5
NR	138.5

Appendix 7: Global Market Shock – Agencies (Adverse)

	OAS Widening (bps)
US Residential Agency Products	
IOs	80.0
POs	10.0
Other CMOs	25.0
Pass-Throughs	20.0
Agency Debt/Debentures	10.0
IOS Index	80.0
POS Index	10.0
MBX Index	20.0
Other Agency Derivatives	25.0
TBA's	20.0
Reverse Mortgages	40.0
Residential Other / Unspecified	25.0
US Commercial Agency Products	
Cash Agency CMBS	25.0
Agency CMBS Derivatives	25.0
Commercial Other / Unspecified	25.0
Non-US Agency Products	
AAA	25.0
AA	32.5
A	37.5
BBB	62.5
BB	75.0
B	125.0
<B	150.0
NR	150.0

Appendix 8: Global Market Shock – Securitized Products (Severe)

	RMBS														
	Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified
Relative MV Shock Based on Current Rating (%)															
AAA Total															
Pre 2006	-15.5%	-14.2%	-38.7%	-15.5%	-38.7%	-19.5%	-19.5%	-28.6%	-38.7%	-28.6%	-19.5%	-15.5%	-14.2%	-16.8%	-38.7%
2006	-21.1%	-17.7%	-47.5%	-21.1%	-47.5%	-31.4%	-19.5%	-38.5%	-47.5%	-38.5%	-19.5%	-21.1%	-17.7%	-16.8%	-47.5%
2007	-27.6%	-22.5%	-47.5%	-27.6%	-29.5%	-29.5%	-19.5%	-38.5%	-29.5%	-38.5%	-19.5%	-27.6%	-22.5%	-16.8%	-29.5%
Post 2007	-15.5%	-14.2%	-38.7%	-15.5%	-38.7%	-19.5%	-19.5%	-28.6%	-38.7%	-28.6%	-19.5%	-15.5%	-14.2%	-16.8%	-38.7%
Unspecified Vintage	-27.6%	-22.5%	-47.5%	-27.6%	-29.5%	-29.5%	-19.5%	-38.5%	-29.5%	-38.5%	-19.5%	-27.6%	-22.5%	-16.8%	-29.5%
AA Total															
Pre 2006	-58.9%	-38.2%	-70.7%	-58.9%	-70.7%	-40.3%	-37.9%	-28.6%	-70.7%	-28.6%	-37.9%	-58.9%	-38.2%	-34.5%	-70.7%
2006	-70.5%	-36.1%	-84.6%	-70.5%	-84.6%	-79.6%	-37.9%	-38.5%	-84.6%	-38.5%	-37.9%	-70.5%	-36.1%	-34.5%	-84.6%
2007	-70.5%	-36.1%	-84.6%	-70.5%	-79.6%	-79.6%	-37.9%	-38.5%	-79.6%	-38.5%	-37.9%	-70.5%	-36.1%	-34.5%	-79.6%
Post 2007	-58.9%	-38.2%	-70.7%	-58.9%	-70.7%	-40.3%	-37.9%	-28.6%	-70.7%	-28.6%	-37.9%	-58.9%	-38.2%	-34.5%	-70.7%
Unspecified Vintage	-70.5%	-36.1%	-84.6%	-70.5%	-79.6%	-79.6%	-37.9%	-38.5%	-79.6%	-38.5%	-37.9%	-70.5%	-36.1%	-34.5%	-79.6%
A Total															
Pre 2006	-69.4%	-41.2%	-83.3%	-69.4%	-83.3%	-48.5%	-47.8%	-28.6%	-83.3%	-28.6%	-47.8%	-69.4%	-41.2%	-48.2%	-83.3%
2006	-75.0%	-40.1%	-90.0%	-75.0%	-90.0%	-79.6%	-47.8%	-38.5%	-90.0%	-38.5%	-47.8%	-75.0%	-40.1%	-48.2%	-90.0%
2007	-75.0%	-39.5%	-90.0%	-75.0%	-79.6%	-79.6%	-47.8%	-38.5%	-79.6%	-38.5%	-47.8%	-75.0%	-39.5%	-48.2%	-79.6%
Post 2007	-69.4%	-41.2%	-83.3%	-69.4%	-83.3%	-48.5%	-47.8%	-28.6%	-83.3%	-28.6%	-47.8%	-69.4%	-41.2%	-48.2%	-83.3%
Unspecified Vintage	-75.0%	-39.5%	-90.0%	-75.0%	-79.6%	-79.6%	-47.8%	-38.5%	-79.6%	-38.5%	-47.8%	-75.0%	-39.5%	-48.2%	-79.6%
BBB Total															
Pre 2006	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-41.7%	-28.6%	-82.9%	-28.6%	-41.7%	-69.1%	-54.6%	-42.3%	-82.9%
2006	-76.2%	-53.3%	-91.5%	-76.2%	-91.5%	-79.6%	-41.7%	-38.5%	-91.5%	-38.5%	-41.7%	-76.2%	-54.6%	-42.3%	-91.5%
2007	-76.2%	-53.3%	-91.5%	-76.2%	-79.6%	-79.6%	-41.7%	-38.5%	-79.6%	-38.5%	-41.7%	-76.2%	-53.3%	-42.3%	-79.6%
Post 2007	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-41.7%	-28.6%	-82.9%	-28.6%	-41.7%	-69.1%	-54.6%	-42.3%	-82.9%
Unspecified Vintage	-76.2%	-53.3%	-91.5%	-76.2%	-79.6%	-79.6%	-41.7%	-38.5%	-79.6%	-38.5%	-41.7%	-76.2%	-54.6%	-42.3%	-79.6%
BB Total															
Pre 2006	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
2006	-76.2%	-54.6%	-91.5%	-76.2%	-91.5%	-79.6%	-40.5%	-38.5%	-91.5%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-91.5%
2007	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
Post 2007	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
Unspecified Vintage	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
B Total															
Pre 2006	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
2006	-76.2%	-54.6%	-91.5%	-76.2%	-91.5%	-79.6%	-40.5%	-38.5%	-91.5%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-91.5%
2007	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
Post 2007	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
Unspecified Vintage	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
<B Total															
Pre 2006	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
2006	-76.2%	-54.6%	-91.5%	-76.2%	-91.5%	-79.6%	-40.5%	-38.5%	-91.5%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-91.5%
2007	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
Post 2007	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
Unspecified Vintage	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
NR Total															
Pre 2006	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
2006	-76.2%	-54.6%	-91.5%	-76.2%	-91.5%	-79.6%	-40.5%	-38.5%	-91.5%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-91.5%
2007	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%
Post 2007	-69.1%	-54.6%	-82.9%	-69.1%	-82.9%	-56.8%	-40.5%	-28.6%	-82.9%	-28.6%	-40.5%	-69.1%	-54.6%	-42.3%	-82.9%
Unspecified Vintage	-76.2%	-54.6%	-91.5%	-76.2%	-79.6%	-79.6%	-40.5%	-38.5%	-79.6%	-38.5%	-40.5%	-76.2%	-54.6%	-42.3%	-79.6%

Appendix 8: Global Market Shock – Securitized Products (Severe) (Cont.)

	ABS							CMBS						
	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified
Relative MV Shock Based on Current Rating (%)														
AAA Total														
Pre 2006	-7.3%	-13.7%	-17.8%	-17.8%	-17.8%	-8.0%	-17.8%	-18.9%	-26.4%	-34.3%	-26.4%	-26.4%	-18.4%	-34.3%
2006	-7.3%	-13.7%	-18.5%	-18.5%	-18.5%	-8.0%	-18.5%	-18.9%	-26.4%	-34.3%	-26.4%	-26.4%	-22.1%	-34.3%
2007	-7.8%	-18.3%	-19.8%	-19.8%	-19.8%	-8.0%	-19.8%	-18.9%	-26.4%	-34.3%	-26.4%	-26.4%	-22.1%	-34.3%
Post 2007	-7.3%	-13.7%	-17.8%	-17.8%	-17.8%	-8.0%	-17.8%	-18.9%	-26.4%	-34.3%	-26.4%	-26.4%	-18.4%	-34.3%
Unspecified Vintage	-7.8%	-18.3%	-19.8%	-19.8%	-19.8%	-8.0%	-19.8%	-18.9%	-26.4%	-34.3%	-26.4%	-26.4%	-22.1%	-34.3%
AA Total														
Pre 2006	-17.8%	-33.1%	-28.9%	-33.1%	-33.1%	-8.0%	-33.1%	-48.1%	-58.4%	-75.9%	-58.4%	-58.4%	-18.4%	-75.9%
2006	-17.8%	-33.1%	-38.0%	-38.0%	-38.0%	-8.0%	-38.0%	-48.1%	-58.4%	-75.9%	-58.4%	-58.4%	-22.1%	-75.9%
2007	-19.0%	-39.4%	-38.2%	-39.4%	-39.4%	-8.0%	-39.4%	-48.1%	-58.4%	-75.9%	-58.4%	-58.4%	-22.1%	-75.9%
Post 2007	-17.8%	-33.1%	-28.9%	-33.1%	-33.1%	-8.0%	-33.1%	-48.1%	-58.4%	-75.9%	-58.4%	-58.4%	-18.4%	-75.9%
Unspecified Vintage	-19.0%	-39.4%	-38.2%	-39.4%	-39.4%	-8.0%	-39.4%	-48.1%	-58.4%	-75.9%	-58.4%	-58.4%	-22.1%	-75.9%
A Total														
Pre 2006	-19.4%	-33.7%	-35.4%	-35.4%	-35.4%	-8.0%	-35.4%	-59.7%	-58.1%	-75.5%	-58.1%	-58.1%	-18.4%	-75.5%
2006	-19.4%	-33.7%	-37.5%	-37.5%	-37.5%	-8.0%	-37.5%	-59.7%	-58.1%	-75.5%	-58.1%	-58.1%	-22.1%	-75.5%
2007	-20.7%	-40.0%	-45.6%	-45.6%	-45.6%	-8.0%	-45.6%	-59.7%	-58.1%	-75.5%	-58.1%	-58.1%	-22.1%	-75.5%
Post 2007	-19.4%	-33.7%	-35.4%	-35.4%	-35.4%	-8.0%	-35.4%	-59.7%	-58.1%	-75.5%	-58.1%	-58.1%	-18.4%	-75.5%
Unspecified Vintage	-20.7%	-40.0%	-45.6%	-45.6%	-45.6%	-8.0%	-45.6%	-59.7%	-58.1%	-75.5%	-58.1%	-58.1%	-22.1%	-75.5%
BBB Total														
Pre 2006	-18.7%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
2006	-18.7%	-46.3%	-37.5%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
2007	-20.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
Post 2007	-18.7%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
Unspecified Vintage	-20.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
BB Total														
Pre 2006	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
2006	-26.2%	-46.3%	-37.5%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
2007	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
Post 2007	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
Unspecified Vintage	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
B Total														
Pre 2006	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
2006	-26.2%	-46.3%	-37.5%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
2007	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
Post 2007	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
Unspecified Vintage	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
<B Total														
Pre 2006	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
2006	-26.2%	-46.3%	-37.5%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
2007	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
Post 2007	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
Unspecified Vintage	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
NR Total														
Pre 2006	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
2006	-26.2%	-46.3%	-37.5%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
2007	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%
Post 2007	-26.2%	-46.3%	-35.4%	-46.3%	-46.3%	-8.0%	-46.3%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-18.4%	-77.6%
Unspecified Vintage	-28.0%	-55.1%	-45.6%	-55.1%	-55.1%	-8.0%	-55.1%	-65.1%	-59.7%	-77.6%	-59.7%	-59.7%	-22.1%	-77.6%

Appendix 8: Global Market Shock – Securitized Products (Severe) (Cont.)

	Corporate CDO / CLO		Warehouse		
	CLO	Other / Unspecified	Total Size	Total Protection	Other / Unspecified
Relative MV Shock Based on Current Rating (%)					
AAA Total					
Pre 2006	-17.7%	-2.7%	-18.4%	18.4%	-2.7%
2006	-17.7%	-2.7%	-22.1%	22.1%	-2.7%
2007	-17.7%	-2.7%	-22.1%	22.1%	-2.7%
Post 2007	-17.7%	-2.7%	-18.4%	18.4%	-2.7%
Unspecified Vintage	-17.7%	-2.7%	-22.1%	22.1%	-2.7%
AA Total					
Pre 2006	-56.1%	-2.7%	-18.4%	18.4%	-2.7%
2006	-56.1%	-2.7%	-22.1%	22.1%	-2.7%
2007	-56.1%	-2.7%	-22.1%	22.1%	-2.7%
Post 2007	-56.1%	-2.7%	-18.4%	18.4%	-2.7%
Unspecified Vintage	-56.1%	-2.7%	-22.1%	22.1%	-2.7%
A Total					
Pre 2006	-82.3%	-2.7%	-18.4%	18.4%	-2.7%
2006	-82.3%	-2.7%	-22.1%	22.1%	-2.7%
2007	-82.3%	-2.7%	-22.1%	22.1%	-2.7%
Post 2007	-82.3%	-2.7%	-18.4%	18.4%	-2.7%
Unspecified Vintage	-82.3%	-2.7%	-22.1%	22.1%	-2.7%
BBB Total					
Pre 2006	-85.9%	-43.9%	-18.4%	18.4%	-43.9%
2006	-85.9%	-43.9%	-22.1%	22.1%	-43.9%
2007	-85.9%	-43.9%	-22.1%	22.1%	-43.9%
Post 2007	-85.9%	-43.9%	-18.4%	18.4%	-43.9%
Unspecified Vintage	-85.9%	-43.9%	-22.1%	22.1%	-43.9%
BB Total					
Pre 2006	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
2006	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
2007	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
Post 2007	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
Unspecified Vintage	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
B Total					
Pre 2006	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
2006	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
2007	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
Post 2007	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
Unspecified Vintage	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
<B Total					
Pre 2006	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
2006	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
2007	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
Post 2007	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
Unspecified Vintage	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
NR Total					
Pre 2006	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
2006	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
2007	-87.4%	-43.9%	-22.1%	22.1%	-43.9%
Post 2007	-87.4%	-43.9%	-18.4%	18.4%	-43.9%
Unspecified Vintage	-87.4%	-43.9%	-22.1%	22.1%	-43.9%

Appendix 8: Global Market Shock – Municipals (Severe)

	Spread Widening (bps)
Bonds	
AAA	3.0
AA	23.0
A	107.0
BBB	277.0
BB	277.0
B	277.0
<B	277.0
NR	277.0
Loans	
AAA	3.0
AA	23.0
A	107.0
BBB	277.0
BB	277.0
B	277.0
<B	277.0
NR	277.0
CDS	
AAA	3.0
AA	23.0
A	107.0
BBB	277.0
BB	277.0
B	277.0
<B	277.0
NR	277.0
Indices	
AAA	185.5
AA	185.5
A	185.5
BBB	185.5
BB	185.5
B	185.5
<B	185.5
NR	185.5
Other / Unspecified Munis	
AAA	3.0
AA	23.0
A	107.0
BBB	277.0
BB	277.0
B	277.0
<B	277.0
NR	277.0

Appendix 8: Global Market Shock – Agencies (Severe)

	OAS Widening (bps)
US Residential Agency Products	
IOs	160.0
POs	20.0
Other CMOs	50.0
Pass-Throughs	40.0
Agency Debt/Debentures	20.0
IOS Index	160.0
POS Index	20.0
MBX Index	40.0
Other Agency Derivatives	50.0
TBA's	40.0
Reverse Mortgages	80.0
Residential Other / Unspecified	50.0
US Commercial Agency Products	
Cash Agency CMBS	50.0
Agency CMBS Derivatives	50.0
Commercial Other / Unspecified	50.0
Non-US Agency Products	
AAA	50.0
AA	65.0
A	75.0
BBB	125.0
BB	150.0
B	250.0
<B	300.0
NR	300.0

Appendix 9: House Price Extrapolation

House Price Index Extrapolation

For house prices, extrapolate from the last period of the scenarios (Q4, 2016) using the following:
2016+ : Long-run house price appreciation rate of 70 basis points over inflation.

Inflation
2016 - 2018: Congressional Budget Office's projection of 2.2 percent per year.
2019 +: Congressional Budget Office's projection of 2.3 percent per year.

Appendix 10: Data Notes

Data Notes

Sources for data through 2013:Q3 (as released through 10/25/2013). The 2013:Q3 values of variables marked with an asterisk (*) are projected.

U.S. real GDP growth*: Percent change in real Gross Domestic Product at an annualized rate, Bureau of Economic Analysis.

U.S. nominal GDP growth*: Percent change in nominal Gross Domestic Product at an annualized rate, Bureau of Economic Analysis.

U.S. real disposable income growth*: Percent change in nominal disposable personal income divided by the price index for personal consumption expenditures at an annualized rate, Bureau of Economic Analysis.

U.S. nominal disposable income growth*: Percent change in nominal disposable personal income at an annualized rate, Bureau of Economic Analysis.

U.S. unemployment rate: Quarterly average of monthly data, Bureau of Labor Statistics.

U.S. CPI inflation*: Percent change in the Consumer Price Index at an annualized rate, Bureau of Labor Statistics.

U.S. 3-month Treasury rate: Quarterly average of 3-month Treasury bill secondary market rate discount basis, Federal Reserve Board.

U.S. 5-year Treasury yield: Quarterly average of the yield on 5-year U.S. Treasury bonds, constructed for FRB/U.S. model by Federal Reserve staff based on the Svensson smoothed term structure model; see Lars E. O. Svensson (1995), "Estimating Forward Interest Rates with the Extended Nelson-Siegel Method," *Quarterly Review* , no. 3, Sveriges Riksbank, pp. 13–26.

U.S. 10-year Treasury yield: Quarterly average of the yield on 10-year U.S. Treasury bonds, constructed for FRB/U.S. model by Federal Reserve staff based on the Svensson smoothed term structure model; see Lars E. O. Svensson (1995), "Estimating Forward Interest Rates with the Extended Nelson-Siegel Method," *Quarterly Review,* No. 3, Sveriges Riksbank, pp. 13-26.

U.S. BBB corporate yield: Quarterly average of the yield on 10-year BBB-rated corporate bonds, constructed for FRB/U.S. model by Federal Reserve staff using a Nelson-Siegel smoothed yield curve model; see Charles R. Nelson and Andrew F. Siegel (1987), "Parsimonious Modeling of Yield Curves," *Journal of Business* , vol. 60, pp. 473-89. Data prior to 1997 is based on the WARGA database. Data after 1997 is based on the Merrill Lynch database.

U.S. mortgage rate: Quarterly average of weekly series of Freddie Mac data.

U.S. prime rate: Quarterly average of monthly series, Federal Reserve Board.

U.S. Dow Jones Total Stock Market (Float Cap) Index: End of quarter value, Dow Jones.

U.S. House Price Index*: CoreLogic, index level, seasonally adjusted by Federal Reserve staff.

U.S. Commercial Real Estate Price Index*: From the Financial Accounts of the United States, Federal Reserve Board (Z.1 release); the series corresponds to the data for price indexes: Commercial Real Estate Price Index (series FI075035503.Q).

U.S. Market Volatility Index (VIX): Chicago Board Options Exchange, converted to quarterly by using the maximum value in any quarter.

Euro area real GDP growth*: Staff calculations based on Statistical Office of the European Communities via Haver, extended back using ECB Area Wide Model dataset (ECB Working Paper series no. 42).

Euro area inflation: Staff calculations based on Statistical Office of the European Community via Haver.

Developing Asia real GDP growth*: Staff calculations based on Chinese National Bureau of Statistics via CEIC; Indian Central Statistical Organization via CEIC; Bank of Korea via Haver; Census and Statistics Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

Developing Asia inflation: Staff calculations based on Chinese National Bureau of Statistics via CEIC; Indian Ministry of Statistics and Programme Implementation via Haver; Labour Bureau of India via CEIC; National Statistical Office of Korea via CEIC; Census and Statistic Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

Japan real GDP growth*: Cabinet Office via Haver.

Japan inflation: Ministry of Internal Affairs and Communications via Haver.

U.K. real GDP growth: Office for National Statistics via Haver.

U.K. inflation: Staff calculations based on Office for National Statistics (uses Retail Price Index to extend series back to 1960) via Haver.

Exchange rates: Bloomberg.

Dodd-Frank Stress Tests

Summary Instructions and Guidance

November 26, 2013

Accompanying Order No. 2013-OR-FNMA-2,

Order No. 2013-OR-FHLMC-2, and

Order No. 2013-OR-B-2

Federal Housing Finance Agency

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Introduction

Section 165(i)(2) of the Dodd-Frank Act requires certain financial companies with total consolidated assets of more than $10 billion, and which are regulated by a primary federal financial regulatory agency, to conduct annual stress tests to determine whether the companies have the capital necessary to absorb losses as a result of adverse economic conditions. The Federal Housing Finance Agency (FHFA) is the primary federal financial regulator of Fannie Mae, Freddie Mac, and the twelve Federal Home Loan Banks (Banks) referred to herein as each of the Banks (any of the Banks singularly, Bank; Fannie Mae and Freddie Mac collectively, the Enterprises; the Enterprises and the Banks collectively, regulated entities; any of the regulated entities singularly, regulated entity).

While each of the regulated entities currently has total consolidated assets of more than $10 billion, the final rule expressly retains the Director's discretion to require any regulated entity that falls below the $10 billion threshold to conduct the stress test.

The Enterprises' capital positions, supported and restricted by the Senior Preferred Stock Purchase Agreements with the Department of the Treasury are unique. Nonetheless, the Enterprises incorporate capital into their models for new business and to determine adequate returns (among other things). FHFA expects the Enterprises to have

processes and procedures for managing their businesses notwithstanding Treasury's support. Therefore, the rule and these instructions apply equally to the Enterprises and the Banks.

FHFA's final rule implementing the Dodd-Frank Act stress testing requirements sets forth the basic requirements for implementing the Dodd-Frank Stress Tests and reporting the results. FHFA anticipates supplementing the rule annually with reporting schedules and such additional Orders, instructions and guidance as may be necessary.

This document presents the general instructions and guidance that each regulated entity is expected to follow in conducting stress tests and reporting and publishing results under the rule.

General instructions and guidance are provided relating to:

- Scenario assumptions;
- Reporting and timing;
- Stress test process governance;
- Use of stress test results;
- Incomplete data;
- Evaluation of stress test processes

Dodd-Frank Stress Test Scenarios

For purposes of the Dodd-Frank Stress Test, the regulated entities are required to submit the results of stress tests based on three scenarios: Baseline, Adverse, and Severely Adverse. Assumptions for the variables in each separate scenario may be found in the attachments to the Order.

The initial stress tests are based on portfolios as of September 30, 2013. The planning horizon for the stress test is nine quarters starting with the fourth quarter of 2013 and extending through the fourth quarter of 2015. A year of scenario assumptions beyond the nine-quarter planning horizon is provided and may be utilized, if needed. Historical data is provided in the event that models require that information.

FHFA expects each regulated entity to use those scenario variables that are relevant to the entity's line of business and that are consumed by the entity's models. However, FHFA expects each regulated entity to apply all of the relevant global market shocks provided, with the exception of the counterparty default scenario component which is required for the Enterprises but optional for the Banks. The regulated entities are expected to indicate which scenario variables are included in their stress tests in their reports to FHFA and the Federal Reserve Board of Governors (Board).

Global Market Shock Assumptions

The global market assumptions provided by FHFA are to be applied to the regulated entities trading securities, available-for-sale-securities and other fair value assets as of September 30, 2013 for the adverse and severely adverse stress test.

The result of the global market shock is to be taken as an instantaneous loss and reduction of capital in the first quarter of the planning horizon. The regulated entities should not assume a related decline in portfolio positions as a result of these market shock losses. The global market shock should be treated as an add-on that is exogenous to the macroeconomic and financial market environment specified in the supervisory stress scenarios. The regulated entities should assume no recoveries of the losses generated by the global market shock over the nine quarters. The capital impact of the global market shock is carried over the planning horizon.

Counterparty Default Scenario Component

The Enterprises are required to perform the counterparty default scenario component of the global market shocks, while the component is optional for the Banks. The counterparty default scenario component of the global market shocks should be treated as an add-on to the macroeconomic and financial market scenarios specified in the FHFA's supervisory adverse and severely adverse scenarios. The counterparty default scenario component involves an instantaneous and unexpected default of the regulated entity's largest counterparty across the regulated entity's securities lending, repurchase/reverse repurchase agreements (collectively Securities Financing Transactions or SFTs) and derivative exposures, and the potential losses and effects on capital associated with such a default. The regulated entity should identify their largest counterparty by the counterparty that represents the largest total net stressed loss if the counterparty defaulted on its obligations.
Net stressed losses for each counterparty are calculated after applying the instantaneous market shock to any non-cash SFT assets (securities/collateral) posted or received, and, for derivatives, to the value of the trade position and non-cash collateral exchanged. All estimated losses from the counterparty default scenario component should be assumed to occur instantaneously and should be reported in the initial quarter of the planning horizon.

More detailed instructions for implementing other assumptions follow:

House Prices

The House Price Index assumptions provided by FHFA describe the path of national house prices. FHFA expects each regulated entity to extrapolate the national house price path beyond the nine quarters using the assumptions provided in the attachments to the Order.

FHFA expects each regulated entity to translate the national house price path in each scenario to regional house price paths as appropriate for each regulated entity's models and to interpolate the house price paths to accommodate the frequency of data required by their models.

Missing Interest Rate Series and Other Missing Variables

Regulated entities should develop assumptions for interest rate series and other variables that their models consume but that FHFA does not provide and interpolate those series to accommodate the frequency of data required by their models.

Balance Sheet Evolution

The regulated entities should also make the necessary assumptions for rolling their balance sheets forward through the nine-quarter projection period. Each entity's assumptions should reflect its reasonable expectations of future business and conform to its strategic plans. Additionally, the Enterprises should ensure that the size and composition of their books of business during the stress test are consistent with the goals in FHFA's Conservatorship Scorecard.

Capital Actions

For capital actions, the Banks should take into account their actual capital actions as of the end of the calendar quarter preceding the first quarter of the nine-quarter planning horizon. For each succeeding quarter, they should either assume payment of stock dividends equal to those paid in the year ending at the end of the first quarter of the planning horizon, or, follow any established rules they have for dividends payments.

The Banks should either assume that they do not redeem or repurchase any capital instrument over the planning horizon or that their capital actions will accord with their established capital plans.

They should also assume that they will redeem all mandatorily redeemable capital stock as per their usual practice unless restricted from doing so by FHFA actions.

Finally, they should assume that they will cease dividend payments, capital redemptions, or repurchases (as applicable) when retained earnings fall to zero.

The Enterprises should comply with the terms of the Senior Preferred Stock Agreements, as amended, to determine the level of dividends to pay over the planning horizon.

FHFA will review those assumptions for reasonableness and consistency with the assumptions used by other regulated entities. In all cases, FHFA may require resubmission where it deems assumptions unacceptable.

Other-than-temporary-impairments and Estimated AMA Losses

FHFA expects the Banks to use the common platform for estimating other-than-temporary impairments on Private Label Securities in each stress test scenario. For estimating AMA losses, the Banks are expected to use their existing modeling processes and may use the common platform.

FHFA Scenarios – Enterprises

In 2013, the Enterprises are required to conduct additional FHFA-required stress tests (the "FHFA scenarios"), as they have in the past, in conjunction with the initial implementation of the Dodd-Frank Stress Tests. Next year, the Enterprises will be required to conduct only the Dodd-Frank Stress Tests.

Reporting Format and Timing

The Enterprises must submit results of the Baseline, Adverse, and Severely Adverse scenarios to FHFA and the Board by February 5 (30 days after required reporting dates for financial institutions with $50 billion or more of assets) and publish results of only the Severely Adverse scenario between April 15 and April 30. The Banks are to report results of the Baseline, Adverse, and Severely Adverse scenarios to FHFA and the Board by April 30 (30 days after required reporting dates for financial institutions with less than $50 billion of assets) and publish results of only the Severely Adverse scenario between July 15 and July 30.

The results of a regulated entity's analysis for each scenario should encompass all potential losses and other impacts to net income and capital that the regulated entity might experience under the scenarios. In all cases, regulated entities should substantiate that their results are consistent with the specified macroeconomic and financial environment, and that the components of their results are internally consistent within each scenario.

The regulated entities are required to report the results to FHFA and the Board using the Dodd Frank Act (DFA) schedules for non-public disclosure provided in Attachment 1. DFA schedules for public disclosure are provided in Attachment 2.

The regulated entities also are required to submit qualitative information describing the methodologies, including any simplifying or other assumptions used to produce the estimates, as well as any other information necessary to fully support the reasonableness of the stress test results.

Each regulated entity must submit its results and any supporting information to FHFA through a secure site. The Enterprises must use the secure server. The Banks must use the secure bank portal.

Stress Test Governance

The board of directors of each regulated entity or a designated committee thereof is responsible for reviewing and approving policies and procedures established to comply with the rule. The board should also receive and review the results of the stress tests for compliance with the rule and established policies and procedures. Senior management of each regulated entity is responsible for establishing and testing controls. Senior management and each member of the board of directors are to receive a summary of the stress test results.

Use of Stress Test Results

The rule requires that each regulated entity take the results of the annual stress test into account in making any changes, as appropriate, to its capital structure (including the level and composition of capital); its exposures, concentrations, and risk positions; any plans for recovery and resolution; and to improve overall risk management. Consultation with FHFA supervisory staff is expected in making such improvements. If a regulated entity is under FHFA conservatorship, any post-assessment actions would require FHFA's prior approval.

Results should include effects on capital as required under the Dodd-Frank Act stress testing rule. Specifically, and in accordance with the rule, each regulated entity must calculate how each of the following is affected during each quarter of the stress test planning horizon, for each scenario:

- Potential losses, pre-provision net revenues, allowance for loan losses, and future pro forma capital positions over the planning horizon; and

- Capital levels and capital ratios, including regulatory capital and net worth, each Bank's leverage and permanent capital ratios, and any other capital ratios, as specified by FHFA.

Incomplete Data

All regulated entities are required to report all data elements in the attached FHFA DFA schedules. Failure to submit complete data to FHFA in a timely manner may require resubmission of data or any other remedy or penalty authorized under the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended (12 U.S.C. 4501 et seq.) (Safety and Soundness Act) and the Federal Home Loan Bank Act, as amended (12 U.S.C. 1421 through 1449) (Bank Act).

Evaluation of Stress Test Processes

FHFA will focus particular attention on the processes surrounding the implementation of the scenarios to ensure that these processes are robust and that they capture and stress key vulnerabilities and idiosyncratic risks facing the firm; and that the translation of the scenario into loss, revenue, and post-stress capital projections is conceptually sound and implemented in a well- controlled manner. FHFA will evaluate the extent to which stress testing processes at the regulated entities adhere to the regulatory principles outlined in Appendix 1. Failure to follow these principles in a timely manner constitutes a basis for objection to results, which may result in monetary penalties, revocation of publication or other remedy or penalty, authorized under the Safety and Soundness Act and the Bank Act.

Appendix 1: Regulatory Expectations for a Stress Testing Process

A regulated entity's stress testing process should adhere to the following principles:

Principle 1: The regulated entity has a sound risk measurement and management infrastructure that supports the identification, measurement, assessment, and control of all material risks arising from its exposures and business activities.

- A satisfactory stress testing process requires (1) a comprehensive risk identification process, and (2) complete and accurate measurement and assessment of all material risks.

- A regulated entity should measure or assess the full spectrum of risks that face the regulated entity, using both quantitative and qualitative methods, where applicable.

- The regulated entity should have data capture and retention systems that allow for the input, use, and storage of information required for sound risk identification and measurement and to produce reliable inputs for assessments of capital adequacy.

- Quantitative processes for measuring risks should meet supervisory expectations for model effectiveness and be supported by robust model development, documentation, validation, and overall model governance practices. Both qualitative and quantitative processes for assessing risk should be transparent, repeatable, and reviewable by an independent party.

- Any identified weaknesses in risk measures used as inputs to the stress testing process should be documented and reported to relevant parties, with an assessment of the potential impact of risk-measurement weaknesses on the reliability of the stress test results.

Principle 2: The regulated entity has effective processes for translating risk measures into estimates of potential losses over a range of stressful scenarios and environments and for aggregating those estimated losses across the regulated entity.

- Stress tests should include methodologies that generate estimates of potential losses for all material risk exposures, one of which should be an enterprise-wide stress test using scenario analysis. Methodologies should be complementary, not suffer from common limitations, and minimize reliance on common assumptions.

- Using the loss estimation methodologies for its various risk exposures, a regulated entity should develop consistent and repeatable processes to aggregate its loss estimates on an enterprise-wide basis.

- A regulated entity should demonstrate that its loss estimation tools are developed using sound modeling approaches, appropriate for the manner in which they are being employed, and that the most relevant limitations are clearly identified, well documented, and appropriately communicated.

- A regulated entity should recognize that its loss projections are estimates and should have a good understanding of the uncertainty around those estimates, including the potential margin of error and the sensitivity of the estimates to changes in inputs and key assumptions.

Principle 3: The regulated entity has a clear definition of available capital resources and an effective process for estimating available capital resources (including any projected revenues) over the same range of stressful scenarios and environments used for estimating losses.

- Management and the Board of directors should understand the loss-absorption capabilities of the components of the regulated entity's capital base, and maintain projection methodologies for each of the capital components included in relevant capital adequacy metrics.

- In estimating available capital resources, a regulated entity will need to consider not only its current positions and mix of capital instruments, but also how its capital resources may evolve over time under varying circumstances and stress scenarios.
- As part of a comprehensive enterprise-wide stress testing program, projections of pre-provision net revenue (PPNR) should be consistent with balance sheet and other exposure assumptions used for related loss estimation. Projections should estimate all key elements of PPNR, including net interest income, non-interest income, and non-interest expense at a level of granularity consistent with material revenue and expense components.

- A regulated entity should demonstrate that its capital resource estimation tools are developed using sound modeling approaches, appropriate for the manner in which they are being employed, and that the most relevant limitations are clearly identified, well documented, and appropriately communicated.

- A regulated entity should recognize that its projections of capital resources are estimates and should have a good understanding of the uncertainty around those estimates, including the potential margin of error and the sensitivity of the estimates to changes in inputs and key assumptions.

Principle 4: The regulated entity has processes for bringing together estimates of losses and capital resources to assess the combined impact on capital adequacy in relation to the regulated entity's stated goals for the level and composition of capital.

- A regulated entity should have a comprehensive and consistently executed process for combining loss, resource, and balance sheet estimates to assess the baseline and post-stress impact of those estimates on capital measures.

- A regulated entity should calculate and use several capital measures that represent both leverage and risk at specified time horizons under both baseline and stressful conditions, consistent with its capital policy framework. Measures should include quarterly estimates for the impact on capital and leverage ratios as well as other capital and risk measures useful in assessing overall capital adequacy.

- The processes for bringing together estimates of losses and capital resources should ensure that appropriately stressful conditions over the regulated entity's planning horizon have been incorporated to properly address the institutions' unique vulnerabilities.

- The processes should provide for the presentation of any information that may have material bearing on the regulated entity's capital adequacy assessment, including all relevant risks and strategic factors, as well as key uncertainties and process limitations.

Principle 5: The regulated entity has a comprehensive capital policy and robust capital planning practices for establishing capital goals, determining appropriate capital levels and composition of capital, making decisions about capital actions, and maintaining capital contingency plans.

Capital Policy

- A capital policy is defined as a regulated entity's written assessment of the principles and guidelines used for capital planning, capital issuance, and usage and distributions, including internal capital goals, the quantitative or qualitative guidelines for dividend and stock repurchase decisions, the strategies for addressing potential capital shortfalls, and the internal governance procedures around capital policy principles and guidelines.

- A regulated entity should establish capital goals aligned with its risk appetite and risk profile as well as expectations of stakeholders, providing specific targets for the level and composition of capital. The regulated entity should ensure that maintaining its internal capital goals will allow it to continue its operations under stressful conditions.

- The capital policy should describe the decision making processes regarding capital goals, the level and composition of capital, capital actions, and capital contingency plans, including an explanation of the roles and responsibilities of key decision makers and information and analysis used to make decisions.

- The regulated entity should outline in its policy specific capital contingency actions it would consider to remedy any current or prospective deficiencies in its capital position, including any triggers and escalation procedures. The policy should also include a detailed explanation of the circumstances in which it will reduce or suspend a dividend or repurchase program, or will not execute a previously planned capital action.

- A regulated entity should establish a minimum frequency with which its capital plan is reevaluated (at least annually). In addition, a regulated entity should review its capital policy at least annually to ensure it remains relevant and current.

Capital Planning Practices

- At regular intervals, a regulated entity should compare the estimates of baseline and post-stress capital measures (see Principle 4) to the capital goals established in the capital policy for purposes of informing capital decisions.

- For capital decisions, consideration should be given to any information that may have material bearing on the regulated entity's capital adequacy assessment, including all relevant risks and strategic factors, key uncertainties, and limitations of the stress test.

- Assessments of capital adequacy and decisions about capital should be supported by high-quality data and information, informed by current and relevant analysis, and subject to challenge by senior management and the Board of directors.

- Periodically, the regulated entity should conduct a thorough assessment of its capital contingency strategies, including their feasibility under stress, impact, timing, and potential stakeholder reactions.

- A regulated entity should administer its capital planning activities and capital decision processes in conformance with its policy framework, documenting and justifying any divergence from policy.

Principle 6: The regulated entity has robust internal controls governing capital adequacy process components, including policies and procedures, change control, model validation and independent review, comprehensive documentation, and review by internal audit.

- The internal control framework should encompass the entire stress test, including the risk measurement and management systems used to produce input data, the models and other techniques used to estimate loss and resource estimates, the process for making capital adequacy decisions, and the aggregation and reporting framework used to produce management and board reporting. The set of control functions in place should provide confirmation that all aspects of the stress test are functioning as intended.

- Policies and procedures should ensure a consistent and repeatable process and provide transparency to third parties for their understanding of a regulated entity's stress test processes and practices. Policies and procedures should be comprehensive, relevant to their use in the stress test, periodically updated and approved, and cover the entire stress test and all of its components.

- Specific to the stress test, a regulated entity should have internal controls that ensure the integrity of reported results and that all material changes to the stress test and its components are appropriately documented, reviewed, and approved. A regulated entity should have controls to ensure that management information systems are robust enough to support stress tests with sufficient flexibility to run ad hoc analysis as needed.

- Expectations for validation and independent review for components of the stress test are consistent with existing supervisory guidance on model risk management. Models should be independently validated or otherwise reviewed in line with model risk management and model governance expectations.

- A regulated entity should have clear and comprehensive documentation for all aspects of its stress test, including its risk measurement and management infrastructure, loss- and resource-estimation methodologies, the process for making capital decisions, and efficacy of control and governance functions.

- A regulated entity's internal audit should play a strong role in evaluating the stress test and its components. A full review of the capital adequacy process component should be done by audit periodically to ensure that as a whole the stress test is functioning as expected and in accordance with the regulated entity's policies and procedures. Internal audit should review the manner in which stress test deficiencies are identified, tracked, and remediated.

Principle 7: The regulated entity has effective board and senior management oversight of the stress test, including periodic review of the regulated entity's risk infrastructure and loss and resource estimation methodologies; evaluation of capital goals, assessment of the appropriateness of stressful scenarios considered, regular review of any limitations and uncertainties in all aspects of the stress test, and approval of capital decisions.

- The Board of directors should make informed decisions on capital adequacy for its regulated entity by receiving sufficient information detailing the risks the regulated entity faces, its exposures and activities, and the impact that loss and resource estimates may have on its capital position.
- Information provided to the board about capital adequacy should be framed against the capital goals established by the regulated entity and by obligations to external stakeholders, and consider capital adequacy for the regulated entity with respect to the current circumstances as well as on a pro forma, post-stress basis.
- The information the board of directors reviews should include a representation of key limitations, assumptions, and uncertainties within the stress test, enabling the board to have the perspective to effectively understand and challenge reported results. The board should take action when weaknesses in the stress test are identified, giving full consideration to the impact of those weaknesses in their capital decisions.

- Senior management should ensure that all weaknesses in the stress test are identified, as well as key assumptions, limitations, and uncertainties, and evaluate them for materiality (both individually and collectively). Senior management also should have remediation plans for any weaknesses affecting stress test reliability or results.

- Using appropriate information, senior management should make informed recommendations to the Board of directors about the regulated entity's capital, including capital goals and distribution decisions. Senior management should include supporting information to highlight key assumptions, limitations, and uncertainties in the stress test that may affect capital decisions.

- A regulated entity should appropriately document the key decisions about capital adequacy—including capital actions—made by the Board of directors and senior management, and describe the information used to make those decisions.

Attachment 1: FHFA DFA Reporting Schedules (Non-Public)

Scenario Schedule Cover Sheet

Each regulated entity is expected to provide input data for all the tabs in this spreadsheet.

Institution Name:	
Date of Data Submission:	
Institution Contact Name:	
Institution Contact Phone Number:	
Institution Contact Email Address:	

Supplied Scenario Variables

(Please indicate which scenarios were used in your model by checking the appropriate box:)

Domestic Variables

- ☐ Real GDP Growth
- ☐ Nominal GDP Growth
- ☐ Real Disposable Income Growth
- ☐ Nominal Disposable Income Growth
- ☐ Unemployment Rate
- ☐ CPI Inflation Rate
- ☐ 3-month Treasury Yield
- ☐ 5-year Treasury Yield
- ☐ 10-year Treasury Yield
- ☐ BBB Corporate Yield
- ☐ Mortgage Rate
- ☐ Prime Rate
- ☐ Dow Jones Total Stock Market Index
- ☐ House Price Index
- ☐ Commercial Real Estate Price Index
- ☐ Market Volatility Index (VIX)
- ☐ Private Label Securities (PLS) or Non-Agency Prices for Residential Mortgage-backed Securities (RMBS), Asset-based Securities (ABS), Commercial Mortgage-backed Securities (CMBS) and other collateral*
- ☐ Agency Securities Option-Adjusted Spreads (OAS)*
- ☐ Municipal Securities*
- ☐ Counterparty Default Risk**

International Variables

- ☐ Euro Area Real GDP Growth
- ☐ Euro Area Inflation
- ☐ Euro Area Bilateral Dollar Exchange Rate ($/euro)
- ☐ Developing Asia Real GDP Growth
- ☐ Developing Asia Inflation
- ☐ Developing Asia Bilateral Dollar Exchange Rate (F/UDS, indes, base = 2000,Q1)
- ☐ Japan Real GDP Growth
- ☐ Japan Inflation
- ☐ Japan Bilateral Dollar Exchange Rate (yen/USD)
- ☐ U.K. Real GDP Growth
- ☐ U.K. Inflation
- ☐ U.K. Bilaeral Dollar Exchange Rate (USD/pound)

*Note: These are mandatory variables required by the Order for all Regulated Entities

**Note: This is a mandatory variable required by the Order for the Enterprises

For variables not used, please provide a brief explanation below as to why it was not used:

Variable Name	Explanation
1	
2	
3	
4	
5	

Scenario Variables Beyond Those Supplied

Baseline Scenario (additional variables used beyond those supplied)

Variable Number	Variable Name	Variable Definition
1		
2		
3		
4		
5		

Adverse Scenario (additional variables used beyond those supplied)

Variable Number	Variable Name	Variable Definition
1		
2		
3		
4		
5		

Severely Adverse Scenario (additional variables used beyond those supplied)

Variable Number	Variable Name	Variable Definition
1		
2		
3		
4		
5		

Baseline

Spread Assumptions

Category	Benchmark	Actual 3Q 2013	Spread to Benchmark Projected Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Example: Advance	3-Month LIBOR	10.0	10.0	10.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0

Variables Used Beyond Those Supplied

Variable Name	Actual 3Q 2013	Projected Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9

Forward Curve

Maturity	Actual 3Q 2013	Projected Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
3-Month Treasury		0.1	0.1	0.1	0.1	0.2	0.4	0.6	0.8	1.1
6-Month										
1 year										
2 year										
5 year Treasury		1.8	2	2.1	2.2	2.3	2.4	2.6	2.7	2.8
10 year Treasury		2.8	2.9	3	3.1	3.3	3.4	3.5	3.7	3.8
15 year										
30 year										

House Price Index

(NOTE: For printing purposes dates only goes to Jul-14. However, the underlying excel spreadsheet collects 30 years of data.)

Region	Actual 3Q 2013	Projected Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Region 1											
Region 2											
.											
.											
.											
.											

Adverse

Spread Assumptions

Category	Benchmark	Actual 3Q 2013	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
			Spread to Benchmark Projected								
Example: Advance	3-Month LIBOR	10.0	10.0	10.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0

Variables Used Beyond Those Supplied

Variable Name	Actual 3Q 2013	Projected Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9

Forward Curve

Maturity	Actual 3Q 2013	Projected Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
3-Month Treasury	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
6-Month										
1 year										
2 year										
5 year Treasury	2.7	3.3	3.9	4.5	4.6	4.5	4.4	4.2	4	
10 year Treasury	3.5	4.2	5	5.7	5.8	5.7	5.5	5.3	5.1	
15 year										
30 year										

House Price Index

(NOTE: For printing purposes dates only goes to Jul-14. However, the underlying excel spreadsheet collects 30 years of data.)

Region	Actual 3Q 2013	Projected Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Region 1											
Region 2											
.											
.											
.											
.											

Severely Adverse

Spread Assumptions

		Actual	Spread to Benchmark Projected								
Category	Benchmark	3Q 2013	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Example: Advance	3-Month LIBOR	10.0	10.0	10.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0

Variables Used Beyond Those Supplied

	Actual	Projected								
Variable Name	3Q 2013	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9

Forward Curve

	Actual	Projected								
Maturity	3Q 2013	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
3-Month Treasury		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6-Month										
1 year										
2 year										
5 year Treasury		0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
10 year Treasury		1	1	1.1	1.1	1.3	1.3	1.4	1.5	1.6
15 year										
30 year										

House Price Index

(NOTE: For printing purposes dates only go to Jul-14. However, the underlying excel spreadsheet collects 30 years of data.)

	Actual	Projected									
Region	3Q 2013	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Region 1											
Region 2											
.											
.											
.											
.											
.											

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

	Income Statement (BASE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	Interest Income:										
1	Advances										
2	Whole loans held for portfolio										
3	Investment Securities										
4	Fed Funds										
5	Other Interest Income										
6	Total Interest Income										
	Interest Expense:										
7	CO Bonds										
8	Discount Notes										
9	Member Deposits										
10	Other Interest Expense										
11	Total Interest Expense										
12	**Net interest income**										
13	Provision (reversal) for credit losses on mortgage loans										
14	**Net Interest Income after mortgage loan loss provision**										
15	Derivatives gains (losses)										
16	Gains (losses) on securities										
17	Total net gain (loss) on changes in fair value										
18	Total OTTI credit charge										
19	Other gains (losses)										
20	Operating expenses										
21	Other expenses										
22	**Income (loss) before assessments**										
23	Total assessments										
24	**Net Income (Loss)**										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Balance Sheet (BASE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
ASSETS										
1 Advances										
2 Investment Securities										
3 Mortgage Loans										
4 Allowance for loan losses										
5 Fed Funds										
6 Other assets										
7 Total assets										
LIABILITIES										
8 CO bonds										
9 Discount notes										
10 Member deposits										
11 Other liabilities										
12 Total liabilities										
CAPITAL										
13 Class B capital stock										
14 Class A capital stock										
15 Capital stock pre-conversion										
16 Retained earnings (unrestricted)										
17 Retained earnings (restricted)										
18 Accumulated other comprehensive income (loss)										
19 Total capital										
20 Total liabilities and capital										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Capital Roll Forward (BASE)		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning Capital										
2	Net Income										
3	Less: Dividends										
4	Other Capital Actions										
5	Change in AOCI										
6	Other										
7	**Ending Capital**										
8	Regulator Capital										

Capital Ratios

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
9	Regulatory Capital										
10	Leverage Capital										
11	Permanent Capital										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

	Credit (BASE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CREDIT EXPENSES										
1	Provision for credit losses										
	PLS CREDIT QUALITY										
2	Principal										
3	Principal writedown										
4	Balance										
5	Credit support										
	COUNTERPARTY CREDIT										
6	Unsecured credit										
7	Unsecured derivative counterparty exposure										
8	Payment from private mortgage insurers										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Income Statement (ADVERSE)		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	Interest Income:										
1	Advances										
2	Whole loans held for portfolio										
3	Investment Securities										
4	Fed Funds										
5	Other Interest Income										
6	Total Interest Income										
	Interest Expense:										
7	CO Bonds										
8	Discount Notes										
9	Member Deposits										
10	Other Interest Expense										
11	Total Interest Expense										
12	**Net interest income**										
13	Provision (reversal) for credit losses on mortgage loans										
14	**Net Interest Income after mortgage loan loss provision**										
15	Derivatives gains (losses)										
16	Gains (losses) on securities										
17	Total net gain (loss) on changes in fair value										
18	Total OTTI credit charge										
19	Other gains (losses)										
20	Operating expenses										
21	Other expenses										
22	**Income (loss) before assessments**										
23	Total assessments										
24	**Net Income (Loss)**										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Balance Sheet (ADVERSE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
ASSETS										
1 Advances										
2 Investment Securities										
3 Mortgage Loans										
4 Allowance for loan losses										
5 Fed Funds										
6 Other assets										
7 Total assets										
LIABILITIES										
8 CO bonds										
9 Discount notes										
10 Member deposits										
11 Other liabilities										
12 Total liabilities										
CAPITAL										
13 Class B capital stock										
14 Class A capital stock										
15 Capital stock pre-conversion										
16 Retained earnings (unrestricted)										
17 Retained earnings (restricted)										
18 Accumulated other comprehensive income (loss)										
19 Total capital										
20 Total liabilities and capital										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

	Capital Roll Forward (ADVERSE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning Capital										
2	Net Income										
3	Less: Dividends										
4	Other Capital Actions										
5	Change in AOCI										
6	Other										
7	**Ending Capital**										
8	Regulator Capital										
	Capital Ratios										
9	Regulatory Capital										
10	Leverage Capital										
11	Permanent Capital										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Credit (ADVERSE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
CREDIT EXPENSES										
1 Provision for credit losses										
PLS CREDIT QUALITY										
2 Principal										
3 Principal writedown										
4 Balance										
5 Credit support										
COUNTERPARTY CREDIT										
6 Unsecured credit										
7 Unsecured derivative counterparty exposure										
8 Payment from private mortgage insurers										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Global Market Shock (Adverse)		Q1 Loss
1	Private Label Securities (PLS) or Non-Agency Prices for Residential Mortgage-backed Securities (RMBS), Asset-based Securities (ABS), Commercial Mortgage-backed Securities (CMBS) and other collateral	
2	Agency Securities Option-Adjust Spread	
3	Municipal Securities	

Investment Securities and Other Fair Value Assets
Securitized Products (Adverse)

(*Credit ratings should be as of September 30, 2013)

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

		RMBS															
	Grand Total	Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
MV* ($MM)																	
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Profit/Loss ($MM)																	
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Investment Securities and Other Fair Value Assets
Securitized Products (Adverse)

(*Credit ratings should be as of September 30, 2013)

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

		ABS								CMBS								Corporate CDO / CLO			Warehouse		
MV* ($MM)	Grand Total	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	ABS SubTotal	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified	CMBS SubTotal	CLO	Other / Unspecified	Corporate CDO/CLO SubTotal	Total Size	Total Protection	Other / Unspecified
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Profit/Loss ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Trading and Other Fair Value Assets Schedule
Agencies (Adverse)

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

	MV ($MM)	Proft/Loss
US Residential Agency Products		
IOs		
POs		
Other CMOs		
Pass-Throughs		
Agency Debt/Debentures		
IOS Index		
POS Index		
MBX Index		
Other Agency Derivatives		
TBA's		
Reverse Mortgages		
Residential Other / Unspecified		
Total	**$0**	**$0**

US Commercial Agency Products		
Cash Agency CMBS		
Agency CMBS Derivatives		
Commercial Other / Unspecified		
Total	**$0**	**$0**

Non-US Agency Products		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Total	**$0**	**$0**

Trading and Other Fair Value Assets
Munis (Adverse)

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

Bonds	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Bonds Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Bonds Total	**$0**	**$0**

Indices	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Indices Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Indices Total	**$0**	**$0**

Loans		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Loans Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Loans Total	**$0**	**$0**

Other / Unspecified Munis		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Other / Unspecified Munis Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Other / Unspecified Munis Total	**$0**	**$0**

CDS		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
CDS Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
CDS Total	**$0**	**$0**

Grand Total		
AAA	$0	$0
AA	$0	$0
A	$0	$0
BBB	$0	$0
BB	$0	$0
B	$0	$0
<B	$0	$0
NR	$0	$0
Grand Total	**$0**	**$0**
1M	$0	$0
3M	$0	$0
6M	$0	$0
9M	$0	$0
1Y	$0	$0
2Y	$0	$0
3Y	$0	$0
5Y	$0	$0
7Y	$0	$0
10Y	$0	$0
15Y	$0	$0
20Y	$0	$0
30Y	$0	$0
Grand Total	**$0**	**$0**

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Income Statement (SEVERE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Interest Income:										
1 Advances										
2 Whole loans held for portfolio										
3 Investment Securities										
4 Fed Funds										
5 Other Interest Income										
6 Total Interest Income										
Interest Expense:										
7 CO Bonds										
8 Discount Notes										
9 Member Deposits										
10 Other Interest Expense										
11 Total Interest Expense										
12 Net interest income										
13 Provision (reversal) for credit losses on mortgage loans										
14 Net Interest Income after mortgage loan loss provision										
15 Derivatives gains (losses)										
16 Gains (losses) on securities										
17 Total net gain (loss) on changes in fair value										
18 Total OTTI credit charge										
19 Other gains (losses)										
20 Operating expenses										
21 Other expenses										
22 Income (loss) before assessments										
23 Total assessments										
24 Net Income (Loss)										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Balance Sheet (SEVERE)		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
ASSETS											
1	Advances										
2	Investment Securities										
3	Mortgage Loans										
4	Allowance for loan losses										
5	Fed Funds										
6	Other assets										
7	**Total assets**										
LIABILITIES											
8	CO bonds										
9	Discount notes										
10	Member deposits										
11	Other liabilities										
12	**Total liabilities**										
CAPITAL											
13	Class B capital stock										
14	Class A capital stock										
15	Capital stock pre-conversion										
16	Retained earnings (unrestricted)										
17	Retained earnings (restricted)										
18	Accumulated other comprehensive income (loss)										
19	**Total capital**										
20	**Total liabilities and capital**										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Capital Roll Forward (SEVERE)		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning Capital										
2	Net Income										
3	Less: Dividends										
4	Other Capital Actions										
5	Change in AOCI										
6	Other										
7	**Ending Capital**										
8	Regulator Capital										

Capital Ratios

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
9	Regulatory Capital										
10	Leverage Capital										
11	Permanent Capital										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

	Credit (SEVERE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CREDIT EXPENSES										
1	Provision for credit losses										
	PLS CREDIT QUALITY										
2	Principal										
3	Principal writedown										
4	Balance										
5	Credit support										
	COUNTERPARTY CREDIT										
6	Unsecured credit										
7	Unsecured derivative counterparty exposure										
8	Payment from private mortgage insurers										

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

	Global Market Shock (Severe)	Q1 Loss
1	Private Label Securities (PLS) or Non-Agency Prices for Residential Mortgage-backed Securities (RMBS), Asset-based Securities (ABS), Commercial Mortgage-backed Securities (CMBS) and other collateral	
2	Agency Securities Option-Adjust Spread	
3	Municipal Securities	

Investement Securities and Fair Value Trading Assets
Securitized Products (Severe)

(*Credit ratings should be as of September 30, 2013)

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

MV* ($MM)	Grand Total	RMBS: Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Profit/Loss ($MM)	Grand Total	RMBS: Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Investement Securities and Fair Value Trading Assets
Securitized Products (Severe)

(*Credit ratings should be as of September 30, 2013)

FHLBank Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

		ABS								CMBS								Corporate CDO / CLO			Warehouse		
	Grand Total	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	ABS SubTotal	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified	CMBS SubTotal	CLO	Other / Unspecified	Corporate CDO/CLO SubTotal	Total Size	Total Protection	Other / Unspecified
MV* ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Profit/Loss ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Trading & Other Fair Value Assets Schedule
Agencies (Severe)

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

	MV ($MM)	Proft/Loss in $K from OAS Widening
US Residential Agency Products		
IOs		
POs		
Other CMOs		
Pass-Throughs		
Agency Debt/Debentures		
IOS Index		
POS Index		
MBX Index		
Other Agency Derivatives		
TBA's		
Reverse Mortgages		
Residential Other / Unspecified		
Total	**$0**	**$0**
US Commercial Agency Products		
Cash Agency CMBS		
Agency CMBS Derivatives		
Commercial Other / Unspecified		
Total	**$0**	**$0**
Non-US Agency Products		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Total	**$0**	**$0**

FHLBank Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

Bonds

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Bonds Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Bonds Total	**$0**	**$0**

Indices

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Indices Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Indices Total	**$0**	**$0**

Loans

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Loans Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Loans Total	**$0**	**$0**

Other / Unspecified Munis

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Other / Unspecified Munis Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Other / Unspecified Munis Total	**$0**	**$0**

CDS

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
CDS Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
CDS Total	**$0**	**$0**

Grand Total

	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA	$0	$0
AA	$0	$0
A	$0	$0
BBB	$0	$0
BB	$0	$0
B	$0	$0
<B	$0	$0
NR	$0	$0
Grand Total	$0	$0
1M	$0	$0
3M	$0	$0
6M	$0	$0
9M	$0	$0
1Y	$0	$0
2Y	$0	$0
3Y	$0	$0
5Y	$0	$0
7Y	$0	$0
10Y	$0	$0
15Y	$0	$0
20Y	$0	$0
30Y	$0	$0
Grand Total	$0	$0

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

	Income Statement (BASE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	Interest income:										
1	Securities										
2	Mortgage loans										
3	Other										
4	Total interest income										
	Interest expense:										
5	Short-term debt										
6	Long-term debt										
7	Other debt/Interest expense										
8	Total interest expense										
9	**Net interest income**										
10	Guaranty fees										
11	Other income										
12	**Total revenue**										
13	(Provision) benefit for credit losses										
14	**Total revenue after (provision) benefit for credit losses**										
15	Derivatives gains (losses)										
16	Trading gains (losses)										
17	Other gains (losses)										
18	REO (foreclosed property exp.)										
19	SOP 03-3 losses, net										
20	Security impairments										
21	Administrative expenses										
22	Other expenses										
23	**Pre-Tax Income (Loss)**										
24	Provision (benefit) for federal income taxes										
25	Extraordinary gains (losses), net of tax effect										
26	**Net income (Loss)**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Balance Sheet (BASE)

	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
ASSETS										
1 Cash and cash equivalents										
2 Investments in securities										
3 Available-for-sale, at fair value										
4 Trading, at fair value										
5 Mortgage loans, excluding loss allowance										
6 Allowance for loan losses										
7 Deferred tax assets, net of allowance										
8 Other assets										
9 Total Assets										
LIABILITIES										
10 Short-term debt										
11 Long-term debt										
12 Debt of consolidated trusts/PCs										
13 Guarantee fee obligation										
14 Reserve for guaranty losses										
15 Other liabilities										
16 Total liabilities										
17 Minority interest										
CAPITAL										
18 Senior preferred stock										
19 Preferred stock										
20 Common stock										
21 Retained earnings (deficit)										
22 Accumulated other comprehensive income (loss)										
23 Treasury stock										
24 Total stockholders' equity (deficit)										
25 Total capital (deficit)										
26 Total liabilities, minority interest and capital										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Capital Roll Forward (BASE)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning capital										
2	Senior preferred Treasury draw (prior period)										
3	Net income										
4	Less: Dividends										
5	Other capital actions										
6	Change in AOCI										
7	Change in non-controlling/minority interest										
8	Other										
9	**Ending capital**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

	Credit (BASE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CREDIT EXPENSES										
1	Credit losses										
2	REO (foreclosed property exp.)										
3	Net charge-offs										
4	Provision for credit losses										
5	SOP 03-3 losses, net										
6	**Total credit expenses**										
	LOAN LOSS RESERVE										
7	Loan loss reserve beginning balance										
8	Net charge-offs										
9	Provison (benefit) for loan/guaranty losses										
10	Other										
11	Allowance for accrued interest receivable										
12	Allowance for accrued property taxes and insurance										
13	**Ending total loan loss reserve**										
	PAYMENTS FROM PRIVATE MORTGAGE INSURERS										
14	MGIC										
15	Radian										
16	United										
17	Genworth										
18	PMI										
19	Other										
	CREDIT QUALITY										
20	Defaults (count)										
21	REO acquisitions (count)										
22	Average seriously delinquent loans (count)										
23	Average seriously delinquent rate (%)										
24	Aggregate UPB of seriously delinquent loans ($)										
25	Loan modifications (count)										
26	Special Mention (count)										
27	Special Mention ($)										
28	Substandard (count)										
29	Substandard ($)										
30	Doubtful (count)										
31	Doubtful ($)										
32	Loss (count)										
33	Loss ($)										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

	Income Statement (ADVERSE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	Interest income:										
1	Securities										
2	Mortgage loans										
3	Other										
4	Total interest income										
	Interest expense:										
5	Short-term debt										
6	Long-term debt										
7	Other debt/Interest expense										
8	Total interest expense										
9	**Net interest income**										
10	Guaranty fees										
11	Fee and float income										
12	**Total revenue**										
13	(Provision) benefit for credit losses										
14	**Total revenue after (provision) benefit for credit losses**										
15	Derivatives gains (losses)										
16	Trading gains (losses)										
17	Other gains (losses)										
18	REO (foreclosed property exp.)										
19	SOP 03-3 losses, net										
20	Security impairments										
21	Administrative expenses										
22	Other expenses										
23	**Pre-Tax Income (Loss)**										
24	Provision (benefit) for federal income taxes										
25	Extraordinary gains (losses), net of tax effect										
26	**Net income (Loss)**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Balance Sheet (ADVERSE)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	ASSETS										
1	Cash and cash equivalents										
2	Investments in securities										
3	Available-for-sale, at fair value										
4	Trading, at fair value										
5	Mortgage loans, excluding loss allowance										
6	Allowance for loan losses										
7	Deferred tax assets, net of allowance										
8	Other assets										
9	**Total Assets**										
	LIABILITIES										
10	Short-term debt										
11	Long-term debt										
12	Debt of consolidated trusts/PCs										
13	Guarantee fee obligation										
14	Reserve for guaranty losses										
15	Other liabilities										
16	**Total liabilities**										
17	Minority interest										
	CAPITAL										
18	Senior preferred stock										
19	Preferred stock										
20	Common stock										
21	Retained earnings (deficit)										
22	Accumulated other comprehensive income (loss)										
23	Treasury stock										
24	Total stockholders' equity (deficit)										
25	**Total capital (deficit)**										
26	**Total liabilities, minority interest and capital**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Capital Roll Forward (ADVERSE)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning capital										
2	Senior preferred Treasury draw (prior period)										
3	Net income										
4	Less: Dividends										
5	Other capital actions										
6	Change in AOCI										
7	Change in non-controlling/minority interest										
8	Other										
9	**Ending capital**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

	Credit (ADVERSE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CREDIT EXPENSES										
1	Credit losses										
2	REO (foreclosed property exp.)										
3	Net charge-offs										
4	Provision for credit losses										
5	SOP 03-3 losses, net										
6	**Total credit expenses**										
	LOAN LOSS RESERVE										
7	Loan loss reserve beginning balance										
8	Net charge-offs										
9	Provison (benefit) for loan/guaranty losses										
10	Other										
11	Allowance for accrued interest receivable										
12	Allowance for accrued property taxes and insurance										
13	**Ending total loan loss reserve**										
	PAYMENTS FROM PRIVATE MORTGAGE INSURERS										
14	MGIC										
15	Radian										
16	United										
17	Genworth										
18	PMI										
19	Other										
	CREDIT QUALITY										
20	Defaults (count)										
21	REO acquisitions (count)										
22	Average seriously delinquent loans (count)										
23	Average seriously delinquent rate (%)										
24	Aggregate UPB of seriously delinquent loans ($)										
25	Loan modifications (count)										
26	Special Mention (count)										
27	Special Mention ($)										
28	Substandard (count)										
29	Substandard ($)										
30	Doubtful (count)										
31	Doubtful ($)										
32	Loss (count)										
33	Loss ($)										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Global Market Shock (Adverse)

		Q1 Loss
1	Private Label Securities (PLS) or Non-Agency Prices for Residential Mortgage-backed Securities (RMBS), Asset-based Securities (ABS), Commercial Mortgage-backed Securities (CMBS) and other collateral	
2	Agency Securities Option-Adjust Spread	
3	Municipal Securities	
4	Counterparty Default Risk*	

* Please provide the name and type (eg: derivatives, repo, etc.) of the largest counterparty below:

Counterparty Name	Counterparty Type

Investment Securities and Other Fair Value Assets
Securitized Products (Adverse)

(*Credit ratings should be as of September 30, 2013)

Enterprise Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

MV* ($MM)

	Grand Total	RMBS															
		Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Profit/Loss ($MM)

AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Investment Securities and Other Fair Value Assets
Securitized Products (Adverse)

(*Credit ratings should be as of September 30, 2013)

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

		ABS								CMBS								Corporate CDO / CLO			Warehouse		
	Grand Total	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	ABS SubTotal	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified	CMBS SubTotal	CLO	Other / Unspecified	Corporate CDO/CLO SubTotal	Total Size	Total Protection	Other / Unspecified
MV* ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Profit/Loss ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Trading and Other Fair Value Assets Schedule
Agencies (Adverse)

Enterprises Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

US Residential Agency Products	MV ($MM)	Proft/Loss
IOs		
POs		
Other CMOs		
Pass-Throughs		
Agency Debt/Debentures		
IOS Index		
POS Index		
MBX Index		
Other Agency Derivatives		
TBA's		
Reverse Mortgages		
Residential Other / Unspecified		
Total	**$0**	**$0**

US Commercial Agency Products		
Cash Agency CMBS		
Agency CMBS Derivatives		
Commercial Other / Unspecified		
Total	**$0**	**$0**

Non-US Agency Products		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Total	**$0**	**$0**

Trading and Other Fair Value Assets
Munis (Adverse)

Enterprises Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

Bonds	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Bonds Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Bonds Total	**$0**	**$0**

Indices	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Indices Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Indices Total	**$0**	**$0**

Loans	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Loans Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Loans Total	**$0**	**$0**

Other / Unspecified Munis	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Other / Unspecified Munis Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Other / Unspecified Munis Total	**$0**	**$0**

CDS	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
CDS Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
CDS Total	**$0**	**$0**

Grand Total	MV* ($MM)	Profit/(Loss) from a Widening in Spreads
AAA	$0	$0
AA	$0	$0
A	$0	$0
BBB	$0	$0
BB	$0	$0
B	$0	$0
<B	$0	$0
NR	$0	$0
Grand Total	**$0**	**$0**
1M	$0	$0
3M	$0	$0
6M	$0	$0
9M	$0	$0
1Y	$0	$0
2Y	$0	$0
3Y	$0	$0
5Y	$0	$0
7Y	$0	$0
10Y	$0	$0
15Y	$0	$0
20Y	$0	$0
30Y	$0	$0
Grand Total	**$0**	**$0**

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Income Statement (SEVERE)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	Interest income:										
1	Securities										
2	Mortgage loans										
3	Other										
4	Total interest income										
	Interest expense:										
5	Short-term debt										
6	Long-term debt										
7	Other debt/Interest expense										
8	Total interest expense										
9	**Net interest income**										
10	Guaranty fees										
11	Other income										
12	**Total revenue**										
13	(Provision) benefit for credit losses										
14	**Total revenue after (provision) benefit for credit losses**										
15	Derivatives gains (losses)										
16	Trading gains (losses)										
17	Other gains (losses)										
18	REO (foreclosed property exp.)										
19	SOP 03-3 losses, net										
20	Security impairments										
21	Administrative expenses										
22	Other expenses										
23	**Pre-Tax Income (Loss)**										
24	Provision (benefit) for federal income taxes										
25	Extraordinary gains (losses), net of tax effect										
26	**Net income (Loss)**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Balance Sheet (SEVERE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
ASSETS										
1 Cash and cash equivalents										
2 Investments in securities										
3 Available-for-sale, at fair value										
4 Trading, at fair value										
5 Mortgage loans, excluding loss allowance										
6 Allowance for loan losses										
7 Deferred tax assets, net of allowance										
8 Other assets										
9 Total Assets										
LIABILITIES										
10 Short-term debt										
11 Long-term debt										
12 Debt of consolidated trusts/PCs										
13 Guarantee fee obligation										
14 Reserve for guaranty losses										
15 Other liabilities										
16 Total liabilities										
17 Minority interest										
CAPITAL										
18 Senior preferred stock										
19 Preferred stock										
20 Common stock										
21 Retained earnings (deficit)										
22 Accumulated other comprehensive income (loss)										
23 Treasury stock										
24 Total stockholders' equity (deficit)										
25 Total capital (deficit)										
26 Total liabilities, minority interest and capital										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

Capital Roll Forward (SEVERE)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CAPITAL										
1	Beginning capital										
2	Senior preferred Treasury draw (prior period)										
3	Net income										
4	Less: Dividends										
5	Other capital actions										
6	Change in AOCI										
7	Change in non-controlling/minority interest										
8	Other										
9	**Ending capital**										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

($s in billions)

	Credit (SEVERE)	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
	CREDIT EXPENSES										
1	Credit losses										
2	REO (foreclosed property exp.)										
3	Net charge-offs										
4	Provision for credit losses										
5	SOP 03-3 losses, net										
6	**Total credit expenses**										
	LOAN LOSS RESERVE										
7	Loan loss reserve beginning balance										
8	Net charge-offs										
9	Provison (benefit) for loan/guaranty losses										
10	Other										
11	Allowance for accrued interest receivable										
12	Allowance for accrued property taxes and insurance										
13	**Ending total loan loss reserve**										
	PAYMENTS FROM PRIVATE MORTGAGE INSURERS										
14	MGIC										
15	Radian										
16	United										
17	Genworth										
18	PMI										
19	Other										
	CREDIT QUALITY										
20	Defaults (count)										
21	REO acquisitions (count)										
22	Average seriously delinquent loans (count)										
23	Average seriously delinquent rate (%)										
24	Aggregate UPB of seriously delinquent loans ($)										
25	Loan modifications (count)										
26	Special Mention (count)										
27	Special Mention ($)										
28	Substandard (count)										
29	Substandard ($)										
30	Doubtful (count)										
31	Doubtful ($)										
32	Loss (count)										
33	Loss ($)										

Enterprise Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

Global Market Shock (Severe)

		Q1 Loss
1	Private Label Securities (PLS) or Non-Agency Prices for Residential Mortgage-backed Securities (RMBS), Asset-based Securities (ABS), Commercial Mortgage-backed Securities (CMBS) and other collateral	
2	Agency Securities Option-Adjust Spread	
3	Municipal Securities	
4	Counterparty Default Risk*	

* Please provide the name and type (eg: derivatives, repo, etc.) of the largest counterparty below:

Counterparty Name	Counterparty Type

Investement Securities and Fair Value Trading Assets
Securitized Products (Severe)

(*Credit ratings should be as of September 30, 2013)

Enterprises Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

MV* ($MM)

		RMBS															
	Grand Total	Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Profit/Loss ($MM)

	Grand Total	Non-Agency Prime	Sub-prime	Option ARMS	Other AltA	Unspec Non-Prime	HELOC	RMBS CDO	RMBS CDS	Credit Basket	PrimeX	ABX / TABX	Prime Whole Loans	Non-Prime Whole Loans	European RMBS	Other / Unspecified	RMBS SubTotal
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0																$0
2006	$0																$0
2007	$0																$0
Post 2007	$0																$0
Unspecified Vintage	$0																$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Investement Securities and Fair Value Trading Assets
Securitized Products (Severe)

(*Credit ratings should be as of September 30, 2013)

Enterprises Dodd-Frank Stress Test Template
(Disclosure to FHFA ONLY)

		ABS								CMBS								Corporate CDO / CLO			Warehouse		
MV* ($MM)	Grand Total	Autos	Credit Cards	Student Loans	ABS CDS	Credit Basket	Index Tranches	Other / Unspecified	ABS SubTotal	Cash Non-Agency CMBS	CMBS CDS	CMBS CDO	Credit Basket	Index Tranches	Whole Loans	Other / Unspecified	CMBS SubTotal	CLO	Other / Unspecified	Corporate CDO/CLO SubTotal	Total Size	Total Protection	Other / Unspecified
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Profit/Loss ($MM)																							
AAA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
AA Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
A Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BBB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
BB Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
<B Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
NR Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pre 2006	$0								$0								$0			$0			
2006	$0								$0								$0			$0			
2007	$0								$0								$0			$0			
Post 2007	$0								$0								$0			$0			
Unspecified Vintage	$0								$0								$0			$0			
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Trading & Other Fair Value Assets Schedule
Agencies (Severe)

Enterprises Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

	MV ($MM)	Proft/Loss in $K from OAS Widening
US Residential Agency Products		
IOs		
POs		
Other CMOs		
Pass-Throughs		
Agency Debt/Debentures		
IOS Index		
POS Index		
MBX Index		
Other Agency Derivatives		
TBA's		
Reverse Mortgages		
Residential Other / Unspecified		
Total	**$0**	**$0**

	MV ($MM)	Proft/Loss in $K from OAS Widening
US Commercial Agency Products		
Cash Agency CMBS		
Agency CMBS Derivatives		
Commercial Other / Unspecified		
Total	**$0**	**$0**

	MV ($MM)	Proft/Loss in $K from OAS Widening
Non-US Agency Products		
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Total	**$0**	**$0**

Enterprises Dodd-Frank Stress Test Template (Disclosure to FHFA ONLY)

Bonds	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Bonds Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Bonds Total	**$0**	**$0**

Indices	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Indices Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Indices Total	**$0**	**$0**

Loans	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Loans Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Loans Total	**$0**	**$0**

Other / Unspecified Munis	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
Other / Unspecified Munis Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
Other / Unspecified Munis Total	**$0**	**$0**

CDS	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA		
AA		
A		
BBB		
BB		
B		
<B		
NR		
CDS Total	**$0**	**$0**
1M		
3M		
6M		
9M		
1Y		
2Y		
3Y		
5Y		
7Y		
10Y		
15Y		
20Y		
30Y		
CDS Total	**$0**	**$0**

Grand Total	MV* ($MM)	Profit/(Loss) in $K from a Widening in Spreads
AAA	$0	$0
AA	$0	$0
A	$0	$0
BBB	$0	$0
BB	$0	$0
B	$0	$0
<B	$0	$0
NR	$0	$0
Grand Total	$0	$0
1M	$0	$0
3M	$0	$0
6M	$0	$0
9M	$0	$0
1Y	$0	$0
2Y	$0	$0
3Y	$0	$0
5Y	$0	$0
7Y	$0	$0
10Y	$0	$0
15Y	$0	$0
20Y	$0	$0
30Y	$0	$0
Grand Total	$0	$0

Attachment 2: FHFA DFA Reporting Schedules (Public)

FHLBank Dodd-Frank Stress Test Template - SEVERE
(Disclosure to the Public)

	Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
1 Net interest income + other non-interest income										
2 Provision (reversal) for credit losses on mortgage loans										
3 Net income (loss) before assessments										
4 Total capital										

Enterprise Dodd-Frank Stress Test Template - SEVERE
(Disclosure to the Public)

($s in billions)

		Most Recent Quarter	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
1	Total net revenue before provision for credit losses										
2	Benefit (Provision) for credit losses										
3	Net income before taxes										
4	Credit losses ($s)										
5	Credit losses (% of average portfolio balance)										
6	Ending capital										

Credit losses are defined as charge-offs, net plus foreclosed property expenses

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