

Accessible Version

Meeting of the Federal Open Market Committee April 24-25, 2012 Presentation Materials

[Presentation Materials \(PDF\)](#)

Pages 191 to 226 of the Transcript

Appendix 1: Materials used by Mr. Laubach

Material for

Alternative Scenarios for Contingency Planning

Thomas Laubach

April 24, 2012

Class I FOMC - Restricted (FR)

Exhibit 1

Alternative Scenarios for Contingency Planning -- an Experiment

Top panel

Main Results from the Survey

- Nine said scenario 1 (Tealbook baseline) was closest to own modal outlook; most others saw stronger real activity and/or higher inflation
- Most thought differences across scenarios merited adjustments to their own *individual* assessments of appropriate monetary policy
- Ten specifically indicated that additional portfolio actions could be appropriate in some circumstances
- Enough information provided to infer views on whether the *current* policy should be maintained, tightened, or eased in each scenario
 - Eleven favored maintaining status quo or easier policy in scenario 1
 - Thirteen favored tighter policy in scenario 2; similar number in scenario 4
 - Twelve favored or would consider an easier policy in scenario 3
- Several cited risks (e.g., fiscal policy) as influences on their policy assessments

Middle-left panel

Which Scenario is Closest to Your Own Modal Outlook?

(number of responses)

1--March Tealbook baseline	9
2--stronger real activity	3
3--weaker real activity	0
4--higher inflation	2
Mix of 1 and 3	1
Mix of 1 and 2	2

Middle-right panel

Do Conditions in Scenarios 2 to 4 Warrant a Change in Own Policy Assessment Relative to Scenario 1?

(number of responses)

	Scenario		
	2	3	4
No change	0	0	1
Tighter policy	13	0	12
Easier policy	0	13	0
Insufficient information	4	4	4

Bottom panel

Should Policy Be Tighter, Easier, or the Same as Current Policy?¹

Policy	Scenario			
	1	2	3	4
Maintain status quo	8	1	1	1
Tighter	4	13 ²	0	12 ²
Easier	3	1	12 ³	1
Insufficient information	2	2	4	3

1. Current policy defined as maintaining "at least through late 2014" language and initiating no new asset purchases or MEP. [Return to text](#)

2. Includes two participants who said they might tighten, in that they would consider pulling forward the current liftoff date. [Return to table](#)

3. Includes two participants who said that they might ease, in that they would consider additional balance sheet actions. [Return to table](#)

Exhibit 2 Additional Results and Issues

- Many thought judging appropriate policy responses was difficult without more information for each scenario
- Frequently mentioned examples of other useful indicators included:
 - Additional inflation measures, house prices, broader range of financial market data, readings on foreign economic conditions, initial claims, and business surveys
 - Anecdotal information from business contacts
- Some questioned the general design of the exercise
 - Scenario descriptions did not identify fundamental shocks driving each scenario, nor how events would play out
 - Scenarios might be more useful if they provided this information
- Several participants offered general comments on the potential value of scenario exercises
 - Three said that they might be useful for internal deliberations, but further work was needed before they could be used in public communications
 - Two suggested that such exercises could help to provide information on the Committee's reaction function

Appendix 2: Materials used by Mr. Sack

Material for

FOMC Presentation: *Financial Market Developments and Desk Operations*

Brian Sack

April 24, 2012

Class II FOMC - Restricted FR

Exhibit 1

Top-left panel (1)

Title: Ten-Year Treasury Yield

Series: Ten-year Treasury yield

Horizon: April 1, 2011 - April 20, 2012

Description: The ten-year Treasury yield exhibited notable volatility over the intermeeting period, increasing after the March FOMC meeting and decreasing after the March Employment Situation Report. It ended the period near the same low level observed over the past few months (near 2 percent).

Source: Bloomberg

Top-right panel (2)

Title: Implied Federal Funds Rate Path

Series: Implied federal funds rate path derived from federal funds futures and eurodollar futures

Horizon: April 20, 2012 - June 30, 2015

Description: The expected path of the federal funds rate decreased on net over the intermeeting period, though intermeeting volatility left it significantly higher for a period of time.

Source: Bloomberg, Federal Reserve Bank of New York

Middle-left panel (3)

Title: Probability Distribution of First Increase in Federal Funds Target Rate

Series: Average probabilities of first increase in federal funds target rate by half-year, as assessed in March and April Federal Reserve Bank of New York Surveys of primary dealers

Horizon: H1 2012 to H2 2016 or later

Description: Dealer survey respondents place sizable odds on policy remaining on hold for a long period. The distribution of expectations for the first federal funds rate increase did not appreciably change over the intermeeting period.

Source: Federal Reserve Bank of New York Survey

Middle-right panel (4)

Title: Term Premium for Ten-Year Treasury Yield

Series: Estimate of term premium embedded in zero-coupon ten-year Treasury yield, as estimated by Kim-Wright model

Horizon: April 1, 2011 - April 20, 2012

Description: The Kim-Wright estimate of the ten-year term premium stands at roughly -0.5 percent, which is about 125 basis points below its average level since the late 1990s.

Source: Federal Reserve Board of Governors

Bottom-left panel (5) Decomposition of Decline in Ten-Year Yield Since June 2011 *

(Tealbook Estimates)

Expected Path of Fed Funds Rate		-31
Term Premium Due To:		
	Rate Uncertainty	-22
	SOMA Holdings	-22
	European Risk	-21
	Other Factors	-11

* Changes in BPS. [Return to text](#)

Source: Federal Reserve Board of Governors

Bottom-right panel (6)

Title: Expected Change in SOMA Holdings (Over Subsequent Two Years)

Series: Expected change in SOMA holdings over subsequent two years, based on median response from FRBNY primary dealer survey. (The observation for March 2012 is based on a similar survey conducted by Macroeconomic Advisers.)

Horizon: January 2011 - March 2012

Description: The expected change in SOMA holdings has fluctuated since the beginning of 2011. As of March, there is a median expectation for an increase of \$250 billion over the next two years.

Source: Federal Reserve Bank of New York Survey, Macroeconomic Advisers

Exhibit 2

Top-left panel (7)

Title: Euro Area Sovereign Debt Spreads

Series: Spanish and Italian ten-year spreads to Germany

Horizon: April 1, 2011 - April 20, 2012

Description: Sovereign debt spreads for peripheral European countries have increased since mid-March, concurrent with some reemergence of financial stress in Europe. Spanish spreads to Germany are now above French spreads, attributable in some part to setbacks to its planned fiscal consolidation measures.

Source: Bloomberg

Top-right panel (8)

Title: Patterns in Euro Area Sovereign Debt

Series: Change in bank holdings of euro area sovereign debt from November 2011 to February 2012 by bank country; projected 2012 net issuance by sovereign

Horizon: November 2011 - February 2012; January 2012 - December 2012

Description: Italian and Spanish banks increased their holdings of euro area sovereign debt to a large extent since November, which has been attributed in large part to the European Central Bank's three-year LTROs. Indeed, the increase over those several months outstripped the estimated net funding needs of Spain and Italy over the entirety of 2012. German banks' holdings of euro area debt decreased slightly, and Germany has very little estimated net 2012 issuance.

Source: ECB, Barclays

Middle-left panel (9)

Title: 3-Month Libor-OIS Spreads

Series: Euro-denominated and dollar-denominated three-month Libor-OIS

Horizon: April 1, 2011 - April 20, 2012

Description: Spreads indicating funding stresses continued to decrease over the intermeeting period, though they flattened out over the second half of the period.

Source: Bloomberg

Middle-right panel (10)

Title: Bank Equity Prices

Series: KBW Bank Index and Euro Stoxx Bank Index, indexed to 04/01/11

Horizon: April 1, 2011 - April 20, 2012

Description: U.S. bank equity prices reacted positively to the Comprehensive Capital Analysis and Review results released at the beginning of the intermeeting period, and were roughly flat on net on the period. In contrast, European bank stocks have fallen sharply, returning to the levels observed late last year.

Source: Bloomberg

Bottom-left panel (11)

Title: Financial CDS Spreads

Series: Average five-year CDS spreads of major European financials, major U.S. financials

Horizon: April 1, 2011 - April 20, 2012

Description: Financial CDS spreads have increased to some extent in the U.S. and to a greater extent in Europe, in response to macroeconomic uncertainty, European risks, and looming downgrades from Moody's.

Source: Bloomberg

Bottom-right panel (12)

Title: Equity Prices and Corporate Debt Spreads

Series: S&P 500 Index, Bank of America-Merrill Lynch High Yield Spread to Treasuries Index

Horizon: April 1, 2011 - April 20, 2012

Description: U.S. equity prices showed roughly the same pattern as interest rates, with increases earlier in the period giving way to a retracement as growth optimism faltered and risk concerns reemerged. High-yield bond spreads moved slightly higher.

Source: Bloomberg, Bank of America-Merrill Lynch

Exhibit 3

Top-left panel (13) Operations for Maturity Extension Program (Through 04/23/12)

	Purchases	Sales
Par Amount (\$ Bil.)	302.3	303.7
Bid-to-Cover (Median)	3.0	7.4
Duration (Years)	10.4	1.5
10-Year Equivalents (\$ Bil.)	370.8	53.9

Source: Federal Reserve Bank of New York

Top-right panel (14)

Title: SOMA Treasury Holdings by Maturity*

Series: SOMA holdings with 0-3 years to maturity, with 3-6 years to maturity, and with 6-30 years to maturity

Horizon: April 1, 2011 - April 20, 2012

Description: Since the start of the Maturity Extension Program, SOMA holdings of longer-term Treasuries have increased notably, while holdings of shorter-term securities have decreased, consistent with the increase in portfolio duration.

* Par values. [Return to text](#)

Source: Federal Reserve Bank of New York

Middle-left panel (15)

Title: SOMA Holdings as Percent of Outstanding*

Series: SOMA holdings of Treasuries with 0-3, 3-6, and 6-30 years to maturity as a percent of outstanding in those respective maturity ranges, and 15- and 30-year MBS holdings as a percent of outstanding.

Horizon: July 31, 2007; September 30, 2011; June 30, 2012 (projected)

Description: The shift in the composition of SOMA holdings under the Maturity Extension Program (MEP) has left the portfolio with a relatively high portion of the outstanding stock of longer-term Treasuries, particularly as compared to pre-crisis levels and pre-MEP levels. Shorter-term Treasuries have fallen as a share of outstanding since pre-crisis. The agency MBS reinvestment program is keeping SOMA holdings of those securities relatively stable as a percent of outstanding, at roughly 20 percent.

* Par values as percent of outstanding. Includes only 15- and 30-year FNMA, FHLMC, and GNMA securities for MBS. [Return to text](#)

Source: Federal Reserve Bank of New York, eMBS

Middle-right panel (16)

Title: Treasury and MBS Trading Volumes

Series: 12-week moving averages of total weekly primary dealer volumes of Treasuries and agency MBS, as reported in FR 2004

Horizon: January 1, 2005 - April 18, 2012

Description: Despite the size of the Federal Reserve's presence in Treasury and MBS markets, liquidity and market functioning appear to be holding up well, as trading volumes are near their normal levels observed since 2005.

Source: FR 2004

Bottom-left panel (17)

Title: Probability of Additional Policy Actions

Series: Federal Reserve Bank of New York Survey additional policy action responses by primary dealers

Horizon: Current meeting & 1 year

Description: Participants placed some probability on the possibility of additional easing over the next year, with about a 45 percent median probability of further asset purchases, 30 percent probability of a change in the rate guidance, and 20 percent probability of an increase in SOMA duration. Expectations for any additional policy actions at the April meeting were minimal.

Source: Federal Reserve Bank of New York Survey

Bottom-right panel (18)

Title: Changes to Macroeconomic Forecasts That Would Prompt Change in Policy

Series: Required change to the projection for Q4 2014 unemployment or inflation (as listed in the Summary of Economic Projections) that would prompt a shortening of the forward rate guidance or an expansion of the balance sheet, holding the other variable fixed, based on median responses from FRBNY Survey.

Horizon: N/A

Description: Dealers thought that there would have to be a 1/2 percentage point downward revision to the projected unemployment rate, holding fixed the projection for inflation, in order for the FOMC to shorten the policy guidance in the FOMC statement; they thought it would take a 1/2 percentage point increase in the projection for inflation to prompt a change in the guidance; they thought that additional asset purchases would be warranted if the unemployment projection were to increase by 0.4 percentage points or if the forecast for inflation were to fall by 0.3 percentage points. The results indicate that market participants take these policy measures to be conditioned on the economic outlook.

Source: Federal Reserve Bank of New York Survey

Appendix 3: Materials used by Mr. Wilcox

Material for

Forecast Summary

David Wilcox

April 24, 2012

Class II FOMC - Restricted (FR)

Forecast Summary

Confidence Intervals Based on Tealbook Track Record

Top-left panel Unemployment Rate

Percent

Period	April TB	March TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	9.10	ND	ND	ND
2011:Q3	9.10	ND	ND	ND
2011:Q4	8.70	ND	ND	ND
2012:Q1	8.24	8.36	8.24	8.24
2012:Q2	8.18	8.36	7.97	8.39
2012:Q3	8.12	8.30	7.75	8.48
2012:Q4	8.04	8.21	7.51	8.54
2013:Q1	7.91	8.11	7.26	8.53
2013:Q2	7.86	8.03	7.11	8.60
2013:Q3	7.80	7.93	6.97	8.64
2013:Q4	7.72	7.83	6.81	8.66
2014:Q1	7.63	ND	6.69	8.69
2014:Q2	7.54	ND	6.58	8.69
2014:Q3	7.46	ND	6.48	8.68
2014:Q4	7.39	ND	6.39	8.64

Top-right panel Real GDP

Percent change, annual rate

Period	April TB	March TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	1.34	ND	ND	ND
2011:Q3	1.81	1.81	ND	ND
2011:Q4	2.95	3.08	2.95	2.95
2012:Q1	2.54	1.82	2.35	2.73
2012:Q2	2.13	2.17	1.47	2.81
2012:Q3	2.50	2.60	1.52	3.52

2012:Q4	2.90	2.88	1.62	4.23
2013:Q1	2.37	2.26	0.87	3.97
2013:Q2	2.67	2.57	1.03	4.33
2013:Q3	2.90	2.78	1.13	4.59
2013:Q4	3.11	3.02	1.17	4.87
2014:Q1	3.12	ND	1.01	4.77
2014:Q2	3.19	ND	1.00	4.81
2014:Q3	3.35	ND	1.13	5.01
2014:Q4	3.51	ND	1.33	5.29

Middle-left panel
PCE Prices

Percent change, annual rate

Period	April TB	March TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	3.30	ND	ND	ND
2011:Q3	2.34	2.34	ND	ND
2011:Q4	1.17	1.17	1.17	1.17
2012:Q1	2.46	2.09	2.35	2.58
2012:Q2	1.61	2.16	1.20	2.03
2012:Q3	1.81	1.54	1.15	2.49
2012:Q4	1.68	1.43	0.83	2.58
2013:Q1	1.58	1.39	0.57	2.64
2013:Q2	1.54	1.36	0.49	2.62
2013:Q3	1.48	1.36	0.39	2.63
2013:Q4	1.49	1.36	0.33	2.71
2014:Q1	1.51	ND	0.32	2.73
2014:Q2	1.51	ND	0.27	2.73
2014:Q3	1.52	ND	0.25	2.74
2014:Q4	1.54	ND	0.23	2.74

Middle-right panel
Unemployment Effects of Matching Efficiency

Period	Percentage points
1990:Q1	-0.02
1990:Q2	0.11
1990:Q3	-0.17
1990:Q4	-0.25
1991:Q1	-0.33
1991:Q2	-0.28
1991:Q3	0.02
1991:Q4	-0.08
1992:Q1	0.06
1992:Q2	0.11
1992:Q3	-0.01
1992:Q4	0.23
1993:Q1	0.08
1993:Q2	0.20
1993:Q3	0.04
1993:Q4	-0.02
1994:Q1	-0.01
1994:Q2	-0.19
1994:Q3	-0.13
1994:Q4	-0.21
1995:Q1	-0.15
1995:Q2	-0.22
1995:Q3	0.06
1995:Q4	-0.04
1996:Q1	0.05
1996:Q2	-0.22
1996:Q3	-0.02
1996:Q4	-0.26
1997:Q1	-0.20
1997:Q2	0.03
1997:Q3	-0.17
1997:Q4	-0.06
1998:Q1	-0.19
1998:Q2	-0.24
1998:Q3	-0.18

1998:Q4		-0.25
1999:Q1		-0.02
1999:Q2		-0.30
1999:Q3		-0.45
1999:Q4		-0.34
2000:Q1		-0.22
2000:Q2		-0.38
2000:Q3		-0.19
2000:Q4		-0.32
2001:Q1		-0.64
2001:Q2		-0.58
2001:Q3		-0.55
2001:Q4		-0.53
2002:Q1		0.00
2002:Q2		-0.28
2002:Q3		0.01
2002:Q4		0.08
2003:Q1		-0.07
2003:Q2		0.14
2003:Q3		-0.06
2003:Q4		0.22
2004:Q1		-0.02
2004:Q2		-0.13
2004:Q3		-0.24
2004:Q4		0.15
2005:Q1		0.13
2005:Q2		0.07
2005:Q3		0.18
2005:Q4		0.17
2006:Q1		-0.20
2006:Q2		-0.42
2006:Q3		-0.30
2006:Q4		-0.39
2007:Q1		0.08
2007:Q2		-0.06
2007:Q3		-0.10
2007:Q4		-0.06
2008:Q1		-0.08
2008:Q2		0.02
2008:Q3		0.44
2008:Q4		0.50
2009:Q1		0.57
2009:Q2		0.77
2009:Q3		1.22
2009:Q4		1.03
2010:Q1		0.98
2010:Q2		1.20
2010:Q3		1.10
2010:Q4		1.47
2011:Q1		1.49
2011:Q2		1.30
2011:Q3		0.95
2011:Q4		1.03

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

Bottom-left panel Measures of Labor Market Slack

Percentage points

Period	Unemployment gap	Job availability	Jobs hard-to-fill*
1990:Q1	-0.53	0.00	0.72
1990:Q2	-0.43	0.22	0.76
1990:Q3	-0.02	0.45	1.08
1990:Q4	0.46	1.23	1.56
1991:Q1	0.98	1.59	1.98
1991:Q2	1.27	1.81	2.24
1991:Q3	1.36	1.98	2.13
1991:Q4	1.62	2.52	2.53

1992:Q1		1.82	2.62	2.47
1992:Q2		2.08	2.27	1.97
1992:Q3		2.18	2.43	2.07
1992:Q4		2.00	2.37	1.96
1993:Q1		1.79	2.06	1.83
1993:Q2		1.76	2.11	1.85
1993:Q3		1.53	2.00	1.72
1993:Q4		1.41	1.82	1.33
1994:Q1		1.33	1.45	0.62
1994:Q2		1.01	1.16	0.89
1994:Q3		0.89	1.04	0.44
1994:Q4		0.53	0.79	0.43
1995:Q1		0.41	0.48	0.05
1995:Q2		0.63	0.46	0.20
1995:Q3		0.63	0.40	0.06
1995:Q4		0.55	0.58	0.02
1996:Q1		0.54	0.54	-0.02
1996:Q2		0.47	0.28	-0.28
1996:Q3		0.27	0.09	-0.37
1996:Q4		0.33	0.07	-0.25
1997:Q1		0.24	-0.36	-0.30
1997:Q2		-0.01	-0.49	-0.29
1997:Q3		-0.12	-0.69	-0.87
1997:Q4		-0.30	-0.66	-0.88
1998:Q1		-0.37	-1.12	-0.57
1998:Q2		-0.60	-1.25	-0.93
1998:Q3		-0.48	-1.29	-0.79
1998:Q4		-0.58	-1.06	-1.30
1999:Q1		-0.73	-1.48	-1.34
1999:Q2		-0.76	-1.49	-1.21
1999:Q3		-0.77	-1.56	-0.94
1999:Q4		-0.93	-1.58	-1.57
2000:Q1		-0.95	-1.86	-1.61
2000:Q2		-1.05	-1.83	-2.00
2000:Q3		-0.97	-1.92	-1.92
2000:Q4		-1.08	-1.68	-1.93
2001:Q1		-0.77	-1.37	-1.11
2001:Q2		-0.59	-0.96	-0.39
2001:Q3		-0.18	-0.47	-0.52
2001:Q4		0.53	0.51	0.87
2002:Q1		0.70	0.52	1.02
2002:Q2		0.73	0.45	0.79
2002:Q3		0.63	0.73	1.03
2002:Q4		0.77	1.11	1.05
2003:Q1		0.81	1.30	1.19
2003:Q2		1.07	1.37	1.63
2003:Q3		1.03	1.59	1.25
2003:Q4		0.74	1.35	1.03
2004:Q1		0.65	1.14	0.92
2004:Q2		0.59	0.95	0.71
2004:Q3		0.44	0.80	0.56
2004:Q4		0.39	0.86	0.24
2005:Q1		0.29	0.47	0.37
2005:Q2		0.11	0.42	0.50
2005:Q3		-0.03	0.44	0.34
2005:Q4		-0.04	0.47	0.24
2006:Q1		-0.27	-0.02	-0.04
2006:Q2		-0.34	-0.11	-0.56
2006:Q3		-0.35	0.05	-0.09
2006:Q4		-0.54	0.12	0.17
2007:Q1		-0.47	-0.19	-0.17
2007:Q2		-0.50	-0.08	-0.21
2007:Q3		-0.34	-0.03	-0.04
2007:Q4		-0.19	0.29	0.60
2008:Q1		-0.01	0.43	0.83
2008:Q2		0.33	1.04	1.12
2008:Q3		0.78	1.31	1.56
2008:Q4		1.47	1.95	2.00
2009:Q1		2.62	2.47	3.02

2009:Q2	3.39	2.46	3.10
2009:Q3	3.48	2.61	3.31
2009:Q4	3.54	2.76	3.12
2010:Q1	3.31	2.60	3.17
2010:Q2	3.23	2.44	3.10
2010:Q3	3.09	2.54	2.80
2010:Q4	3.18	2.65	2.71
2011:Q1	2.62	2.49	2.25
2011:Q2	2.74	2.34	2.25
2011:Q3	2.76	2.59	2.16
2011:Q4	2.43	2.39	1.81
2012:Q1	1.98	2.12	1.76

* Job availability: proportion of households believing jobs are plentiful, minus proportion believing jobs are hard to get. Job availability and jobs hard-to-fill are inverted and scaled for best fit over the period 1990:Q1 to 2011:Q4. [Return to table](#)

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

Source: For job availability, Conference Board; for jobs hard-to-fill, NFIB.

Bottom-right panel Dispersion of House Price Changes across 383 Metropolitan Areas

Percent of MSAs

Period	Percent with falling prices	Percent with rising prices
January 2003	6.53	68.41
February 2003	1.83	71.28
March 2003	2.61	66.84
April 2003	5.22	61.10
May 2003	4.96	58.75
June 2003	6.27	54.83
July 2003	3.66	50.65
August 2003	3.92	61.10
September 2003	2.61	67.36
October 2003	4.18	70.50
November 2003	3.39	72.32
December 2003	1.83	73.63
January 2004	3.39	79.63
February 2004	2.61	74.41
March 2004	1.04	88.25
April 2004	3.92	81.72
May 2004	2.61	69.19
June 2004	5.22	74.41
July 2004	3.39	75.46
August 2004	2.09	71.28
September 2004	2.09	65.27
October 2004	8.62	60.57
November 2004	6.53	61.88
December 2004	4.44	74.41
January 2005	2.35	86.68
February 2005	0.26	90.86
March 2005	1.04	86.16
April 2005	2.09	78.85
May 2005	2.61	77.55
June 2005	7.31	66.06
July 2005	7.05	70.23
August 2005	2.61	69.45
September 2005	7.31	68.15
October 2005	7.31	57.96
November 2005	6.27	63.19
December 2005	5.22	71.28
January 2006	4.44	76.50
February 2006	2.87	74.93
March 2006	9.40	68.67
April 2006	10.97	50.91
May 2006	23.50	34.73
June 2006	27.68	32.11
July 2006	29.77	27.15
August 2006	38.12	17.23
September 2006	33.16	27.68
October 2006	30.55	28.72

November 2006	24.80	32.90
December 2006	26.37	26.89
January 2007	32.38	27.94
February 2007	41.51	16.71
March 2007	37.86	20.63
April 2007	41.78	20.37
May 2007	50.13	15.40
June 2007	56.66	13.84
July 2007	55.09	6.79
August 2007	57.18	7.05
September 2007	61.10	8.09
October 2007	52.22	7.31
November 2007	62.40	5.48
December 2007	70.76	3.13
January 2008	77.81	3.92
February 2008	75.98	4.70
March 2008	76.76	5.48
April 2008	74.93	4.96
May 2008	77.02	5.48
June 2008	83.03	4.18
July 2008	85.12	3.39
August 2008	84.86	0.52
September 2008	85.64	0.52
October 2008	89.03	3.13
November 2008	90.34	1.57
December 2008	92.43	1.83
January 2009	93.73	1.83
February 2009	93.73	2.09
March 2009	88.25	0.78
April 2009	83.03	7.31
May 2009	65.54	13.32
June 2009	45.95	15.67
July 2009	33.68	24.80
August 2009	25.59	33.68
September 2009	30.29	21.93
October 2009	43.08	12.27
November 2009	45.95	16.45
December 2009	34.46	19.58
January 2010	34.73	25.07
February 2010	46.74	19.58
March 2010	50.13	16.97
April 2010	28.46	21.93
May 2010	19.06	21.67
June 2010	35.51	20.10
July 2010	64.75	5.74
August 2010	85.12	1.31
September 2010	85.90	1.31
October 2010	84.60	2.35
November 2010	78.59	4.70
December 2010	73.37	5.48
January 2011	72.06	8.36
February 2011	71.02	12.53
March 2011	66.06	12.27
April 2011	52.74	19.84
May 2011	47.52	14.62
June 2011	37.60	20.63
July 2011	45.69	18.80
August 2011	46.74	15.67
September 2011	48.56	11.75
October 2011	61.10	7.05
November 2011	66.58	8.88
December 2011	58.22	8.36
January 2012	38.64	25.33
February 2012	25.07	49.87

Note: An MSA's price level is defined as having risen (declined) if its three-month percent increase (decrease) exceeds one percent. Shaded bar indicates period of business recession as defined by the National Bureau of Economic Research (NBER): December 2007-June 2009.

Source: FirstAmerican Core Logic. All series seasonally adjusted by FRB staff.

Appendix 4: Materials used by Ms. Liang

Material for

FOMC Presentation: *Financial Stability*

Nellie Liang

April 24, 2012

Class II FOMC - Restricted (FR)

Exhibit 1 Risks and Vulnerabilities of MMFs and BHCs

Top panel
U.S. Equity Correlation with Selected European CDS Premiums*

Daily

Date	Correlation
4 January 2010	-0.126
5 January 2010	-0.156
6 January 2010	-0.156
7 January 2010	-0.134
8 January 2010	-0.103
11 January 2010	-0.090
12 January 2010	-0.157
13 January 2010	-0.086
14 January 2010	-0.054
15 January 2010	-0.091
18 January 2010	NA
19 January 2010	-0.032
20 January 2010	-0.152
21 January 2010	-0.270
22 January 2010	-0.241
25 January 2010	-0.264
26 January 2010	-0.228
27 January 2010	-0.127
28 January 2010	-0.203
29 January 2010	-0.134
1 February 2010	-0.126
2 February 2010	-0.071
3 February 2010	-0.115
4 February 2010	-0.457
5 February 2010	-0.459
8 February 2010	-0.478
9 February 2010	-0.520
10 February 2010	-0.481
11 February 2010	-0.478
12 February 2010	-0.476
15 February 2010	NA
16 February 2010	-0.452
17 February 2010	-0.460
18 February 2010	-0.456
19 February 2010	-0.456
22 February 2010	-0.455
23 February 2010	-0.470
24 February 2010	-0.394
25 February 2010	-0.396
26 February 2010	-0.381
1 March 2010	-0.433
2 March 2010	-0.398
3 March 2010	-0.389
4 March 2010	-0.386
5 March 2010	-0.397
8 March 2010	-0.379
9 March 2010	-0.375
10 March 2010	-0.393
11 March 2010	-0.370
12 March 2010	-0.367
15 March 2010	-0.367
16 March 2010	-0.329

17 March 2010	-0.332
18 March 2010	-0.306
19 March 2010	-0.343
22 March 2010	-0.319
23 March 2010	-0.359
24 March 2010	-0.359
25 March 2010	-0.363
26 March 2010	-0.362
29 March 2010	-0.277
30 March 2010	-0.273
31 March 2010	-0.280
1 April 2010	-0.287
2 April 2010	NA
5 April 2010	-0.273
6 April 2010	-0.238
7 April 2010	-0.289
8 April 2010	-0.245
9 April 2010	-0.328
12 April 2010	-0.328
13 April 2010	-0.327
14 April 2010	-0.136
15 April 2010	-0.132
16 April 2010	-0.186
19 April 2010	-0.167
20 April 2010	-0.223
21 April 2010	-0.221
22 April 2010	-0.153
23 April 2010	-0.143
26 April 2010	-0.182
27 April 2010	-0.360
28 April 2010	-0.389
29 April 2010	-0.448
30 April 2010	-0.284
3 May 2010	-0.271
4 May 2010	-0.514
5 May 2010	-0.524
6 May 2010	-0.682
7 May 2010	-0.588
10 May 2010	-0.770
11 May 2010	-0.757
12 May 2010	-0.769
13 May 2010	-0.772
14 May 2010	-0.790
17 May 2010	-0.782
18 May 2010	-0.728
19 May 2010	-0.727
20 May 2010	-0.723
21 May 2010	-0.706
24 May 2010	-0.704
25 May 2010	-0.659
26 May 2010	-0.658
27 May 2010	-0.608
28 May 2010	-0.562
31 May 2010	NA
1 June 2010	-0.597
2 June 2010	-0.520
3 June 2010	-0.517
4 June 2010	-0.537
7 June 2010	-0.542
8 June 2010	-0.545
9 June 2010	-0.484
10 June 2010	-0.530
11 June 2010	-0.533
14 June 2010	-0.529
15 June 2010	-0.463
16 June 2010	-0.463
17 June 2010	-0.458
18 June 2010	-0.450
21 June 2010	-0.445

22 June 2010	-0.484
23 June 2010	-0.484
24 June 2010	-0.495
25 June 2010	-0.489
28 June 2010	-0.488
29 June 2010	-0.502
30 June 2010	-0.435
1 July 2010	-0.429
2 July 2010	-0.408
5 July 2010	NA
6 July 2010	-0.413
7 July 2010	-0.385
8 July 2010	-0.404
9 July 2010	-0.416
12 July 2010	-0.411
13 July 2010	-0.422
14 July 2010	-0.418
15 July 2010	-0.418
16 July 2010	-0.333
19 July 2010	-0.327
20 July 2010	-0.323
21 July 2010	-0.271
22 July 2010	-0.266
23 July 2010	-0.288
26 July 2010	-0.333
27 July 2010	-0.285
28 July 2010	-0.299
29 July 2010	-0.297
30 July 2010	-0.296
2 August 2010	-0.338
3 August 2010	-0.312
4 August 2010	-0.293
5 August 2010	-0.291
6 August 2010	-0.298
9 August 2010	-0.280
10 August 2010	-0.302
11 August 2010	-0.419
12 August 2010	-0.428
13 August 2010	-0.423
16 August 2010	-0.406
17 August 2010	-0.450
18 August 2010	-0.451
19 August 2010	-0.462
20 August 2010	-0.455
23 August 2010	-0.438
24 August 2010	-0.485
25 August 2010	-0.442
26 August 2010	-0.442
27 August 2010	-0.390
30 August 2010	-0.370
31 August 2010	-0.370
1 September 2010	-0.534
2 September 2010	-0.554
3 September 2010	-0.584
6 September 2010	NA
7 September 2010	-0.605
8 September 2010	-0.605
9 September 2010	-0.609
10 September 2010	-0.609
13 September 2010	-0.632
14 September 2010	-0.617
15 September 2010	-0.610
16 September 2010	-0.606
17 September 2010	-0.603
20 September 2010	-0.547
21 September 2010	-0.542
22 September 2010	-0.549
23 September 2010	-0.512
24 September 2010	-0.535

27 September 2010	-0.542
28 September 2010	-0.491
29 September 2010	-0.468
30 September 2010	-0.465
1 October 2010	-0.473
4 October 2010	-0.487
5 October 2010	-0.430
6 October 2010	-0.429
7 October 2010	-0.426
8 October 2010	-0.448
11 October 2010	-0.427
12 October 2010	-0.420
13 October 2010	-0.453
14 October 2010	-0.443
15 October 2010	-0.445
18 October 2010	-0.439
19 October 2010	-0.424
20 October 2010	-0.388
21 October 2010	-0.384
22 October 2010	-0.370
25 October 2010	-0.374
26 October 2010	-0.374
27 October 2010	-0.379
28 October 2010	-0.374
29 October 2010	-0.368
1 November 2010	-0.342
2 November 2010	-0.302
3 November 2010	-0.272
4 November 2010	-0.121
5 November 2010	-0.048
8 November 2010	-0.071
9 November 2010	-0.081
10 November 2010	-0.038
11 November 2010	-0.047
12 November 2010	0.132
15 November 2010	0.137
16 November 2010	0.006
17 November 2010	0.007
18 November 2010	-0.051
19 November 2010	-0.048
22 November 2010	-0.065
23 November 2010	-0.210
24 November 2010	-0.181
25 November 2010	NA
26 November 2010	-0.255
29 November 2010	-0.232
30 November 2010	-0.279
1 December 2010	-0.522
2 December 2010	-0.561
3 December 2010	-0.563
6 December 2010	-0.555
7 December 2010	-0.552
8 December 2010	-0.554
9 December 2010	-0.479
10 December 2010	-0.432
13 December 2010	-0.425
14 December 2010	-0.425
15 December 2010	-0.398
16 December 2010	-0.361
17 December 2010	-0.355
20 December 2010	-0.331
21 December 2010	-0.313
22 December 2010	-0.302
23 December 2010	-0.306
24 December 2010	NA
27 December 2010	-0.306
28 December 2010	-0.306
29 December 2010	-0.304
30 December 2010	-0.304

31 December 2010	-0.303
3 January 2011	-0.277
4 January 2011	-0.263
5 January 2011	-0.239
6 January 2011	-0.251
7 January 2011	-0.261
10 January 2011	-0.264
11 January 2011	-0.297
12 January 2011	-0.399
13 January 2011	-0.338
14 January 2011	-0.383
17 January 2011	NA
18 January 2011	-0.387
19 January 2011	-0.168
20 January 2011	-0.159
21 January 2011	-0.180
24 January 2011	-0.236
25 January 2011	-0.224
26 January 2011	-0.196
27 January 2011	-0.178
28 January 2011	-0.033
31 January 2011	-0.116
1 February 2011	-0.351
2 February 2011	-0.304
3 February 2011	-0.275
4 February 2011	-0.287
7 February 2011	-0.220
8 February 2011	-0.209
9 February 2011	-0.212
10 February 2011	-0.211
11 February 2011	-0.163
14 February 2011	-0.145
15 February 2011	-0.132
16 February 2011	-0.158
17 February 2011	-0.150
18 February 2011	-0.152
21 February 2011	NA
22 February 2011	-0.184
23 February 2011	-0.198
24 February 2011	-0.201
25 February 2011	-0.246
28 February 2011	-0.283
1 March 2011	-0.180
2 March 2011	-0.186
3 March 2011	-0.253
4 March 2011	-0.235
7 March 2011	-0.242
8 March 2011	-0.254
9 March 2011	-0.253
10 March 2011	-0.311
11 March 2011	-0.316
14 March 2011	-0.144
15 March 2011	-0.139
16 March 2011	0.012
17 March 2011	-0.089
18 March 2011	-0.108
21 March 2011	-0.071
22 March 2011	-0.087
23 March 2011	-0.081
24 March 2011	-0.090
25 March 2011	-0.078
28 March 2011	-0.053
29 March 2011	-0.083
30 March 2011	-0.089
31 March 2011	-0.099
1 April 2011	-0.145
4 April 2011	-0.143
5 April 2011	-0.141
6 April 2011	-0.153

7 April 2011	-0.157
8 April 2011	-0.122
11 April 2011	-0.126
12 April 2011	-0.208
13 April 2011	-0.200
14 April 2011	-0.191
15 April 2011	-0.157
18 April 2011	-0.357
19 April 2011	-0.390
20 April 2011	-0.351
21 April 2011	-0.294
22 April 2011	NA
25 April 2011	-0.294
26 April 2011	-0.262
27 April 2011	-0.294
28 April 2011	-0.316
29 April 2011	-0.316
2 May 2011	-0.315
3 May 2011	-0.309
4 May 2011	-0.226
5 May 2011	-0.322
6 May 2011	-0.299
9 May 2011	-0.200
10 May 2011	-0.261
11 May 2011	-0.163
12 May 2011	-0.179
13 May 2011	-0.102
16 May 2011	-0.037
17 May 2011	-0.040
18 May 2011	0.001
19 May 2011	0.016
20 May 2011	-0.069
23 May 2011	-0.211
24 May 2011	-0.205
25 May 2011	-0.227
26 May 2011	-0.220
27 May 2011	-0.206
30 May 2011	NA
31 May 2011	-0.250
1 June 2011	-0.112
2 June 2011	-0.111
3 June 2011	0.043
6 June 2011	0.027
7 June 2011	0.027
8 June 2011	-0.025
9 June 2011	0.022
10 June 2011	-0.184
13 June 2011	-0.180
14 June 2011	-0.265
15 June 2011	-0.378
16 June 2011	-0.350
17 June 2011	-0.357
20 June 2011	-0.329
21 June 2011	-0.405
22 June 2011	-0.436
23 June 2011	-0.421
24 June 2011	-0.446
27 June 2011	-0.430
28 June 2011	-0.499
29 June 2011	-0.532
30 June 2011	-0.564
1 July 2011	-0.526
4 July 2011	NA
5 July 2011	-0.516
6 July 2011	-0.419
7 July 2011	-0.420
8 July 2011	-0.453
11 July 2011	-0.600
12 July 2011	-0.561

13 July 2011	-0.563
14 July 2011	-0.567
15 July 2011	-0.471
18 July 2011	-0.508
19 July 2011	-0.568
20 July 2011	-0.541
21 July 2011	-0.597
22 July 2011	-0.595
25 July 2011	-0.602
26 July 2011	-0.583
27 July 2011	-0.572
28 July 2011	-0.576
29 July 2011	-0.589
1 August 2011	-0.596
2 August 2011	-0.620
3 August 2011	-0.582
4 August 2011	-0.502
5 August 2011	-0.499
8 August 2011	-0.103
9 August 2011	-0.080
10 August 2011	-0.251
11 August 2011	-0.301
12 August 2011	-0.303
15 August 2011	-0.321
16 August 2011	-0.321
17 August 2011	-0.318
18 August 2011	-0.400
19 August 2011	-0.400
22 August 2011	-0.392
23 August 2011	-0.333
24 August 2011	-0.335
25 August 2011	-0.330
26 August 2011	-0.322
29 August 2011	-0.309
30 August 2011	-0.309
31 August 2011	-0.313
1 September 2011	-0.334
2 September 2011	-0.383
5 September 2011	NA
6 September 2011	-0.379
7 September 2011	-0.442
8 September 2011	-0.438
9 September 2011	-0.494
12 September 2011	-0.440
13 September 2011	-0.438
14 September 2011	-0.460
15 September 2011	-0.491
16 September 2011	-0.489
19 September 2011	-0.494
20 September 2011	-0.489
21 September 2011	-0.496
22 September 2011	-0.529
23 September 2011	-0.528
26 September 2011	-0.529
27 September 2011	-0.511
28 September 2011	-0.533
29 September 2011	-0.537
30 September 2011	-0.559
3 October 2011	-0.533
4 October 2011	-0.442
5 October 2011	-0.478
6 October 2011	-0.498
7 October 2011	-0.495
10 October 2011	-0.516
11 October 2011	-0.516
12 October 2011	-0.516
13 October 2011	-0.501
14 October 2011	-0.463
17 October 2011	-0.437

18 October 2011	-0.408
19 October 2011	-0.377
20 October 2011	-0.354
21 October 2011	-0.383
24 October 2011	-0.359
25 October 2011	-0.365
26 October 2011	-0.361
27 October 2011	-0.542
28 October 2011	-0.541
31 October 2011	-0.602
1 November 2011	-0.665
2 November 2011	-0.674
3 November 2011	-0.681
4 November 2011	-0.683
7 November 2011	-0.668
8 November 2011	-0.642
9 November 2011	-0.690
10 November 2011	-0.673
11 November 2011	-0.688
14 November 2011	-0.690
15 November 2011	-0.632
16 November 2011	-0.587
17 November 2011	-0.577
18 November 2011	-0.563
21 November 2011	-0.578
22 November 2011	-0.580
23 November 2011	-0.581
24 November 2011	NA
25 November 2011	-0.582
28 November 2011	-0.616
29 November 2011	-0.605
30 November 2011	-0.697
1 December 2011	-0.674
2 December 2011	-0.674
5 December 2011	-0.673
6 December 2011	-0.667
7 December 2011	-0.650
8 December 2011	-0.681
9 December 2011	-0.669
12 December 2011	-0.688
13 December 2011	-0.681
14 December 2011	-0.682
15 December 2011	-0.679
16 December 2011	-0.680
19 December 2011	-0.654
20 December 2011	-0.684
21 December 2011	-0.685
22 December 2011	-0.684
23 December 2011	-0.684
26 December 2011	NA
27 December 2011	-0.684
28 December 2011	-0.660
29 December 2011	-0.633
30 December 2011	-0.631
2 January 2012	NA
3 January 2012	-0.560
4 January 2012	-0.531
5 January 2012	-0.507
6 January 2012	-0.509
9 January 2012	-0.509
10 January 2012	-0.530
11 January 2012	-0.528
12 January 2012	-0.520
13 January 2012	-0.528
16 January 2012	NA
17 January 2012	-0.531
18 January 2012	-0.527
19 January 2012	-0.523
20 January 2012	-0.519

23 January 2012	-0.488
24 January 2012	-0.489
25 January 2012	-0.463
26 January 2012	-0.422
27 January 2012	-0.400
30 January 2012	-0.391
31 January 2012	-0.391
1 February 2012	-0.438
2 February 2012	-0.437
3 February 2012	-0.460
6 February 2012	-0.460
7 February 2012	-0.463
8 February 2012	-0.458
9 February 2012	-0.459
10 February 2012	-0.498
13 February 2012	-0.466
14 February 2012	-0.459
15 February 2012	-0.485
16 February 2012	-0.495
17 February 2012	-0.487
20 February 2012	NA
21 February 2012	-0.486
22 February 2012	-0.496
23 February 2012	-0.466
24 February 2012	-0.469
27 February 2012	-0.466
28 February 2012	-0.478
29 February 2012	-0.454
1 March 2012	-0.500
2 March 2012	-0.512
5 March 2012	-0.520
6 March 2012	-0.611
7 March 2012	-0.610
8 March 2012	-0.614
9 March 2012	-0.595
12 March 2012	-0.589
13 March 2012	-0.496
14 March 2012	-0.458
15 March 2012	-0.438
16 March 2012	-0.431
19 March 2012	-0.446
20 March 2012	-0.456
21 March 2012	-0.460
22 March 2012	-0.504
23 March 2012	-0.497
26 March 2012	-0.528
27 March 2012	-0.525
28 March 2012	-0.505
29 March 2012	-0.486
30 March 2012	-0.493
2 April 2012	-0.508
3 April 2012	-0.508
4 April 2012	-0.586
5 April 2012	-0.582
6 April 2012	NA
9 April 2012	-0.538
10 April 2012	-0.622
11 April 2012	-0.608
12 April 2012	-0.625
13 April 2012	-0.668
16 April 2012	-0.660
17 April 2012	-0.681
18 April 2012	-0.681
19 April 2012	-0.692
20 April 2012	-0.690
23 April 2012	-0.697

* Average percent change in CDS premiums on 5-year foreign currency sovereign debt of France, Italy, and Spain (FIS). [Return to text](#)

Note: 1-day stock price returns are used to construct exponentially-weighted moving-average correlation with 1-day percent change in CDS premiums, with 75% of weight distributed over the most recent 22 days. Vertical lines indicate "IMF approves 750 billion euro package" in 2010:Q2, "EU approves Ireland package" in 2010:Q4, "1st ECB LTRO announced" in 2011:Q4, and "2nd ECB

LTRO announced" in 2012:Q1.

Middle-left panel MMF European Holdings, by Maturity

Monthly
Billions of dollars

Period	Assets maturing within: Overnight	Assets maturing within: 1 week	Assets maturing within: > 1 week	Sum
December 2010	286.23	157.10	590.17	1033.50
January 2011	369.27	133.05	573.18	1075.50
February 2011	394.06	121.66	605.76	1121.48
March 2011	314.12	147.43	605.26	1066.81
April 2011	355.16	138.18	638.32	1131.66
May 2011	396.45	106.80	664.63	1167.88
June 2011	340.74	123.34	572.76	1036.84
July 2011	364.81	115.58	493.79	974.18
August 2011	441.85	145.93	414.55	1002.33
September 2011	356.02	145.54	373.85	875.41
October 2011	362.68	155.19	359.74	877.61
November 2011	374.50	146.76	326.03	847.29
December 2011	322.95	138.58	287.48	749.01
January 2012	368.93	115.58	334.44	818.95
February 2012	391.52	133.28	309.88	834.68
March 2012	309.55	127.49	323.23	760.27

Source: SEC form N-MFP filings.

Middle-right panel Stock Prices for Select U.S. Banks

Weekly
Index 100 = Jan. 3, 2011

Period	Bank of America	Wells Fargo	JP Morgan	Citigroup	Goldman Sachs	Morgan Stanley
7 January 2011	100.35	99.74	100.24	100.82	98.64	99.89
14 January 2011	107.44	103.68	103.16	104.70	101.13	102.65
21 January 2011	100.35	102.94	104.04	99.80	96.04	106.31
28 January 2011	95.82	100.81	102.31	96.34	93.49	103.05
4 February 2011	100.64	103.87	102.42	98.37	95.25	105.91
11 February 2011	104.04	107.07	106.96	99.59	96.31	107.02
18 February 2011	103.90	103.49	110.27	100.20	97.11	109.96
25 February 2011	100.00	102.74	107.22	95.93	95.42	105.98
4 March 2011	99.57	101.19	104.56	92.66	93.23	100.90
11 March 2011	101.35	102.68	105.06	93.28	93.05	100.54
18 March 2011	99.01	100.94	105.06	91.85	92.64	97.31
25 March 2011	94.05	101.29	105.35	91.03	91.48	96.24
1 April 2011	94.26	101.65	106.46	90.83	92.79	96.70
8 April 2011	95.04	100.26	108.17	93.07	93.22	96.67
15 April 2011	90.36	94.77	103.66	90.21	89.84	95.74
22 April 2011	86.82	90.51	103.18	92.87	88.90	93.94
29 April 2011	86.61	92.32	105.37	93.69	87.45	92.94
6 May 2011	86.82	89.93	104.02	92.26	86.92	89.72
13 May 2011	84.12	88.93	99.64	84.76	81.92	85.78
20 May 2011	81.64	89.16	99.60	83.71	78.18	84.70
27 May 2011	82.42	89.61	98.81	83.63	80.50	85.56
3 June 2011	79.59	85.51	96.01	81.34	78.57	82.19
10 June 2011	76.19	83.67	94.80	77.42	78.91	80.65
17 June 2011	75.34	87.03	94.23	78.20	79.68	81.15
24 June 2011	74.20	86.80	91.21	80.81	76.01	78.97
1 July 2011	78.24	91.29	96.63	87.54	79.34	84.45
8 July 2011	75.48	90.09	94.68	85.80	77.85	79.25
15 July 2011	70.59	86.54	92.89	78.34	75.57	74.96
22 July 2011	71.51	92.77	98.03	82.18	78.67	84.95
29 July 2011	68.53	88.96	93.99	78.30	78.36	79.25
5 August 2011	57.62	80.61	87.36	68.29	72.68	71.34
12 August 2011	50.74	77.15	83.44	60.95	67.62	60.16
19 August 2011	49.18	74.70	79.82	54.66	64.89	57.00
26 August 2011	54.78	78.64	84.15	60.93	64.88	59.15
2 September 2011	51.24	77.38	80.47	57.99	62.35	56.86
9 September 2011	49.33	75.22	74.55	54.60	59.55	54.42
16 September 2011	51.10	79.80	77.69	59.19	62.60	58.62

23 September 2011	44.58	75.77	68.75	51.00	55.43	48.87
30 September 2011	43.23	77.12	69.99	52.31	55.06	48.12
7 October 2011	41.67	78.48	71.96	50.29	53.98	50.73
14 October 2011	43.73	85.29	74.76	57.99	56.33	54.21
21 October 2011	45.64	84.12	78.35	61.87	59.45	60.62
28 October 2011	51.95	86.61	86.00	69.76	67.47	69.01
4 November 2011	45.85	81.64	79.63	61.97	61.17	59.73
11 November 2011	43.87	82.41	78.02	59.91	59.20	58.47
18 November 2011	40.82	79.35	71.77	53.68	53.52	50.77
25 November 2011	36.50	75.54	66.75	48.26	51.68	47.37
2 December 2011	39.90	83.77	75.78	57.54	56.85	55.46
9 December 2011	40.47	86.48	77.78	58.77	59.31	58.51
16 December 2011	36.78	83.48	74.76	53.17	52.67	53.53
23 December 2011	39.62	89.32	78.68	56.09	54.83	56.32
30 December 2011	39.33	88.58	77.95	53.74	52.87	54.07
6 January 2012	43.73	93.00	83.48	58.32	54.61	56.83
13 January 2012	46.78	95.16	84.81	62.79	57.85	59.41
20 January 2012	50.04	98.13	88.21	60.54	63.57	65.71
27 January 2012	51.59	95.13	87.86	63.06	65.34	66.50
3 February 2012	55.49	98.84	90.38	68.53	68.71	72.77
10 February 2012	57.12	97.64	88.81	67.29	66.72	70.44
17 February 2012	56.77	100.32	90.83	67.27	67.76	68.65
24 February 2012	55.78	97.39	90.38	66.10	67.74	66.25
2 March 2012	57.62	100.94	95.94	69.68	70.34	67.61
9 March 2012	57.05	102.16	96.86	69.88	68.78	65.82
16 March 2012	69.45	109.36	105.23	74.97	72.08	69.97
23 March 2012	69.81	108.20	106.63	75.87	73.99	72.84
30 March 2012	67.82	110.16	108.56	74.68	72.93	70.37
6 April 2012	65.41	108.84	105.37	71.09	69.19	65.89
13 April 2012	61.52	105.97	102.69	68.27	67.49	61.91
20 April 2012	59.25	106.49	101.52	69.25	65.93	62.63

Source: Bloomberg.

Bottom-left panel 5-Year CDS Premiums for Select U.S. Banks

Weekly
Basis points

Period	Bank of America	Wells Fargo	JP Morgan	Citigroup	Goldman Sachs	Morgan Stanley
7 January 2011	175	114	85	156	131	168
14 January 2011	165	108	80	145	120	157
21 January 2011	157	101	79	140	121	156
28 January 2011	161	98	78	140	117	158
4 February 2011	141	86	68	125	108	141
11 February 2011	135	87	65	127	107	137
18 February 2011	133	85	66	122	105	134
25 February 2011	139	88	73	133	110	140
4 March 2011	137	84	70	126	110	138
11 March 2011	142	83	72	133	116	144
18 March 2011	137	79	70	130	113	140
25 March 2011	133	78	70	122	112	135
1 April 2011	131	78	71	123	111	139
8 April 2011	129	76	68	119	110	135
15 April 2011	132	79	75	122	115	140
22 April 2011	131	80	76	121	114	140
29 April 2011	129	79	75	120	112	141
6 May 2011	131	80	75	121	117	141
13 May 2011	133	82	76	123	130	144
20 May 2011	138	81	77	123	140	145
27 May 2011	141	83	77	125	146	148
3 June 2011	152	89	80	133	154	156
10 June 2011	169	103	85	150	154	164
17 June 2011	168	102	83	148	148	169
24 June 2011	179	110	88	157	157	184
1 July 2011	148	88	75	129	130	157
8 July 2011	156	92	82	135	135	162
15 July 2011	174	100	92	150	150	177
22 July 2011	164	93	85	138	139	166
29 July 2011	175	98	97	149	149	177

5 August 2011	204	111	111	161	166	197
12 August 2011	309	118	118	191	200	261
19 August 2011	338	126	125	215	215	291
26 August 2011	330	129	129	229	235	307
2 September 2011	326	124	125	223	222	302
9 September 2011	354	132	134	245	251	332
16 September 2011	320	117	120	220	223	300
23 September 2011	396	151	153	278	297	436
30 September 2011	419	158	159	314	325	489
7 October 2011	390	156	155	292	363	435
14 October 2011	365	141	141	245	336	387
21 October 2011	361	146	142	242	319	367
28 October 2011	310	129	125	203	259	313
4 November 2011	354	149	144	237	310	393
11 November 2011	379	153	150	256	344	438
18 November 2011	412	162	162	282	382	482
25 November 2011	487	181	178	320	422	532
2 December 2011	417	147	146	248	314	414
9 December 2011	404	144	145	253	312	411
16 December 2011	405	146	144	274	317	418
23 December 2011	400	144	143	272	317	414
30 December 2011	402	143	144	278	324	415
6 January 2012	370	133	130	272	311	380
13 January 2012	340	127	132	240	294	366
20 January 2012	301	114	123	219	250	318
27 January 2012	274	108	121	218	233	291
3 February 2012	248	103	113	201	218	258
10 February 2012	265	108	128	220	239	273
17 February 2012	278	109	120	233	257	324
24 February 2012	268	106	115	236	267	336
2 March 2012	253	88	106	202	228	304
9 March 2012	259	91	102	215	244	323
16 March 2012	203	82	95	185	208	282
23 March 2012	211	87	97	195	235	306
30 March 2012	225	84	93	196	228	306
6 April 2012	255	92	106	230	265	352
13 April 2012	270	96	107	249	271	370
20 April 2012	260	90	106	238	271	364

Source: Markit.

Bottom-right panel Moody's Ratings Review, Feb. 2012

- Five of the largest U.S. BHCs on review for downgrades
 - Related to structural vulnerabilities of global capital markets business
- Possible P-2 and Baa ratings for:
 - Morgan Stanley
 - Bank subsidiaries of:
 - Bank of America
 - Citigroup

Exhibit 2 Balance Sheet Structure of BHCs and Dealer Firms

Percent of total

	BHCs	Dealer firms
Assets		
Other Assets		
Net loans & leases	34.2	5.0
Securities	25.3	12.2
Liquid Assets		
Trading assets and reverse repos	27.9	72.8
Cash and treasury securities	12.6	10.0
Liabilities		
Capital & long-term funding		
Capital	12.1	10.4
Debt maturing > 1yr	9.6	18.9
Deposits: Insured	33.7	4.2

Deposits: NITD & Domestic Uninsured	15.1	2.5
Wholesale funding		
Debt maturing < 1yr	5.7	6.8
Short sales & derivatives	6.2	15.4
Payables & other	7.4	23.4
Repo	10.1	18.4

Source: FRY-9C reports as of 2011:Q4.

* BHCs include J.P. Morgan, Bank of America, and Citigroup. [Return to table](#)

** Dealer firms include Goldman Sachs and Morgan Stanley. [Return to table](#)

Exhibit 3 Asset Valuations and Leverage

Top-left panel Gross Issuance by Nonfinancial U.S. Corporations

Monthly rate

Billions of dollars

Period	Institutional Leveraged Loans	High Yield Bonds	Sum
2008	5.79	2.6	8.39
2009	4.69	10.3	14.99
2010	17.21	17.5	34.71
2011:H1	33.52	18.5	52.02
2011:H2	10.93	14.2	25.13
2012:Q1	20.78	20.0	40.78

Source: Reuters Loan Pricing Corporation, Depository Trust & Clearing Corporation, and Thomson Financial.

Top-right panel High Yield Bond Near- and Far-Term Spreads

Weekly

Percent

Period	Near-Term	Far-Term
6 January 2006	3.95	3.44
13 January 2006	4.04	3.51
20 January 2006	4.05	3.49
27 January 2006	3.85	3.30
3 February 2006	3.96	3.30
10 February 2006	3.89	3.34
17 February 2006	3.86	3.34
24 February 2006	3.73	3.33
3 March 2006	3.87	3.19
10 March 2006	3.91	3.07
17 March 2006	4.09	3.04
24 March 2006	3.90	3.02
31 March 2006	3.79	2.86
7 April 2006	3.73	2.77
14 April 2006	3.64	2.74
21 April 2006	3.68	2.75
28 April 2006	3.81	2.63
5 May 2006	3.80	2.57
12 May 2006	3.67	2.53
19 May 2006	3.96	2.75
26 May 2006	4.01	2.76
2 June 2006	4.06	2.83
9 June 2006	4.12	3.01
16 June 2006	4.00	3.04
23 June 2006	4.09	3.06
30 June 2006	4.29	3.01
7 July 2006	4.23	3.13
14 July 2006	4.38	3.24
21 July 2006	4.37	3.25
28 July 2006	4.31	3.26
4 August 2006	4.33	3.31
11 August 2006	4.21	3.24
18 August 2006	4.28	3.30
25 August 2006	4.32	3.34

1 September 2006	4.29	3.50
8 September 2006	4.21	3.36
15 September 2006	4.22	3.27
22 September 2006	4.51	3.43
29 September 2006	4.33	3.41
6 October 2006	4.17	3.36
13 October 2006	4.05	3.20
20 October 2006	4.06	3.22
27 October 2006	4.15	3.27
3 November 2006	3.94	3.31
10 November 2006	4.00	3.36
17 November 2006	3.91	3.31
24 November 2006	4.06	3.34
1 December 2006	4.07	3.62
8 December 2006	3.87	3.45
15 December 2006	3.86	3.35
22 December 2006	3.80	3.30
29 December 2006	3.61	3.28
5 January 2007	3.67	3.46
12 January 2007	3.54	3.30
19 January 2007	3.44	3.27
26 January 2007	3.29	3.14
2 February 2007	3.31	3.24
9 February 2007	3.28	3.17
16 February 2007	3.34	3.13
23 February 2007	3.35	3.07
2 March 2007	3.73	3.38
9 March 2007	3.57	3.24
16 March 2007	3.75	3.27
23 March 2007	3.66	3.14
30 March 2007	3.69	3.11
6 April 2007	3.74	3.02
13 April 2007	3.58	2.93
20 April 2007	3.62	2.93
27 April 2007	3.58	2.87
4 May 2007	3.60	2.97
11 May 2007	3.52	2.89
18 May 2007	3.34	2.81
25 May 2007	3.28	2.72
1 June 2007	3.11	2.69
8 June 2007	3.12	2.73
15 June 2007	3.17	2.71
22 June 2007	3.40	2.77
29 June 2007	3.68	2.95
6 July 2007	3.65	2.84
13 July 2007	3.83	2.97
20 July 2007	4.24	3.19
27 July 2007	5.27	3.59
3 August 2007	5.14	3.57
10 August 2007	4.92	3.34
17 August 2007	5.37	3.12
24 August 2007	5.05	3.28
31 August 2007	5.42	3.17
7 September 2007	5.64	3.21
14 September 2007	5.47	3.23
21 September 2007	5.02	2.89
28 September 2007	5.01	2.94
5 October 2007	4.89	2.89
12 October 2007	4.73	2.76
19 October 2007	5.18	3.07
26 October 2007	5.21	3.11
2 November 2007	5.36	3.24
9 November 2007	5.74	3.25
16 November 2007	5.88	3.42
23 November 2007	6.37	3.59
30 November 2007	6.41	3.65
7 December 2007	6.35	3.33
14 December 2007	6.17	3.16
21 December 2007	6.35	3.35

28 December 2007	6.42	3.39
4 January 2008	6.82	3.79
11 January 2008	7.23	3.78
18 January 2008	7.71	4.01
25 January 2008	7.78	3.87
1 February 2008	7.81	3.66
8 February 2008	8.09	3.70
15 February 2008	8.10	3.63
22 February 2008	8.07	3.62
29 February 2008	8.59	3.72
7 March 2008	8.68	3.64
14 March 2008	8.50	4.02
21 March 2008	8.49	4.20
28 March 2008	8.25	3.81
4 April 2008	7.89	4.10
11 April 2008	7.92	4.05
18 April 2008	7.32	3.85
25 April 2008	6.98	3.93
2 May 2008	6.90	3.89
9 May 2008	7.11	3.96
16 May 2008	7.00	4.02
23 May 2008	7.14	4.24
30 May 2008	6.94	4.08
6 June 2008	7.24	3.86
13 June 2008	6.71	4.04
20 June 2008	6.92	4.12
27 June 2008	7.05	4.39
4 July 2008	7.09	4.27
11 July 2008	7.48	4.48
18 July 2008	7.62	4.18
25 July 2008	7.49	4.22
1 August 2008	6.87	4.40
8 August 2008	7.03	4.50
15 August 2008	7.02	4.44
22 August 2008	7.23	4.62
29 August 2008	7.36	4.57
5 September 2008	6.97	4.87
12 September 2008	7.15	4.84
19 September 2008	6.75	5.22
26 September 2008	8.55	5.22
3 October 2008	9.99	6.67
10 October 2008	10.18	6.58
17 October 2008	12.62	7.65
24 October 2008	14.62	8.29
31 October 2008	14.24	7.02
7 November 2008	13.65	8.35
14 November 2008	14.53	9.18
21 November 2008	16.17	11.11
28 November 2008	16.57	11.53
5 December 2008	16.68	12.31
12 December 2008	19.86	12.89
19 December 2008	16.50	12.58
26 December 2008	15.30	10.97
2 January 2009	14.59	11.51
9 January 2009	12.64	8.96
16 January 2009	12.66	9.26
23 January 2009	13.32	9.51
30 January 2009	11.86	8.11
6 February 2009	12.45	8.37
13 February 2009	12.56	8.57
20 February 2009	12.53	8.16
27 February 2009	13.87	10.85
6 March 2009	13.98	11.39
13 March 2009	13.01	10.06
20 March 2009	14.13	10.75
27 March 2009	13.23	10.01
3 April 2009	11.07	9.63
10 April 2009	11.44	8.43
17 April 2009	12.39	8.97

24 April 2009	11.53	7.67
1 May 2009	9.99	6.27
8 May 2009	10.58	6.87
15 May 2009	10.20	8.35
22 May 2009	10.45	7.42
29 May 2009	10.26	7.17
5 June 2009	9.24	6.15
12 June 2009	8.91	6.20
19 June 2009	9.20	5.86
26 June 2009	9.57	6.27
3 July 2009	9.35	6.08
10 July 2009	9.76	6.06
17 July 2009	9.34	5.69
24 July 2009	8.66	5.43
31 July 2009	8.33	5.19
7 August 2009	7.65	4.63
14 August 2009	8.20	5.00
21 August 2009	8.23	5.15
28 August 2009	8.34	5.09
4 September 2009	8.47	4.83
11 September 2009	8.38	4.85
18 September 2009	7.89	4.40
25 September 2009	7.74	4.29
2 October 2009	7.93	4.36
9 October 2009	7.44	4.10
16 October 2009	7.25	4.01
23 October 2009	7.00	3.94
30 October 2009	7.58	3.88
6 November 2009	7.61	3.46
13 November 2009	7.57	3.57
20 November 2009	7.61	3.73
27 November 2009	7.84	3.88
4 December 2009	7.25	3.77
11 December 2009	7.42	3.33
18 December 2009	7.02	3.46
25 December 2009	6.84	2.99
1 January 2010	6.87	2.75
8 January 2010	6.83	2.35
15 January 2010	6.90	2.46
22 January 2010	7.15	2.66
29 January 2010	7.24	2.64
5 February 2010	7.50	2.61
12 February 2010	7.78	2.64
19 February 2010	7.42	2.43
26 February 2010	7.63	2.54
5 March 2010	7.18	2.47
12 March 2010	7.00	2.46
19 March 2010	6.96	2.58
26 March 2010	6.79	2.35
2 April 2010	7.09	2.25
9 April 2010	6.98	2.23
16 April 2010	6.98	2.18
23 April 2010	6.81	2.21
30 April 2010	7.09	2.24
7 May 2010	7.74	2.76
14 May 2010	7.84	2.63
21 May 2010	8.34	3.18
28 May 2010	8.24	3.04
4 June 2010	8.55	3.09
11 June 2010	8.65	3.19
18 June 2010	8.36	3.02
25 June 2010	8.47	3.09
2 July 2010	8.81	3.24
9 July 2010	8.55	3.00
16 July 2010	8.53	2.88
23 July 2010	8.23	2.79
30 July 2010	8.26	2.66
6 August 2010	8.26	2.64
13 August 2010	8.50	2.94

20 August 2010	8.49	3.11
27 August 2010	8.47	3.15
3 September 2010	8.36	2.83
10 September 2010	8.05	2.84
17 September 2010	8.09	2.58
24 September 2010	8.17	2.62
1 October 2010	8.13	2.55
8 October 2010	8.09	2.40
15 October 2010	8.00	1.94
22 October 2010	8.05	1.85
29 October 2010	7.96	1.68
5 November 2010	7.84	1.60
12 November 2010	7.63	1.61
19 November 2010	7.63	1.84
26 November 2010	7.76	1.93
3 December 2010	7.66	1.80
10 December 2010	7.19	1.72
17 December 2010	7.23	1.75
24 December 2010	6.96	1.74
31 December 2010	7.09	1.90
7 January 2011	6.96	1.57
14 January 2011	6.94	1.47
21 January 2011	6.82	1.41
28 January 2011	6.86	1.45
4 February 2011	6.29	1.29
11 February 2011	6.10	1.41
18 February 2011	6.12	1.40
25 February 2011	6.38	1.58
4 March 2011	6.32	1.43
11 March 2011	6.59	1.41
18 March 2011	6.81	1.57
25 March 2011	6.43	1.54
1 April 2011	6.32	1.58
8 April 2011	6.13	1.28
15 April 2011	6.40	1.37
22 April 2011	6.39	1.37
29 April 2011	6.59	1.29
6 May 2011	6.67	1.35
13 May 2011	6.63	1.48
20 May 2011	6.68	1.47
27 May 2011	6.98	1.44
3 June 2011	7.24	1.34
10 June 2011	7.45	1.41
17 June 2011	7.71	1.52
24 June 2011	7.96	1.44
1 July 2011	7.31	1.19
8 July 2011	7.46	1.13
15 July 2011	7.62	1.16
22 July 2011	7.45	1.14
29 July 2011	7.74	1.24
5 August 2011	8.32	1.78
12 August 2011	9.28	2.51
19 August 2011	9.22	2.78
26 August 2011	9.41	2.72
2 September 2011	9.04	2.86
9 September 2011	9.03	3.11
16 September 2011	8.98	3.07
23 September 2011	9.13	3.74
30 September 2011	9.56	3.77
7 October 2011	9.38	3.81
14 October 2011	8.81	3.32
21 October 2011	8.58	3.01
28 October 2011	8.21	2.59
4 November 2011	8.93	2.87
11 November 2011	8.97	3.08
18 November 2011	9.08	3.44
25 November 2011	9.21	3.75
2 December 2011	9.02	3.26
9 December 2011	8.96	3.05

16 December 2011	9.11	3.40
23 December 2011	8.74	3.21
30 December 2011	8.82	3.27
6 January 2012	8.48	2.93
13 January 2012	8.44	3.18
20 January 2012	8.33	2.83
27 January 2012	8.35	2.68
3 February 2012	8.31	2.54
10 February 2012	8.25	2.53
17 February 2012	8.10	2.52
24 February 2012	7.96	2.45
2 March 2012	7.95	2.36
9 March 2012	8.02	2.41
16 March 2012	7.78	2.19
23 March 2012	7.86	2.47
30 March 2012	7.89	2.46
6 April 2012	7.96	2.38
13 April 2012	8.19	2.69
20 April 2012	8.10	2.75

* Near-term spread between years two and three. [Return to table](#)

** Far-term spread between years nine and ten. [Return to table](#)

Source: Staff estimates.

Middle-left panel Triparty Repo Market Activity

Monthly

Billions of dollars per day

Period	Agency and Treasury	Other Fixed Income	Equities	Other	Total
July 2008	1870.19	448.95	105.81	43.43	2468.39
August 2008	1908.17	432.65	117.32	41.33	2499.48
September 2008	1902.27	399.99	116.30	38.96	2457.53
October 2008	1908.78	315.27	114.08	37.10	2375.22
November 2008	1950.84	256.37	99.10	30.97	2337.27
December 2008	1847.28	224.12	84.82	29.61	2185.84
January 2009	1831.60	204.53	76.09	29.67	2141.89
February 2009	1851.30	198.49	78.08	29.03	2156.90
March 2009	1772.92	189.90	64.93	21.85	2049.60
April 2009	1644.29	182.23	64.07	24.29	1914.87
May 2009	1607.66	183.19	57.81	27.69	1876.35
June 2009	1483.52	175.35	54.36	28.56	1741.79
July 2009	1440.19	166.18	56.33	35.54	1698.24
August 2009	1443.82	173.09	62.22	30.41	1709.53
September 2009	1410.63	182.40	66.75	30.04	1689.82
October 2009	1349.50	190.42	65.71	32.30	1637.93
November 2009	1332.63	202.30	65.51	36.44	1636.87
December 2009	1292.73	205.04	66.12	33.81	1597.70
January 2010	1303.51	211.38	72.16	34.72	1621.77
February 2010	1385.76	219.45	73.18	33.94	1712.33
March 2010	1369.90	217.51	75.27	31.91	1694.60
April 2010	1336.57	218.55	75.81	31.84	1662.78
May 2010	1403.83	213.47	74.72	30.39	1722.40
June 2010	1391.26	199.72	65.96	27.63	1684.56
July 2010	1424.36	201.24	64.08	28.85	1718.53
August 2010	1491.74	204.56	61.64	34.11	1792.05
September 2010	1503.64	206.55	61.14	32.13	1803.47
October 2010	1484.32	209.63	63.56	32.76	1790.27
November 2010	1573.01	233.54	72.60	11.34	1890.49
December 2010	1499.48	242.47	76.46	4.37	1822.79
January 2011	1311.77	240.31	77.80	3.73	1633.61
February 2011	1325.81	243.36	83.02	4.23	1656.41
March 2011	1304.07	240.21	85.38	5.29	1634.96
April 2011	1251.91	240.47	88.83	4.74	1585.94
May 2011	1322.15	237.46	95.04	5.19	1659.83
June 2011	1311.84	234.73	88.90	5.82	1641.28
July 2011	1286.53	222.95	90.15	5.86	1605.50
August 2011	1372.30	227.13	87.13	5.88	1692.44
September 2011	1400.61	217.23	70.60	6.12	1694.57

October 2011	1406.12	210.99	70.29	5.88	1693.29
November 2011	1437.54	206.39	69.48	5.82	1719.24
December 2011	1396.69	195.72	67.37	5.94	1665.71
January 2012	1430.03	187.69	70.10	5.62	1693.44
February 2012	1470.62	184.25	76.54	5.30	1736.70
March 2012	1467.67	185.57	80.14	5.32	1738.70
April 2012	1436.87	186.96	84.33	5.49	1713.64

Note: Data are through April 13, 2012.

Source: Federal Reserve Bank of New York.

Middle-right panel Securities Lending Activity

Monthly

Billions of dollars per day

Period	Bonds	Equities	Total
July 2008	1972.53	1392.89	3365.42
August 2008	1906.53	1343.70	3250.23
September 2008	1737.33	1246.30	2983.63
October 2008	1378.19	808.66	2186.85
November 2008	1235.98	716.07	1952.05
December 2008	1142.48	704.34	1846.82
January 2009	1085.13	661.73	1746.86
February 2009	1080.76	651.05	1731.81
March 2009	1023.58	662.94	1686.52
April 2009	1016.88	748.71	1765.59
May 2009	1047.95	852.14	1900.09
June 2009	1018.27	728.29	1746.56
July 2009	1036.41	685.59	1722.00
August 2009	1071.34	726.98	1798.32
September 2009	1086.24	749.67	1835.91
October 2009	1079.64	757.19	1836.83
November 2009	1099.39	774.56	1873.95
December 2009	1052.26	733.99	1786.25
January 2010	1065.65	702.92	1768.57
February 2010	1098.77	721.30	1820.07
March 2010	1097.96	791.06	1889.02
April 2010	1131.27	877.04	2008.31
May 2010	1141.92	944.37	2086.29
June 2010	1097.54	790.14	1887.68
July 2010	1111.44	696.95	1808.39
August 2010	1146.61	705.75	1852.36
September 2010	1151.05	745.47	1896.52
October 2010	1171.80	770.85	1942.65
November 2010	1155.84	806.23	1962.07
December 2010	1084.12	753.97	1838.09
January 2011	1116.34	779.32	1895.66
February 2011	1156.91	803.11	1960.02
March 2011	1132.52	827.79	1960.31
April 2011	1174.64	921.74	2096.38
May 2011	1205.45	1046.95	2252.40
June 2011	1190.77	852.90	2043.67
July 2011	1237.86	787.24	2025.10
August 2011	1249.79	745.23	1995.02
September 2011	1173.73	797.72	1971.45
October 2011	1114.44	780.46	1894.90
November 2011	1082.86	767.82	1850.68
December 2011	1050.44	744.76	1795.20
January 2012	1056.81	728.76	1785.57
February 2012	1071.05	752.59	1823.64
March 2012	1055.71	792.63	1848.34
April 2012	1027.43	778.72	1806.15

Note: Data through April 16, 2012. Bonds include corporate bonds, ABS, convertible bonds, US government bonds, the bonds of most Western European countries in addition to Japan, Australia, Canada, and emerging market bonds.

Source: Data Explorers Inc.

Bottom panel Low Interest Rates Could Create New Vulnerabilities

- Could be one impetus for new financial products
 - For example, Exchange Traded Notes offer leveraged returns
 - Limited aggregate size, but will monitor growth and complexity
- Financial institutions look to enhance returns
 - Pension funds or insurance companies with target returns may take on excessive risk
 - Depository institutions could mismanage the risks of unexpected shifts in the yield curve

Appendix 5: Materials used by Ms. Weinbach

Material for Briefing on the
Summary of Economic Projections

Gretchen Weinbach
 April 24, 2012

Class I FOMC - Restricted Controlled (FR)

Exhibit 1. Central tendencies and ranges of economic projections, 2012-14 and over the longer run

Change in real GDP

Percent

	2007	2008	2009	2010	2011	2012	2013	2014	Longer run
Actual	2.2	-3.3	-0.5	3.1	1.6	-	-	-	-
Upper End of Range	-	-	-	-	-	3.0	3.8	4.3	3.0
Upper End of Central Tendency	-	-	-	-	-	2.9	3.1	3.6	2.6
Lower End of Central Tendency	-	-	-	-	-	2.4	2.7	3.1	2.3
Lower End of Range	-	-	-	-	-	2.1	2.4	2.9	2.2

Unemployment rate

Percent

	2007	2008	2009	2010	2011	2012	2013	2014	Longer run
Actual	4.8	6.9	9.9	9.6	8.7	-	-	-	-
Upper End of Range	-	-	-	-	-	8.2	8.1	7.7	6.0
Upper End of Central Tendency	-	-	-	-	-	8.0	7.7	7.4	6.0
Lower End of Central Tendency	-	-	-	-	-	7.8	7.3	6.7	5.2
Lower End of Range	-	-	-	-	-	7.8	7.0	6.3	4.9

PCE inflation

Percent

	2007	2008	2009	2010	2011	2012	2013	2014	Longer run
Actual	3.5	1.7	1.5	1.3	2.7	-	-	-	-
Upper End of Range	-	-	-	-	-	2.3	2.1	2.2	2.0
Upper End of Central Tendency	-	-	-	-	-	2.0	2.0	2.0	2.0
Lower End of Central Tendency	-	-	-	-	-	1.9	1.6	1.7	2.0
Lower End of Range	-	-	-	-	-	1.8	1.5	1.5	2.0

Core PCE inflation

Percent

	2007	2008	2009	2010	2011	2012	2013	2014
Actual	2.4	2.0	1.7	1.0	1.8	-	-	-
Upper End of Range	-	-	-	-	-	2.0	2.1	2.2
Upper End of Central Tendency	-	-	-	-	-	2.0	2.0	2.0
Lower End of Central Tendency	-	-	-	-	-	1.8	1.7	1.8
Lower End of Range	-	-	-	-	-	1.7	1.6	1.7

Exhibit 2. Overview of FOMC participants' assessments of appropriate monetary policy, April 2012

Appropriate Timing of Policy Firming

Number of Participants

	2012	2013	2014	2015	2016
April projections	3	3	7	4	0
January projections	3	3	5	4	2

Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year.

Appropriate Pace of Policy Firming

Number of Participants With Projected Targets

Target Federal Funds Rate at Year-End (April projections, percent)	2012	2013	2014	Longer run
0.00 - 0.37	14	11	4	
0.38 - 0.62	1		3	
0.63 - 0.87		1		
0.88 - 1.12	1	2	2	
1.13 - 1.37	1	1		
1.38 - 1.62			1	
1.63 - 1.87		2		
1.88 - 2.12			2	
2.13 - 2.37			1	
2.38 - 2.62			3	
2.63 - 2.87			1	
2.88 - 3.12				
3.13 - 3.37				
3.38 - 3.62				1
3.63 - 3.87				1
3.88 - 4.12				6
4.13 - 4.37				2
4.38 - 4.62				7

Note: In the middle panel, each circle indicates the value (rounded to the nearest 1/4 percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Appropriate Pace of Policy Firming

Number of Participants With Projected Targets

Target Federal Funds Rate at Year-End (January projections, percent)	2012	2013	2014	Longer run
0.00 - 0.37	14	11	6	
0.38 - 0.62	1	1	2	
0.63 - 0.87		2	1	
0.88 - 1.12	2	1	2	
1.13 - 1.37				
1.38 - 1.62			1	
1.63 - 1.87		1		
1.88 - 2.12		1	1	
2.13 - 2.37				
2.38 - 2.62			3	
2.63 - 2.87			1	
2.88 - 3.12				
3.13 - 3.37				
3.38 - 3.62				
3.63 - 3.87				1
3.88 - 4.12				7
4.13 - 4.37				3
4.38 - 4.62				6

Note: In the lower panel, each circle indicates the value (rounded to the nearest 1/4 percent) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Exhibit 3. Scatter Plot of Unemployment and PCE Inflation Rates in the Liftoff Year

Projections

Liftoff Year	Unemployment Rate	PCE Inflation
2012	7.8	2.0
2012	7.8	2.0
2012	8.0	2.0
2013	7.0	2.1
2013	7.3	1.9
2013	7.5	2.0
2014	6.4	2.0
2014	6.7	2.0
2014	6.8	1.6
2014	7.1	1.7

2014	7.2	2.2
2014	7.4	1.8
2014	7.4	2.0
2015	6.3	1.9
2015	6.4	1.9
2015	6.8	1.7
2015	7.0	1.7

Note: Larger markers are used when the projections of two participants are identical.

Exhibit 4. Economic projections for 2012-2014 and over the longer run (percent)

Change in real GDP

	2012	2013	2014	Longer run
Central Tendency	2.4 to 2.9	2.7 to 3.1	3.1 to 3.6	2.3 to 2.6
<i>January projections</i>	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6
Range	2.1 to 3.0	2.4 to 3.8	2.9 to 4.3	2.2 to 3.0
<i>January projections</i>	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
Memo: Tealbook	2.5	2.8	3.3	2.5
<i>January Tealbook</i>	2.1	2.4	3.6	2.5

Unemployment rate

	2012	2013	2014	Longer run
Central Tendency	7.8 to 8.0	7.3 to 7.7	6.7 to 7.4	5.2 to 6.0
<i>January projections</i>	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0
Range	7.8 to 8.2	7.0 to 8.1	6.3 to 7.7	4.9 to 6.0
<i>January projections</i>	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
Memo: Tealbook	8.0	7.7	7.4	5.2
<i>January Tealbook</i>	8.6	8.2	7.8	5.2

PCE inflation

	2012	2013	2014	Longer run
Central Tendency	1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2.0 to 2.0
<i>January projections</i>	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0 to 2.0
Range	1.8 to 2.3	1.5 to 2.1	1.5 to 2.2	2.0 to 2.0
<i>January projections</i>	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0 to 2.0
Memo: Tealbook	1.9	1.5	1.5	2.0
<i>January Tealbook</i>	1.4	1.3	1.5	2.0

Core PCE inflation

	2012	2013	2014
Central Tendency	1.8 to 2.0	1.7 to 2.0	1.8 to 2.0
<i>January projections</i>	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0
Range	1.7 to 2.0	1.6 to 2.1	1.7 to 2.2
<i>January projections</i>	1.3 to 2.0	1.4 to 2.0	1.4 to 2.0
Memo: Tealbook	1.8	1.7	1.7
<i>January Tealbook</i>	1.5	1.4	1.4

Note: The changes in real GDP and inflation are measured Q4/Q4

Exhibit 5. Uncertainty and risks in economic projections

Histograms, eight panels.

Uncertainty about GDP growth

Number of participants

	Lower	Broadly similar	Higher
April projections	0	4	13
January projections	0	1	16

Uncertainty about the unemployment rate

Number of participants

	Lower	Broadly similar	Higher

April projections	0	4	13
January projections	0	3	14

Uncertainty about PCE inflation

Number of participants

	Lower	Broadly similar	Higher
April projections	1	7	9
January projections	1	6	10

Uncertainty about core PCE inflation

Number of participants

	Lower	Broadly similar	Higher
April projections	2	7	8
January projections	1	7	9

Risks to GDP growth

Number of participants

	Weighted to downside	Broadly balanced	Weighted to upside
April projections	8	9	0
January projections	11	6	0

Risks to the unemployment rate

Number of participants

	Weighted to downside	Broadly balanced	Weighted to upside
April projections	0	8	9
January projections	1	5	11

Risks to PCE inflation

Number of participants

	Weighted to downside	Broadly balanced	Weighted to upside
April projections	0	14	3
January projections	3	11	3

Risks to core PCE inflation

Number of participants

	Weighted to downside	Broadly balanced	Weighted to upside
April projections	1	13	3
January projections	3	11	3

Note: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

Appendix 6: Materials used by Mr. English

Material for

FOMC Briefing on Monetary Policy Alternatives

Bill English

April 24-25, 2012

Class I FOMC - Restricted Controlled (FR)

March FOMC Statement

1. Information received since the Federal Open Market Committee met in January suggests that the economy has been expanding moderately. Labor market conditions have improved further; the unemployment rate has declined notably in recent months but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has been subdued in recent months, although prices of crude oil and gasoline have increased lately. Longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects moderate economic growth over coming quarters and consequently anticipates that the unemployment rate will decline gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets have eased, though they continue to pose significant

downside risks to the economic outlook. The recent increase in oil and gasoline prices will push up inflation temporarily, but the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

4. The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

[Note: In the April FOMC Statement Alternatives, emphasis (strike-through) indicates strike-through text in the original document, and strong emphasis (bold) indicates bold red underlined text in the original document.]

April FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the economy has been expanding moderately. Labor market conditions have improved ~~further in recent months~~; the unemployment rate has declined ~~notably in recent months~~ but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has ~~been subdued~~ **picked up somewhat in recent months, although mainly reflecting higher** prices of crude oil and gasoline ~~have increased lately~~. **However**, longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee ~~expects moderate~~ **anticipates that, absent further policy stimulus, economic growth over coming quarters would be unacceptably slow** and ~~consequently anticipates~~ that the unemployment rate ~~will~~ **would** decline **only very** gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they~~ continue to pose significant downside risks to the economic outlook. The ~~recent~~ increase in oil and gasoline prices ~~earlier this year will push up~~ **is reducing consumers' purchasing power while boosting** inflation temporarily, but the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

3.1 To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~. In particular, ~~the Committee~~ decided today to ~~continue~~ **expand** its program to extend the average maturity of its holdings of securities ~~as announced in September~~. **After completing the transactions that it announced last September, the Committee intends to purchase, between July 2012 and the end of March 2013, an additional \$400 billion of Treasury securities with remaining maturities of 6 years to 30 years, and to sell an equal amount of Treasury securities with remaining maturities of 4 years or less. These transactions should put downward pressure on longer-term interest rates and help to make broader financial conditions more accommodative.** The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

OR

3.2 To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~. In particular, ~~the Committee~~ decided today to ~~continue its~~ **purchase an additional \$500 billion of agency mortgage-backed securities by the end of April 2013. The Committee also will complete the** program to extend the average maturity of its holdings of securities ~~as that it announced in September~~. **These transactions should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.** The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

4. The Committee also decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions ~~—including low rates of resource utilization and a subdued outlook for inflation over the medium run—~~ are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

5. **In judging the appropriate stance of monetary policy, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-run inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of the Committee's goals.**

April FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the economy has been expanding moderately. Labor market conditions have improved ~~further in recent months~~; the unemployment rate has declined ~~notably in recent months~~ but remains elevated. Household spending and business fixed investment have continued to advance. **Despite some tentative signs of improvement**, the housing sector remains depressed. Inflation has ~~been subdued~~ **picked up somewhat in recent months, although mainly reflecting higher** prices of crude oil and gasoline ~~have increased lately~~. **However**, longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects ~~moderate~~ economic growth **to remain moderate** over coming quarters and **then to pick up gradually, supported by highly accommodative monetary policy**. Consequently, ~~the Committee~~ **anticipates** that the unemployment rate will decline gradually toward levels that ~~the Committee~~ **it** judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they~~ continue to pose significant downside risks to the economic outlook. The ~~recent~~ increase in oil and gasoline prices ~~earlier this year will push up~~ **is expected to affect** inflation **only** temporarily, ~~but~~ **and** the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

4. The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

April FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the ~~economy has been expanding moderately~~ **economic recovery has continued to strengthen**. Labor market conditions have improved further; the unemployment rate has declined ~~notably in recent months but remains elevated~~ **somewhat more, and private payrolls have expanded moderately on average in recent months**. Household spending and business fixed investment have continued to advance. The housing sector remains depressed **but has shown some signs of improvement**. **Sizable increases in the prices of crude oil and gasoline have pushed up inflation somewhat** ~~has been subdued in recent months, although prices of crude oil and gasoline have increased lately~~. Longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects ~~moderate~~ economic growth ~~over coming quarters to pick up over time~~ and consequently anticipates that the unemployment rate will ~~decline gradually~~ **move appreciably closer, over the next few years, to toward** levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they continue to pose significant downside risks to the economic outlook~~. The ~~recent~~ increase in oil and gasoline prices ~~earlier this year will push up~~ **is expected to affect inflation only temporarily, but**; the Committee anticipates that ~~subsequently, with appropriate monetary policy, inflation over the medium term will run at or below~~ **close to** the rate that it judges most consistent with its dual mandate.

3.1 To support a ~~stronger~~ **sustainable** economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.~~ **In judging when to first increase its target for the federal funds rate, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-run inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of the Committee's goals.**

OR

3.2 To support a ~~stronger~~ **sustainable** economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent ~~and~~. **In light of the improvement in the economic outlook, the Committee currently now** anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate ~~at least through late 2014~~ **until mid-2013**.

4. The Committee also decided to ~~continue its~~ **complete in June the** program to extend the average maturity of its holdings of securities ~~as that it~~ announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as ~~appropriate~~ **necessary** to promote ~~a stronger economic recovery in a context of~~ **maximum employment and** price stability.

March 2012 Directive

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

[Note: In the April 2012 Directive Alternatives, emphasis (strike-through) indicates strike-through text in the original document, and strong emphasis (bold) indicates bold red underlined text in the original document.]

April 2012 Directive--Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury

securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. **In addition, the Committee directs the Desk to purchase, between July 2012 and the end of March 2013, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 4 years or less with a total face value of \$400 billion.** The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities; ~~in order these actions are intended~~ to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

OR

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. **In addition, the Committee directs the Desk to execute purchases of agency mortgage-backed securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$3.1 trillion by the end of April 2013.** The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities ~~in order to maintain the total face value of domestic securities at approximately \$2.6 trillion.~~ The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

April 2012 Directive--Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

April 2012 Directive--Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.