

Accessible Version

Meeting of the Federal Open Market Committee October 23-24, 2012 Presentation Materials

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

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Appendix 1: Materials used by Mr. Engen

Material for Briefing on
Thresholds

Eric Engen
October 23, 2012

Class I FOMC - Restricted Controlled (FR)

Exhibit 1 Thresholds

Top panel

- Thresholds could increase clarity of Committee's intentions and improve market's understanding of policy reaction function.
 - Market responses to economic developments may be more likely to move longer-term interest rates consistent with Committee's view for path of short-term rates.
 - Enhanced clarity might reduce uncertainty about future policy.
- Thresholds could facilitate Committee's deliberations.
- Thresholds might provide additional policy stimulus if materially changed expectations for future path of funds rate.

Middle-left panel Federal Funds Rate

Percent

Period	Consensus baseline	(6.5, 2.5) w/ outcome-based rule	(5.5, 3.0) w/ outcome-based rule	(6.5, 2.5) w/ inertial Taylor rule
2012:Q1	0.13	0.13	0.13	0.13
2012:Q2	0.13	0.13	0.13	0.13
2012:Q3	0.13	0.13	0.13	0.13
2012:Q4	0.13	0.13	0.13	0.13
2013:Q1	0.13	0.13	0.13	0.13
2013:Q2	0.13	0.13	0.13	0.13
2013:Q3	0.13	0.13	0.13	0.13
2013:Q4	0.13	0.13	0.13	0.13
2014:Q1	0.13	0.13	0.13	0.13
2014:Q2	0.13	0.13	0.13	0.13
2014:Q3	0.13	0.13	0.13	0.13
2014:Q4	0.13	0.13	0.13	0.13
2015:Q1	0.13	0.13	0.13	0.13
2015:Q2	0.13	0.13	0.13	0.13
2015:Q3	0.40	0.13	0.13	0.24
2015:Q4	1.00	0.52	0.13	0.65
2016:Q1	1.74	1.32	0.13	1.17
2016:Q2	2.43	2.15	0.14	1.66
2016:Q3	2.99	2.86	0.56	2.10
2016:Q4	3.41	3.40	1.66	2.51
2017:Q1	3.73	3.79	2.84	2.88
2017:Q2	3.96	4.06	3.82	3.21
2017:Q3	4.08	4.19	4.44	3.50
2017:Q4	4.12	4.22	4.75	3.73

Middle-right panel Real GDP

Year-to-year percent change

Period	Consensus baseline	(6.5, 2.5) w/ outcome-based rule	(5.5, 3.0) w/ outcome-based rule	(6.5, 2.5) w/ inertial Taylor rule
2012:Q1	2.45	2.45	2.45	2.45
Processing math: 100%	2.25	2.25	2.25	2.25
2012:Q3	2.29	2.29	2.29	2.29

2012:Q4	1.72	1.72	1.71	1.71
2013:Q1	1.77	1.78	1.85	1.83
2013:Q2	1.98	2.00	2.14	2.10
2013:Q3	2.34	2.38	2.59	2.52
2013:Q4	2.65	2.70	3.00	2.91
2014:Q1	2.97	3.03	3.34	3.24
2014:Q2	3.24	3.30	3.61	3.51
2014:Q3	3.46	3.51	3.82	3.72
2014:Q4	3.65	3.71	4.00	3.90
2015:Q1	3.67	3.72	4.00	3.91
2015:Q2	3.69	3.74	4.02	3.92
2015:Q3	3.66	3.71	3.98	3.88
2015:Q4	3.55	3.60	3.86	3.77
2016:Q1	3.47	3.52	3.78	3.68
2016:Q2	3.33	3.37	3.63	3.53
2016:Q3	3.19	3.21	3.47	3.37
2016:Q4	3.11	3.09	3.30	3.25
2017:Q1	3.07	3.02	3.10	3.15
2017:Q2	3.06	2.98	2.89	3.07
2017:Q3	2.97	2.88	2.60	2.90
2017:Q4	2.87	2.78	2.36	2.72

Bottom-left panel Unemployment Rate

Percent

Period	Consensus baseline	(6.5, 2.5) w/ outcome-based rule	(5.5, 3.0) w/ outcome-based rule	(6.5, 2.5) w/ inertial Taylor rule
2012:Q1	8.24	8.24	8.24	8.24
2012:Q2	8.17	8.17	8.17	8.17
2012:Q3	8.20	8.20	8.20	8.20
2012:Q4	8.20	8.20	8.20	8.20
2013:Q1	8.13	8.13	8.11	8.12
2013:Q2	8.04	8.03	8.00	8.01
2013:Q3	7.94	7.93	7.86	7.88
2013:Q4	7.84	7.82	7.72	7.75
2014:Q1	7.68	7.66	7.52	7.56
2014:Q2	7.53	7.50	7.32	7.38
2014:Q3	7.38	7.34	7.13	7.20
2014:Q4	7.24	7.19	6.94	7.02
2015:Q1	7.00	6.95	6.66	6.76
2015:Q2	6.77	6.71	6.39	6.49
2015:Q3	6.55	6.48	6.12	6.24
2015:Q4	6.33	6.26	5.87	6.00
2016:Q1	6.18	6.11	5.68	5.83
2016:Q2	6.05	5.97	5.51	5.67
2016:Q3	5.93	5.84	5.36	5.53
2016:Q4	5.81	5.73	5.23	5.40
2017:Q1	5.70	5.63	5.14	5.29
2017:Q2	5.60	5.54	5.07	5.19
2017:Q3	5.58	5.53	5.11	5.19
2017:Q4	5.57	5.53	5.17	5.20

Bottom-right panel PCE Inflation

12-month percent change

Period	Consensus baseline	(6.5, 2.5) w/ outcome-based rule	(5.5, 3.0) w/ outcome-based rule	(6.5, 2.5) w/ inertial Taylor rule
2012:Q1	2.33	2.33	2.33	2.33
2012:Q2	1.64	1.64	1.64	1.64
2012:Q3	1.58	1.58	1.58	1.58
2012:Q4	1.84	1.85	1.90	1.89
2013:Q1	1.68	1.70	1.79	1.78
2013:Q2	1.94	1.96	2.10	2.08
2013:Q3	1.85	1.88	2.07	2.05
2013:Q4	1.77	1.80	2.00	1.97
2014:Q1	1.76	1.78	1.99	1.97
2014:Q2	1.76	1.79	2.01	1.98
2014:Q3	1.77	1.80	2.02	1.99
2014:Q4	1.79	1.82	2.03	2.01

Processing math: 100%

2015:Q1	1.81	1.83	2.05	2.03
2015:Q2	1.83	1.85	2.07	2.05
2015:Q3	1.85	1.88	2.08	2.06
2015:Q4	1.88	1.90	2.10	2.08
2016:Q1	1.91	1.93	2.12	2.11
2016:Q2	1.94	1.97	2.15	2.13
2016:Q3	1.98	2.00	2.18	2.16
2016:Q4	2.01	2.04	2.21	2.19
2017:Q1	2.03	2.06	2.24	2.20
2017:Q2	2.05	2.08	2.26	2.22
2017:Q3	2.06	2.09	2.27	2.22
2017:Q4	2.06	2.09	2.27	2.22

Exhibit 2 Some Broader Lessons and Issues

- Some lessons from model-based analysis:
 - Thresholds would likely perform fairly well under variety of economic conditions.
 - Thresholds could improve expected economic performance--with caveat that thresholds can be set too aggressively.
- Some issues with setting unemployment rate and projected inflation thresholds:
 - Amount of labor slack is uncertain, but this risk is associated with any policy strategy using measure of slack, and thresholds may not exacerbate it greatly.
 - Even projected inflation is volatile, and setting inflation threshold modestly above target could have threshold crossed early with still-elevated unemployment. Economic outcomes could be less favorable than with somewhat higher inflation threshold.
- Some communications challenges:
 - Difficult to formulate inflation threshold with realized headline inflation because of volatility.
 - Effect of policy on economic conditions depends on expectations for both policy after onset of firming and start date of firming.
 - Thresholds would likely differ from Committee's longer-run objectives and market participants may not understand distinction.
 - Thresholds would describe policy in terms of two variables, but Committee draws on a wide range of indicators when setting policy.

Exhibit 3 Draft threshold language

[Note: In the draft threshold language, emphasis (strike-through) indicates strike-through text in the original document, and strong emphasis (bold) indicates bold red underlined text in the original document.]

Alternative 1

To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least ~~as long as~~ until the unemployment rate ~~exceeds~~ ~~falls below~~ 6 1/2 percent, provided that inflation at a one- to two-year horizon is projected to be no more than a half percentage point above the Committee's 2 percent objective and longer-term inflation expectations continue to be well anchored. [In determining the time horizon over which it maintains a highly accommodative stance of monetary policy, the Committee will also consider the pace of improvement in labor market conditions, and other indicators of economic ~~and financial conditions~~ ~~activity and prices~~.] **The Committee may determine that the current target range for the federal funds rate is appropriate for even longer based on** the pace of improvement in labor market conditions and other indicators of economic activity and prices.] **When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with maintaining continued satisfactory progress toward maximum employment in a context of price stability.**

Alternative 2, referencing realized inflation rather than projected inflation

To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least ~~as long as~~ until the unemployment rate ~~exceeds~~ ~~falls below~~ 6 1/2 percent, provided that ~~the 12-month growth rate of the price index for personal consumption expenditures is~~ inflation at a one- to two-year horizon is projected to be no more than a half percentage point above the Committee's 2 percent objective and longer-term inflation expectations continue to be well anchored. **A transitory increase in inflation owing to fluctuations in the prices of energy or other volatile components of the price index would not necessarily by itself warrant an increase in the target range.** [In determining the time horizon over which it maintains a highly accommodative stance of monetary policy, the Committee will also consider the pace of improvement in labor market conditions, and other indicators of economic ~~and financial conditions~~ ~~activity and prices~~.] **The Committee may determine that the current target range for the federal funds rate is appropriate for even longer based on** the pace of improvement in labor market conditions and other indicators of economic activity and prices.] **When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with maintaining continued satisfactory progress toward maximum employment in a context of price stability.**

Questions for FOMC Discussion on Quantitative Thresholds

Processing math: 100%

1. Do you think it would be beneficial to express the Committee's forward guidance on the funds rate using numerical thresholds?

2. If the Committee were to incorporate such thresholds into the forward guidance:
 - a. Should the thresholds replace the date-based guidance or be combined with the date-based guidance? If you think they should be combined, would you do that routinely or only as a transition when the thresholds are first introduced?
 - b. What variables should the thresholds reference? Regarding inflation, should the thresholds reference actual inflation or a projection? What should the numerical values be for the variables used?
 - c. In what way, if at all, should the language indicate that the Committee may tighten policy before any thresholds are crossed?
 - d. In what way, if at all, should the Committee provide guidance about the timing of liftoff after a threshold is crossed and the likely course of policy after the initial increase in the funds rate target?

Appendix 2: Materials used by Mr. Potter

Material for

FOMC Presentation: *Financial Market Developments and Desk Operations*

Simon Potter

October 23, 2012

Class II FOMC - Restricted (FR)

Exhibit 1

Top-left panel

(1) Ten-Year Nominal and Real Treasury Yields

Percent

Date	Nominal	Real
1 August 2011	2.744	0.315
2 August 2011	2.611	0.257
3 August 2011	2.620	0.349
4 August 2011	2.403	0.188
5 August 2011	2.559	0.310
8 August 2011	2.318	0.136
9 August 2011	2.249	0.022
10 August 2011	2.106	-0.185
11 August 2011	2.340	0.023
12 August 2011	2.255	-0.031
15 August 2011	2.305	0.039
16 August 2011	2.220	0.005
17 August 2011	2.165	-0.025
18 August 2011	2.062	0.002
19 August 2011	2.062	-0.009
22 August 2011	2.106	0.010
23 August 2011	2.153	0.092
24 August 2011	2.299	0.204
25 August 2011	2.229	0.105
26 August 2011	2.190	0.117
29 August 2011	2.256	0.162
30 August 2011	2.177	0.098
31 August 2011	2.223	0.138
1 September 2011	2.130	0.022
2 September 2011	1.986	-0.061
5 September 2011	1.986	-0.061
6 September 2011	1.984	0.022
7 September 2011	2.043	0.057
8 September 2011	1.979	-0.050
9 September 2011	1.918	-0.069
12 September 2011	1.948	-0.022
13 September 2011	1.991	0.038
14 September 2011	1.984	0.058
15 September 2011	2.082	0.100
16 September 2011	2.048	0.069
19 September 2011	1.951	0.047
20 September 2011	1.939	0.003
21 September 2011	1.858	-0.010
22 September 2011	1.718	-0.004
23 September 2011	1.833	0.064
26 September 2011	1.900	0.087
27 September 2011	1.971	0.075
28 September 2011	1.980	0.101

Processing math: 100%

29 September 2011	1.996	0.139
30 September 2011	1.915	0.144
3 October 2011	1.756	0.002
4 October 2011	1.821	0.028
5 October 2011	1.888	0.072
6 October 2011	1.987	0.078
7 October 2011	2.076	0.118
10 October 2011	2.076	0.118
11 October 2011	2.150	0.170
12 October 2011	2.210	0.207
13 October 2011	2.183	0.224
14 October 2011	2.248	0.250
17 October 2011	2.155	0.195
18 October 2011	2.176	0.166
19 October 2011	2.160	0.190
20 October 2011	2.189	0.207
21 October 2011	2.219	0.197
24 October 2011	2.234	0.194
25 October 2011	2.109	0.080
26 October 2011	2.204	0.114
27 October 2011	2.396	0.214
28 October 2011	2.317	0.151
31 October 2011	2.113	0.025
1 November 2011	1.989	-0.069
2 November 2011	1.985	-0.113
3 November 2011	2.073	-0.033
4 November 2011	2.033	-0.097
7 November 2011	2.037	-0.114
8 November 2011	2.077	-0.059
9 November 2011	1.962	-0.068
10 November 2011	2.056	-0.065
11 November 2011	2.056	-0.065
14 November 2011	2.056	-0.038
15 November 2011	2.045	-0.010
16 November 2011	2.000	0.023
17 November 2011	1.960	0.006
18 November 2011	2.010	0.015
21 November 2011	1.955	0.021
22 November 2011	1.917	0.004
23 November 2011	1.884	-0.045
24 November 2011	1.884	-0.045
25 November 2011	1.964	0.000
28 November 2011	1.974	-0.022
29 November 2011	1.991	-0.040
30 November 2011	2.068	-0.022
1 December 2011	2.087	-0.004
2 December 2011	2.033	-0.056
5 December 2011	2.044	-0.055
6 December 2011	2.089	-0.030
7 December 2011	2.030	-0.055
8 December 2011	1.970	-0.055
9 December 2011	2.061	-0.009
12 December 2011	2.012	-0.079
13 December 2011	1.965	-0.095
14 December 2011	1.903	-0.093
15 December 2011	1.908	-0.061
16 December 2011	1.847	-0.113
19 December 2011	1.810	-0.162
20 December 2011	1.923	-0.160
21 December 2011	1.967	-0.133
22 December 2011	1.948	-0.135
23 December 2011	2.024	-0.108
26 December 2011	2.024	-0.108
27 December 2011	2.005	-0.094
28 December 2011	1.916	-0.123
29 December 2011	1.899	-0.119
30 December 2011	1.876	-0.124
2 January 2012	1.876	-0.124
Processing math: 100%	1.947	-0.107

4 January 2012	1.977	-0.149
5 January 2012	1.995	-0.166
6 January 2012	1.958	-0.183
9 January 2012	1.958	-0.191
10 January 2012	1.968	-0.148
11 January 2012	1.904	-0.169
12 January 2012	1.923	-0.165
13 January 2012	1.864	-0.203
16 January 2012	1.864	-0.203
17 January 2012	1.857	-0.227
18 January 2012	1.898	-0.216
19 January 2012	1.977	-0.177
20 January 2012	2.025	-0.020
23 January 2012	2.051	-0.012
24 January 2012	2.060	-0.022
25 January 2012	1.995	-0.135
26 January 2012	1.931	-0.187
27 January 2012	1.891	-0.223
30 January 2012	1.844	-0.266
31 January 2012	1.797	-0.307
1 February 2012	1.827	-0.308
2 February 2012	1.821	-0.325
3 February 2012	1.922	-0.247
6 February 2012	1.907	-0.279
7 February 2012	1.973	-0.233
8 February 2012	1.982	-0.220
9 February 2012	2.036	-0.195
10 February 2012	1.986	-0.244
13 February 2012	1.974	-0.266
14 February 2012	1.936	-0.283
15 February 2012	1.928	-0.293
16 February 2012	1.983	-0.273
17 February 2012	2.002	-0.274
20 February 2012	2.002	-0.274
21 February 2012	2.059	-0.242
22 February 2012	2.003	-0.312
23 February 2012	1.997	-0.319
24 February 2012	1.976	-0.317
27 February 2012	1.926	-0.343
28 February 2012	1.943	-0.332
29 February 2012	1.971	-0.303
1 March 2012	2.026	-0.261
2 March 2012	1.974	-0.277
5 March 2012	2.010	-0.215
6 March 2012	1.943	-0.248
7 March 2012	1.976	-0.253
8 March 2012	2.012	-0.248
9 March 2012	2.028	-0.272
12 March 2012	2.033	-0.269
13 March 2012	2.126	-0.224
14 March 2012	2.269	-0.116
15 March 2012	2.279	-0.120
16 March 2012	2.294	-0.126
19 March 2012	2.377	-0.064
20 March 2012	2.359	-0.084
21 March 2012	2.296	-0.112
22 March 2012	2.278	-0.109
23 March 2012	2.232	-0.152
26 March 2012	2.248	-0.126
27 March 2012	2.184	-0.160
28 March 2012	2.200	-0.142
29 March 2012	2.159	-0.170
30 March 2012	2.209	-0.139
2 April 2012	2.182	-0.205
3 April 2012	2.299	-0.087
4 April 2012	2.223	-0.105
5 April 2012	2.181	-0.118
6 April 2012	2.055	-0.194
Processing math: 100%	2.047	-0.207

10 April 2012	1.982	-0.283
11 April 2012	2.035	-0.297
12 April 2012	2.051	-0.263
13 April 2012	1.982	-0.297
16 April 2012	1.981	-0.286
17 April 2012	1.998	-0.301
18 April 2012	1.975	-0.302
19 April 2012	1.967	-0.254
20 April 2012	1.963	-0.292
23 April 2012	1.935	-0.303
24 April 2012	1.974	-0.291
25 April 2012	1.984	-0.291
26 April 2012	1.938	-0.354
27 April 2012	1.935	-0.344
30 April 2012	1.914	-0.357
1 May 2012	1.944	-0.335
2 May 2012	1.928	-0.349
3 May 2012	1.931	-0.329
4 May 2012	1.879	-0.350
7 May 2012	1.872	-0.341
8 May 2012	1.840	-0.357
9 May 2012	1.823	-0.344
10 May 2012	1.867	-0.339
11 May 2012	1.838	-0.344
14 May 2012	1.764	-0.411
15 May 2012	1.767	-0.414
16 May 2012	1.760	-0.388
17 May 2012	1.697	-0.440
18 May 2012	1.723	-0.447
21 May 2012	1.741	-0.459
22 May 2012	1.769	-0.441
23 May 2012	1.735	-0.454
24 May 2012	1.777	-0.418
25 May 2012	1.738	-0.431
28 May 2012	1.738	-0.431
29 May 2012	1.745	-0.408
30 May 2012	1.622	-0.484
31 May 2012	1.558	-0.568
1 June 2012	1.452	-0.633
4 June 2012	1.524	-0.589
5 June 2012	1.574	-0.586
6 June 2012	1.659	-0.524
7 June 2012	1.639	-0.529
8 June 2012	1.635	-0.544
11 June 2012	1.586	-0.566
12 June 2012	1.664	-0.509
13 June 2012	1.593	-0.540
14 June 2012	1.642	-0.502
15 June 2012	1.577	-0.582
18 June 2012	1.574	-0.581
19 June 2012	1.620	-0.571
20 June 2012	1.657	-0.522
21 June 2012	1.616	-0.500
22 June 2012	1.674	-0.448
25 June 2012	1.602	-0.507
26 June 2012	1.626	-0.504
27 June 2012	1.618	-0.501
28 June 2012	1.577	-0.535
29 June 2012	1.645	-0.495
2 July 2012	1.589	-0.534
3 July 2012	1.629	-0.519
4 July 2012	1.629	-0.519
5 July 2012	1.597	-0.548
6 July 2012	1.549	-0.572
9 July 2012	1.512	-0.605
10 July 2012	1.502	-0.623
11 July 2012	1.517	-0.613
12 July 2012	1.474	-0.628
Processing math: 100%	1.488	-0.637

16 July 2012	1.472	-0.656
17 July 2012	1.508	-0.626
18 July 2012	1.494	-0.639
19 July 2012	1.508	-0.651
20 July 2012	1.457	-0.689
23 July 2012	1.426	-0.693
24 July 2012	1.388	-0.717
25 July 2012	1.398	-0.682
26 July 2012	1.438	-0.669
27 July 2012	1.546	-0.619
30 July 2012	1.502	-0.661
31 July 2012	1.468	-0.724
1 August 2012	1.524	-0.692
2 August 2012	1.478	-0.704
3 August 2012	1.563	-0.679
6 August 2012	1.566	-0.686
7 August 2012	1.628	-0.668
8 August 2012	1.649	-0.630
9 August 2012	1.688	-0.602
10 August 2012	1.657	-0.615
13 August 2012	1.664	-0.593
14 August 2012	1.738	-0.537
15 August 2012	1.816	-0.459
16 August 2012	1.835	-0.442
17 August 2012	1.811	-0.449
20 August 2012	1.805	-0.452
21 August 2012	1.798	-0.470
22 August 2012	1.692	-0.585
23 August 2012	1.678	-0.634
24 August 2012	1.687	-0.619
27 August 2012	1.651	-0.659
28 August 2012	1.634	-0.698
29 August 2012	1.651	-0.660
30 August 2012	1.623	-0.649
31 August 2012	1.548	-0.718
3 September 2012	1.548	-0.718
4 September 2012	1.572	-0.705
5 September 2012	1.596	-0.708
6 September 2012	1.678	-0.647
7 September 2012	1.668	-0.703
10 September 2012	1.654	-0.724
11 September 2012	1.701	-0.690
12 September 2012	1.758	-0.638
13 September 2012	1.723	-0.759
14 September 2012	1.866	-0.777
17 September 2012	1.842	-0.757
18 September 2012	1.808	-0.748
19 September 2012	1.772	-0.775
20 September 2012	1.764	-0.746
21 September 2012	1.753	-0.746
24 September 2012	1.709	-0.749
25 September 2012	1.666	-0.778
26 September 2012	1.610	-0.820
27 September 2012	1.654	-0.795
28 September 2012	1.634	-0.795
1 October 2012	1.625	-0.806
2 October 2012	1.620	-0.865
3 October 2012	1.615	-0.866
4 October 2012	1.673	-0.878
5 October 2012	1.743	-0.836
8 October 2012	1.743	-0.836
9 October 2012	1.713	-0.843
10 October 2012	1.674	-0.838
11 October 2012	1.670	-0.804
12 October 2012	1.656	-0.820
15 October 2012	1.663	-0.813
16 October 2012	1.719	-0.750
17 October 2012	1.819	-0.675
Processing math: 100%	1.834	-0.695

19 October 2012	1.763	-0.748
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Note: Vertical lines or arrows indicate the Draghi Speech on July 26, August Minutes on August 22, and the FOMC meeting, September 12-13, 2012.

Source: Bloomberg

Top-right panel (2) Changes in One-Year Forward Real Rates

Basis points

Start Year	FOMC Day (09/13/12, 12:15 PM - 4:00 PM)	Intermeeting Period (09/12/12 - 10/19/12)
1	-11.78	6.14
2	-19.41	-8.60
3	-18.08	-17.83
4	-12.39	-23.01
5	-5.24	-25.26
6	1.54	-25.46
7	6.98	-24.26
8	10.59	-22.19
9	12.31	-19.65
10	12.28	-16.90

Source: Federal Reserve Board of Governors

Middle-left panel (3) Macroeconomic Conditions That Would Prompt First Rate Hike*

Unemployment
Percent

Headline PCE (Percent)	September 2011 Survey	March 2012 Survey	October 2012 Survey
1.0	6.95	6.50	6.00
2.0	7.50	7.00	6.50
3.0	8.50	7.65	7.20

* Median dealer estimate of unemployment rate for given inflation rate. [Return to text](#)

Source: Federal Reserve Bank of New York Survey

Middle-right panel (4) Inflation Expectations

	5Y BEI	5Y5Y BEI	Prob. of $\geq 3\%$ 10Y CPI	Prob. of $\geq 3\%$ 5Y5Y CPI
Pre-FOMC	2.13% (53)*	2.61% (46)	50%	9%
Peak on Period	2.47% (83)	2.88% (85)	58%	N/A
Current	2.22% (60)	2.81% (78)	53%	9%

* Percentile rank as compared to 01/01/99 - 08/31/08 period in parentheses. [Return to table](#)

** Risk-neutral probability of 10-year average CPI $\geq 3\%$, derived from inflation caps and floors. Data only available since October 2009. [Return to table](#)

*** Probability as estimated on dealer survey. Data only available since March 2007. Historical peak of 10.4% in November 2011 survey. [Return to table](#)

Source: Federal Reserve Board of Governors, Federal Reserve Bank of New York Survey

Bottom-left panel (5) Changes in Agency MBS Spread to Treasury Around MBS Announcements*

Estimated Change in LSAP Expectations (\$ Billions)	Basis points
-142	3.0
25	-6.8
225	(excluded from regression) 15.3
227	(September FOMC) -24.5
265	0.8
500	-13.3

* Two-day changes in FNMA 30-year current coupon zero volatility spread to Treasury. [Return to text](#)

Trendline: $y = -0.0321x$

Source: J.P. Morgan, Federal Reserve Bank of New York Survey

Bottom-right panel (6) Primary and Secondary Mortgage Rates

Period	Primary Rate
28 July 2011	4.55
4 August 2011	4.39
11 August 2011	4.32
18 August 2011	4.15
25 August 2011	4.22
1 September 2011	4.22
8 September 2011	4.12
15 September 2011	4.09
22 September 2011	4.09
29 September 2011	4.01
6 October 2011	3.94
13 October 2011	4.12
20 October 2011	4.11
27 October 2011	4.10
3 November 2011	4.00
10 November 2011	3.99
17 November 2011	4.00
24 November 2011	3.98
1 December 2011	4.00
8 December 2011	3.99
15 December 2011	3.94
22 December 2011	3.91
29 December 2011	3.95
5 January 2012	3.91
12 January 2012	3.89
19 January 2012	3.88
26 January 2012	3.98
2 February 2012	3.87
9 February 2012	3.87
16 February 2012	3.87
23 February 2012	3.95
1 March 2012	3.90
8 March 2012	3.88
15 March 2012	3.92
22 March 2012	4.08
29 March 2012	3.99
5 April 2012	3.98
12 April 2012	3.88
19 April 2012	3.90
26 April 2012	3.88
3 May 2012	3.84
10 May 2012	3.83
17 May 2012	3.79
24 May 2012	3.78
31 May 2012	3.75
7 June 2012	3.67
14 June 2012	3.71
21 June 2012	3.66
28 June 2012	3.66
5 July 2012	3.62
12 July 2012	3.56
19 July 2012	3.53
26 July 2012	3.49
2 August 2012	3.55
9 August 2012	3.59
16 August 2012	3.62
23 August 2012	3.66
30 August 2012	3.59
6 September 2012	3.55
13 September 2012	3.55
20 September 2012	3.49
27 September 2012	3.40
4 October 2012	3.36
11 October 2012	3.39
18 October 2012	3.37

* FHLMC 30-year survey rate. [Return to table](#)

Date	Secondary Rate
1 August 2011	3.824
2 August 2011	3.705
3 August 2011	3.719
4 August 2011	3.540
5 August 2011	3.658
8 August 2011	3.534
9 August 2011	3.554
10 August 2011	3.359
11 August 2011	3.509
12 August 2011	3.353
15 August 2011	3.399
16 August 2011	3.301
17 August 2011	3.241
18 August 2011	3.209
19 August 2011	3.242
22 August 2011	3.297
23 August 2011	3.356
24 August 2011	3.431
25 August 2011	3.379
26 August 2011	3.345
29 August 2011	3.431
30 August 2011	3.345
31 August 2011	3.402
1 September 2011	3.315
2 September 2011	3.235
5 September 2011	3.235
6 September 2011	3.218
7 September 2011	3.263
8 September 2011	3.228
9 September 2011	3.131
12 September 2011	3.262
13 September 2011	3.283
14 September 2011	3.272
15 September 2011	3.343
16 September 2011	3.332
19 September 2011	3.237
20 September 2011	3.214
21 September 2011	2.964
22 September 2011	3.088
23 September 2011	2.998
26 September 2011	3.037
27 September 2011	3.100
28 September 2011	3.089
29 September 2011	3.077
30 September 2011	3.003
3 October 2011	2.933
4 October 2011	3.003
5 October 2011	3.060
6 October 2011	3.129
7 October 2011	3.239
10 October 2011	3.239
11 October 2011	3.261
12 October 2011	3.249
13 October 2011	3.275
14 October 2011	3.400
17 October 2011	3.302
18 October 2011	3.313
19 October 2011	3.313
20 October 2011	3.348
21 October 2011	3.357
24 October 2011	3.364
25 October 2011	3.253
26 October 2011	3.314
27 October 2011	3.442
28 October 2011	3.359
31 October 2011	3.202
1 November 2011	3.129
2 November 2011	3.103
Processing math: 100%	3.204

4 November 2011	3.151
7 November 2011	3.158
8 November 2011	3.200
9 November 2011	3.191
10 November 2011	3.146
11 November 2011	3.146
14 November 2011	3.252
15 November 2011	3.228
16 November 2011	3.211
17 November 2011	3.192
18 November 2011	3.222
21 November 2011	3.177
22 November 2011	3.149
23 November 2011	3.155
24 November 2011	3.155
25 November 2011	3.143
28 November 2011	3.176
29 November 2011	3.162
30 November 2011	3.159
1 December 2011	3.152
2 December 2011	3.117
5 December 2011	3.151
6 December 2011	3.126
7 December 2011	3.097
8 December 2011	3.028
9 December 2011	3.069
12 December 2011	3.057
13 December 2011	3.071
14 December 2011	3.053
15 December 2011	3.043
16 December 2011	3.000
19 December 2011	2.979
20 December 2011	3.049
21 December 2011	3.062
22 December 2011	3.074
23 December 2011	3.135
26 December 2011	3.135
27 December 2011	3.119
28 December 2011	3.035
29 December 2011	2.994
30 December 2011	2.964
2 January 2012	2.964
3 January 2012	2.939
4 January 2012	2.945
5 January 2012	2.926
6 January 2012	2.881
9 January 2012	2.862
10 January 2012	2.900
11 January 2012	2.843
12 January 2012	2.830
13 January 2012	2.861
16 January 2012	2.861
17 January 2012	2.841
18 January 2012	2.831
19 January 2012	2.888
20 January 2012	2.917
23 January 2012	2.992
24 January 2012	2.986
25 January 2012	2.923
26 January 2012	2.824
27 January 2012	2.744
30 January 2012	2.680
31 January 2012	2.630
1 February 2012	2.621
2 February 2012	2.833
3 February 2012	2.827
6 February 2012	2.808
7 February 2012	2.833
Processing math: 100%	2.821

9 February 2012	2.812
10 February 2012	2.761
13 February 2012	2.810
14 February 2012	2.762
15 February 2012	2.814
16 February 2012	2.840
17 February 2012	2.914
20 February 2012	2.914
21 February 2012	2.989
22 February 2012	2.918
23 February 2012	2.897
24 February 2012	2.897
27 February 2012	2.879
28 February 2012	2.866
29 February 2012	2.914
1 March 2012	2.967
2 March 2012	2.923
5 March 2012	2.961
6 March 2012	2.952
7 March 2012	2.907
8 March 2012	3.037
9 March 2012	2.940
12 March 2012	2.917
13 March 2012	3.079
14 March 2012	3.198
15 March 2012	3.149
16 March 2012	3.237
19 March 2012	3.294
20 March 2012	3.286
21 March 2012	3.228
22 March 2012	3.272
23 March 2012	3.222
26 March 2012	3.189
27 March 2012	3.092
28 March 2012	3.113
29 March 2012	3.074
30 March 2012	3.141
2 April 2012	3.072
3 April 2012	3.240
4 April 2012	3.133
5 April 2012	3.125
6 April 2012	3.116
9 April 2012	3.055
10 April 2012	2.894
11 April 2012	3.024
12 April 2012	2.961
13 April 2012	2.952
16 April 2012	2.970
17 April 2012	2.988
18 April 2012	2.955
19 April 2012	2.928
20 April 2012	2.928
23 April 2012	2.903
24 April 2012	2.939
25 April 2012	2.984
26 April 2012	2.876
27 April 2012	2.889
30 April 2012	2.880
1 May 2012	2.890
2 May 2012	2.879
3 May 2012	2.879
4 May 2012	2.846
7 May 2012	2.846
8 May 2012	2.842
9 May 2012	2.833
10 May 2012	2.828
11 May 2012	2.833
14 May 2012	2.827
Processing math: 100%	2.809

16 May 2012	2.768
17 May 2012	2.671
18 May 2012	2.727
21 May 2012	2.762
22 May 2012	2.781
23 May 2012	2.758
24 May 2012	2.800
25 May 2012	2.781
28 May 2012	2.781
29 May 2012	2.793
30 May 2012	2.706
31 May 2012	2.656
1 June 2012	2.596
4 June 2012	2.645
5 June 2012	2.681
6 June 2012	2.726
7 June 2012	2.677
8 June 2012	2.695
11 June 2012	2.652
12 June 2012	2.715
13 June 2012	2.672
14 June 2012	2.696
15 June 2012	2.633
18 June 2012	2.633
19 June 2012	2.629
20 June 2012	2.696
21 June 2012	2.652
22 June 2012	2.686
25 June 2012	2.629
26 June 2012	2.657
27 June 2012	2.629
28 June 2012	2.600
29 June 2012	2.638
2 July 2012	2.567
3 July 2012	2.615
4 July 2012	2.615
5 July 2012	2.576
6 July 2012	2.528
9 July 2012	2.480
10 July 2012	2.446
11 July 2012	2.475
12 July 2012	2.360
13 July 2012	2.414
16 July 2012	2.375
17 July 2012	2.414
18 July 2012	2.381
19 July 2012	2.364
20 July 2012	2.325
23 July 2012	2.280
24 July 2012	2.253
25 July 2012	2.269
26 July 2012	2.308
27 July 2012	2.409
30 July 2012	2.330
31 July 2012	2.303
1 August 2012	2.370
2 August 2012	2.337
3 August 2012	2.409
6 August 2012	2.393
7 August 2012	2.443
8 August 2012	2.443
9 August 2012	2.437
10 August 2012	2.426
13 August 2012	2.426
14 August 2012	2.550
15 August 2012	2.653
16 August 2012	2.687
17 August 2012	2.644
Processing math: 100%	2.631

21 August 2012	2.625
22 August 2012	2.480
23 August 2012	2.480
24 August 2012	2.502
27 August 2012	2.469
28 August 2012	2.458
29 August 2012	2.497
30 August 2012	2.447
31 August 2012	2.364
3 September 2012	2.364
4 September 2012	2.387
5 September 2012	2.387
6 September 2012	2.480
7 September 2012	2.392
10 September 2012	2.376
11 September 2012	2.436
12 September 2012	2.453
13 September 2012	2.218
14 September 2012	2.327
17 September 2012	2.181
18 September 2012	2.158
19 September 2012	2.092
20 September 2012	1.943
21 September 2012	1.850
24 September 2012	1.760
25 September 2012	1.624
26 September 2012	1.522
27 September 2012	1.628
28 September 2012	1.861
1 October 2012	1.800
2 October 2012	1.800
3 October 2012	1.800
4 October 2012	1.800
5 October 2012	1.800
8 October 2012	1.800
9 October 2012	1.896
10 October 2012	1.915
11 October 2012	1.968
12 October 2012	2.029
15 October 2012	2.068
16 October 2012	2.107
17 October 2012	2.202
18 October 2012	2.225
19 October 2012	2.186

** FHLMC 30-year current coupon yield. [Return to table](#)

Note: A vertical line indicates the FOMC meeting, September 12-13, 2012.

Source: FHLMC, Bloomberg

Exhibit 2

Top-left panel (7) Changes in Credit Spreads to Treasury Around September FOMC

	Aug. Minutes to FOMC	Day of FOMC	Total Change on Period
2-Year Swap	-5 bps	-2 bps	-5 bps
10-Year Swap	-2	-3	-6
IG Debt	-7	-2	-33
HY Debt	-34	-2	-12
ABS	-9	-1	-5
Leveraged Loans	-22	+0	-20
CMBS	-9	+0	-32

* Pre-FOMC to present (09/12/12 - 10/19/12). [Return to table](#)

Source: Bloomberg, Barclays, J.P. Morgan

Top-right panel (9) Not Yearly U.S. Fixed Income Issuance (Excluding Treasury Securities)

Processing math: 100%

\$ Billions

Period	Private	Government-Backed	Net Fed Activity	Total Net of Fed
2002	416.53	547.12	0.00	963.64
2003	482.91	433.15	0.01	916.06
2004	634.05	115.17	0.00	749.22
2005	458.62	468.68	0.00	927.30
2006	961.70	779.88	0.00	1741.58
2007	849.25	506.91	0.00	1356.16
2008	-93.42	740.34	-19.71	627.21
2009	400.31	-165.79	-1048.43	-813.91
2010	583.54	163.45	-71.47	675.52
2011	87.31	-108.80	198.31	176.82
2012	-95.00	-127.00	-67.48	-289.48
2013	343.00	-63.00	-435.00	-155.00

* Includes agency securities. [Return to table](#)

** Projections based on median dealer survey responses. [Return to table](#)

Note: A vertical line indicates the forecast period, which begins in 2012.

Source: Flow of Funds, Credit Suisse, Federal Reserve Bank of New York Survey

Middle-left panel (9) Equity Prices

Indexed to 04/01/11

Date	S&P 500 Index	EuroStoxx Index	MSCI Emerging Markets Index	Shanghai Composite Index
1 April 2011	100.00	100.00	100.00	100.00
4 April 2011	100.03	100.02	100.68	100.00
5 April 2011	100.02	99.91	100.82	100.00
6 April 2011	100.23	100.48	101.55	101.14
7 April 2011	100.08	100.06	101.44	101.36
8 April 2011	99.68	100.55	101.76	102.11
11 April 2011	99.40	100.19	101.28	101.86
12 April 2011	98.63	98.78	99.34	101.82
13 April 2011	98.65	99.48	100.02	102.80
14 April 2011	98.66	98.53	99.75	102.54
15 April 2011	99.04	98.60	99.70	102.80
18 April 2011	97.95	96.45	98.06	103.03
19 April 2011	98.51	96.88	98.42	101.07
20 April 2011	99.85	98.86	100.83	101.34
21 April 2011	100.37	99.28	101.75	102.00
22 April 2011	100.37	99.28	101.76	101.45
25 April 2011	100.21	99.28	101.57	99.92
26 April 2011	101.11	99.90	101.54	99.04
27 April 2011	101.74	100.52	101.46	98.58
28 April 2011	102.11	101.28	101.32	97.29
29 April 2011	102.34	101.51	101.60	98.12
2 May 2011	102.16	101.59	101.80	98.12
3 May 2011	101.82	101.18	100.05	98.81
4 May 2011	101.12	99.68	98.80	96.58
5 May 2011	100.20	99.08	98.02	96.80
6 May 2011	100.58	100.06	98.16	96.51
9 May 2011	101.04	98.89	98.04	96.80
10 May 2011	101.86	100.02	98.44	97.41
11 May 2011	100.73	100.17	98.38	97.17
12 May 2011	101.22	99.40	96.83	95.84
13 May 2011	100.40	98.91	96.59	96.75
16 May 2011	99.78	98.51	95.91	96.01
17 May 2011	99.74	97.33	95.64	96.14
18 May 2011	100.62	97.81	96.40	96.81
19 May 2011	100.84	98.58	96.23	96.37
20 May 2011	100.06	97.61	96.24	96.33
23 May 2011	98.87	95.60	93.98	93.50
24 May 2011	98.79	95.91	94.90	93.25
25 May 2011	99.10	96.34	94.34	92.40
26 May 2011	99.50	95.86	95.63	92.22
27 May 2011	99.90	96.49	96.85	91.32
30 May 2011	99.90	96.40	96.88	91.20
31 May 2011	100.96	97.84	98.55	92.45
1 June 2011	98.66	96.85	98.45	92.46
2 June 2011	98.54	95.46	97.79	91.16
3 June 2011	97.58	95.66	97.50	91.93

Processing math: 100%

6 June 2011	96.53	95.03	96.95	91.93
7 June 2011	96.44	95.16	97.25	92.48
8 June 2011	96.03	94.20	96.65	92.68
9 June 2011	96.74	95.11	96.38	91.10
10 June 2011	95.39	93.64	95.25	91.16
13 June 2011	95.45	93.67	94.90	91.00
14 June 2011	96.66	95.02	95.72	92.00
15 June 2011	94.97	93.60	95.16	91.17
16 June 2011	95.14	93.24	93.44	89.78
17 June 2011	95.43	94.20	93.13	89.06
20 June 2011	95.94	93.45	92.68	88.33
21 June 2011	97.23	95.24	93.92	89.18
22 June 2011	96.60	94.97	94.19	89.28
23 June 2011	96.33	93.02	93.27	90.59
24 June 2011	95.20	92.61	94.14	92.55
27 June 2011	96.07	92.75	93.88	92.95
28 June 2011	97.32	93.52	94.60	92.98
29 June 2011	98.12	95.34	95.58	91.95
30 June 2011	99.12	96.75	96.72	93.08
1 July 2011	100.54	97.58	97.61	92.99
4 July 2011	100.54	97.66	98.68	94.79
5 July 2011	100.41	97.08	98.40	94.91
6 July 2011	100.51	96.41	97.98	94.71
7 July 2011	101.56	96.89	98.52	94.17
8 July 2011	100.85	95.29	98.21	94.28
11 July 2011	99.03	92.75	96.43	94.45
12 July 2011	98.59	92.19	94.61	92.83
13 July 2011	98.90	92.99	96.01	94.21
14 July 2011	98.23	92.13	95.81	94.71
15 July 2011	98.78	91.64	95.82	95.04
18 July 2011	97.98	89.82	94.71	94.92
19 July 2011	99.57	90.94	95.26	94.26
20 July 2011	99.51	92.38	95.92	94.16
21 July 2011	100.85	94.02	96.47	93.21
22 July 2011	100.95	94.52	97.30	93.37
25 July 2011	100.38	93.81	96.88	90.61
26 July 2011	99.96	93.53	97.59	91.09
27 July 2011	97.93	92.06	96.95	91.78
28 July 2011	97.62	91.65	96.65	91.28
29 July 2011	96.99	90.97	96.00	91.05
1 August 2011	96.59	88.62	96.83	91.12
2 August 2011	94.12	86.70	95.09	90.29
3 August 2011	94.59	84.97	93.04	90.26
4 August 2011	90.07	81.79	90.54	90.45
5 August 2011	90.02	80.61	87.85	88.51
8 August 2011	84.02	77.13	83.55	85.15
9 August 2011	88.00	77.88	81.72	85.13
10 August 2011	84.12	74.11	82.75	85.91
11 August 2011	88.01	76.40	83.53	87.00
12 August 2011	88.47	79.40	83.51	87.39
15 August 2011	90.40	79.95	85.51	88.52
16 August 2011	89.52	79.56	85.95	87.89
17 August 2011	89.60	79.77	86.44	87.66
18 August 2011	85.61	75.48	83.99	86.25
19 August 2011	84.32	74.06	81.86	85.41
22 August 2011	84.34	74.67	81.52	84.78
23 August 2011	87.24	75.09	83.18	86.07
24 August 2011	88.38	76.46	82.54	85.63
25 August 2011	87.01	75.80	82.11	88.13
26 August 2011	88.32	75.10	82.35	88.03
29 August 2011	90.82	76.82	84.77	86.82
30 August 2011	91.03	76.95	85.53	86.49
31 August 2011	91.48	79.22	87.18	86.52
1 September 2011	90.39	79.24	87.59	86.14
2 September 2011	88.11	76.63	86.23	85.20
5 September 2011	88.11	73.00	83.50	83.53
6 September 2011	87.45	72.22	83.37	83.26
7 September 2011	89.96	74.82	85.20	84.79
Processing math: 100%	89.00	75.21	85.52	84.21

9 September 2011	86.63	72.32	83.73	84.17
12 September 2011	87.23	69.92	81.85	84.17
13 September 2011	88.03	70.98	81.38	83.28
14 September 2011	89.21	72.62	80.38	83.74
15 September 2011	90.75	74.74	81.32	83.54
16 September 2011	91.26	75.10	82.43	83.65
19 September 2011	90.37	73.05	80.11	82.15
20 September 2011	90.22	74.46	80.26	82.49
21 September 2011	87.57	73.20	79.32	84.69
22 September 2011	84.78	69.57	74.31	82.33
23 September 2011	85.29	70.16	72.70	82.00
26 September 2011	87.28	71.71	71.85	80.65
27 September 2011	88.21	75.33	75.39	81.39
28 September 2011	86.39	74.70	75.19	80.61
29 September 2011	87.09	75.64	75.48	79.71
30 September 2011	84.92	74.36	74.29	79.50
3 October 2011	82.50	72.93	71.91	79.50
4 October 2011	84.35	70.98	70.14	79.50
5 October 2011	85.86	73.77	70.59	79.50
6 October 2011	87.43	76.11	72.91	79.50
7 October 2011	86.72	76.62	74.58	79.50
10 October 2011	89.68	78.33	75.80	79.02
11 October 2011	89.73	78.14	76.74	79.14
12 October 2011	90.61	80.03	77.90	81.55
13 October 2011	90.34	78.90	78.51	82.19
14 October 2011	91.91	79.75	78.94	81.94
17 October 2011	90.13	78.40	79.40	82.24
18 October 2011	91.97	78.26	78.06	80.32
19 October 2011	90.80	78.74	78.72	80.12
20 October 2011	91.22	76.96	76.59	78.57
21 October 2011	92.93	79.17	77.64	78.09
24 October 2011	94.13	80.29	80.11	79.88
25 October 2011	92.24	79.58	80.61	81.20
26 October 2011	93.21	79.38	81.04	81.80
27 October 2011	96.41	83.60	83.86	82.08
28 October 2011	96.45	83.16	85.23	83.35
31 October 2011	94.06	80.61	83.96	83.18
1 November 2011	91.43	76.70	81.74	83.24
2 November 2011	92.91	77.71	82.45	84.39
3 November 2011	94.65	79.76	82.18	84.52
4 November 2011	94.06	78.17	83.50	85.20
7 November 2011	94.65	77.76	83.56	84.58
8 November 2011	95.76	78.46	83.58	84.38
9 November 2011	92.25	76.63	82.69	85.09
10 November 2011	93.04	76.61	80.49	83.56
11 November 2011	94.85	78.84	81.95	83.61
14 November 2011	93.95	77.69	82.43	85.22
15 November 2011	94.40	76.60	81.78	85.25
16 November 2011	92.83	76.81	81.01	83.14
17 November 2011	91.27	75.78	80.33	83.00
18 November 2011	91.24	75.41	78.82	81.44
21 November 2011	89.54	72.82	76.77	81.39
22 November 2011	89.16	72.05	76.73	81.30
23 November 2011	87.19	70.89	74.70	80.71
24 November 2011	87.19	70.82	74.95	80.80
25 November 2011	86.96	71.41	74.03	80.21
28 November 2011	89.50	74.85	76.13	80.31
29 November 2011	89.70	75.28	76.74	81.30
30 November 2011	93.59	78.48	78.33	78.63
1 December 2011	93.41	77.85	80.93	80.44
2 December 2011	93.39	78.71	81.07	79.55
5 December 2011	94.35	79.67	81.53	78.63
6 December 2011	94.45	79.16	80.46	78.38
7 December 2011	94.64	78.77	80.95	78.61
8 December 2011	92.64	76.91	79.96	78.51
9 December 2011	94.20	78.44	78.83	78.02
12 December 2011	92.80	76.18	78.04	77.22
13 December 2011	91.99	75.99	77.36	75.78
Processing math: 100%	90.95	74.17	76.27	75.10

15 December 2011	91.24	74.82	75.66	73.49
16 December 2011	91.54	74.42	76.29	74.98
19 December 2011	90.46	74.38	74.99	74.75
20 December 2011	93.16	76.47	76.01	74.68
21 December 2011	93.34	75.86	77.31	73.84
22 December 2011	94.12	76.77	77.59	73.68
23 December 2011	94.97	77.35	78.28	74.30
26 December 2011	94.97	77.35	78.27	73.81
27 December 2011	94.97	77.36	77.99	73.00
28 December 2011	93.79	76.41	77.05	73.13
29 December 2011	94.79	77.43	77.14	73.25
30 December 2011	94.39	78.17	77.32	74.12
2 January 2012	94.39	79.86	77.38	74.12
3 January 2012	95.85	80.57	79.31	74.12
4 January 2012	95.86	79.44	79.11	73.11
5 January 2012	96.15	78.37	78.68	72.40
6 January 2012	95.90	78.05	78.22	72.91
9 January 2012	96.12	77.68	78.55	75.01
10 January 2012	96.97	79.50	80.06	77.03
11 January 2012	97.00	79.36	80.05	76.70
12 January 2012	97.23	79.65	80.45	76.67
13 January 2012	96.75	79.36	80.41	75.64
16 January 2012	96.75	80.10	80.32	74.35
17 January 2012	97.09	81.20	82.05	77.45
18 January 2012	98.17	81.16	82.77	76.38
19 January 2012	98.66	82.59	83.65	77.38
20 January 2012	98.72	82.42	83.96	78.15
23 January 2012	98.77	83.00	84.35	78.15
24 January 2012	98.67	82.51	84.18	78.15
25 January 2012	99.52	82.33	84.35	78.15
26 January 2012	98.95	83.72	85.64	78.15
27 January 2012	98.79	82.94	85.78	78.15
30 January 2012	98.54	81.76	84.90	77.00
31 January 2012	98.50	82.33	86.02	77.26
1 February 2012	99.38	84.22	86.90	76.43
2 February 2012	99.48	84.52	88.09	77.93
3 February 2012	100.94	85.76	88.46	78.53
6 February 2012	100.89	85.49	88.36	78.56
7 February 2012	101.10	85.54	88.48	77.24
8 February 2012	101.32	85.59	89.50	79.11
9 February 2012	101.47	85.87	89.58	79.18
10 February 2012	100.77	84.64	87.94	79.26
13 February 2012	101.45	85.02	88.85	79.26
14 February 2012	101.36	84.84	88.34	79.02
15 February 2012	100.81	85.20	89.31	79.76
16 February 2012	101.92	85.02	88.53	79.42
17 February 2012	102.16	86.12	89.65	79.44
20 February 2012	102.16	87.25	89.99	79.65
21 February 2012	102.24	86.82	89.81	80.25
22 February 2012	101.90	86.09	89.83	81.00
23 February 2012	102.33	85.67	89.38	81.20
24 February 2012	102.50	86.21	90.08	82.21
27 February 2012	102.64	85.79	89.15	82.46
28 February 2012	102.98	86.04	90.19	82.63
29 February 2012	102.50	85.89	91.08	81.84
1 March 2012	103.13	86.99	90.83	81.76
2 March 2012	102.79	87.04	91.12	82.92
5 March 2012	102.40	86.45	89.89	82.40
6 March 2012	100.82	83.55	87.86	81.23
7 March 2012	101.52	84.22	87.56	80.70
8 March 2012	102.51	86.11	88.83	81.56
9 March 2012	102.89	86.28	89.44	82.21
12 March 2012	102.90	86.25	88.64	82.05
13 March 2012	104.77	87.69	89.99	82.76
14 March 2012	104.64	88.16	90.02	80.58
15 March 2012	105.27	88.74	89.90	79.99
16 March 2012	105.39	89.14	89.72	81.04
19 March 2012	105.80	89.14	89.55	81.22
Processing math: 100%	105.49	88.10	88.58	80.10

21 March 2012	105.29	87.85	88.40	80.14
22 March 2012	104.53	86.65	87.80	80.06
23 March 2012	104.86	86.71	87.92	79.18
26 March 2012	106.31	87.43	88.12	79.21
27 March 2012	106.01	86.97	89.06	79.10
28 March 2012	105.49	86.04	88.08	77.00
29 March 2012	105.32	84.64	87.13	75.90
30 March 2012	105.71	85.59	87.88	76.25
2 April 2012	106.50	86.43	88.41	76.25
3 April 2012	106.08	85.21	89.07	76.25
4 April 2012	104.99	82.89	87.53	76.25
5 April 2012	104.93	82.83	87.52	77.58
6 April 2012	104.93	82.83	87.48	77.73
9 April 2012	103.74	82.83	86.60	77.03
10 April 2012	101.96	80.45	85.74	77.71
11 April 2012	102.72	81.19	85.75	77.81
12 April 2012	104.14	81.89	86.48	79.22
13 April 2012	102.84	79.96	86.68	79.50
16 April 2012	102.79	80.20	86.07	79.43
17 April 2012	104.38	82.28	86.07	78.69
18 April 2012	103.96	81.00	86.38	80.23
19 April 2012	103.34	79.84	86.36	80.16
20 April 2012	103.46	80.41	86.19	81.11
23 April 2012	102.59	78.05	85.05	80.49
24 April 2012	102.97	79.37	85.32	80.50
25 April 2012	104.37	80.87	85.35	81.11
26 April 2012	105.07	80.86	85.72	81.04
27 April 2012	105.32	81.70	86.03	80.75
30 April 2012	104.92	80.67	86.58	80.75
1 May 2012	105.51	80.69	86.54	80.75
2 May 2012	105.25	80.23	86.90	82.17
3 May 2012	104.44	80.12	86.43	82.23
4 May 2012	102.75	78.71	85.47	82.63
7 May 2012	102.79	79.70	84.54	82.63
8 May 2012	102.35	78.16	83.75	82.53
9 May 2012	101.66	77.89	82.51	81.17
10 May 2012	101.92	78.53	82.75	81.22
11 May 2012	101.57	78.76	81.93	80.71
14 May 2012	100.45	76.92	80.33	80.23
15 May 2012	99.87	76.17	79.83	80.03
16 May 2012	99.43	75.96	77.99	79.07
17 May 2012	97.93	75.02	77.70	80.17
18 May 2012	97.21	74.67	76.50	79.01
21 May 2012	98.77	75.06	77.07	79.14
22 May 2012	98.82	76.54	77.57	79.98
23 May 2012	98.98	74.50	75.69	79.65
24 May 2012	99.12	75.14	76.12	79.23
25 May 2012	98.90	75.27	76.12	78.64
28 May 2012	98.90	75.01	76.74	79.58
29 May 2012	100.00	75.62	77.77	80.53
30 May 2012	98.57	74.16	76.61	80.36
31 May 2012	98.34	74.04	76.47	79.94
1 June 2012	95.92	72.29	75.42	79.98
4 June 2012	95.93	72.26	74.46	77.80
5 June 2012	96.48	72.62	74.79	77.91
6 June 2012	98.70	74.37	76.16	77.83
7 June 2012	98.69	74.83	77.05	77.28
8 June 2012	99.49	74.70	76.38	76.88
11 June 2012	98.24	74.43	77.20	77.71
12 June 2012	99.38	74.45	77.04	77.16
13 June 2012	98.68	74.25	77.58	78.15
14 June 2012	99.75	74.38	77.08	77.37
15 June 2012	100.78	75.51	78.07	77.74
18 June 2012	100.93	75.00	78.82	78.05
19 June 2012	101.92	76.42	79.61	77.54
20 June 2012	101.75	76.88	80.01	77.27
21 June 2012	99.48	76.55	78.67	76.19
22 June 2012	100.20	76.02	77.39	76.19
Processing math: 100%	98.60	74.27	76.29	74.95

26 June 2012	99.07	73.98	76.52	74.88
27 June 2012	99.96	75.23	77.05	74.71
28 June 2012	99.75	74.94	76.51	74.00
29 June 2012	102.23	78.39	79.09	75.00
2 July 2012	102.48	79.30	79.43	75.02
3 July 2012	103.12	80.21	80.73	75.12
4 July 2012	103.12	80.07	80.69	75.06
5 July 2012	102.64	79.19	80.60	74.18
6 July 2012	101.67	77.65	79.82	74.93
9 July 2012	101.50	77.39	78.95	73.16
10 July 2012	100.68	77.98	78.83	72.94
11 July 2012	100.68	77.90	78.67	73.31
12 July 2012	100.18	77.19	77.13	73.65
13 July 2012	101.83	78.29	78.15	73.66
16 July 2012	101.59	78.21	78.20	72.38
17 July 2012	102.35	78.18	78.74	72.83
18 July 2012	103.03	79.20	78.55	73.10
19 July 2012	103.31	80.00	79.41	73.63
20 July 2012	102.27	78.09	79.05	73.08
23 July 2012	101.36	75.93	76.99	72.16
24 July 2012	100.44	75.16	76.74	72.34
25 July 2012	100.41	75.44	76.42	71.99
26 July 2012	102.07	78.26	77.33	71.65
27 July 2012	104.02	79.79	79.47	71.74
30 July 2012	103.97	80.99	80.07	71.10
31 July 2012	103.52	80.44	80.37	70.89
1 August 2012	103.21	80.64	80.52	71.56
2 August 2012	102.45	78.50	79.73	71.15
3 August 2012	104.40	81.72	80.40	71.87
6 August 2012	104.64	82.65	81.63	72.62
7 August 2012	105.17	83.64	81.67	72.71
8 August 2012	105.24	83.36	81.90	72.82
9 August 2012	105.28	83.59	82.63	73.27
10 August 2012	105.51	83.19	82.63	73.09
13 August 2012	105.38	82.90	82.07	71.98
14 August 2012	105.37	83.43	82.46	72.20
15 August 2012	105.49	83.35	82.21	71.41
16 August 2012	106.24	84.29	82.34	71.18
17 August 2012	106.44	84.91	81.94	71.27
20 August 2012	106.43	84.54	81.78	71.00
21 August 2012	106.06	85.37	82.31	71.38
22 August 2012	106.09	84.25	81.80	71.03
23 August 2012	105.23	83.52	82.19	71.21
24 August 2012	105.91	83.57	81.47	70.50
27 August 2012	105.86	84.35	81.08	69.28
28 August 2012	105.77	83.73	80.73	69.86
29 August 2012	105.86	83.61	80.41	69.19
30 August 2012	105.03	82.61	79.69	69.17
31 August 2012	105.57	83.68	79.94	69.00
3 September 2012	105.57	84.37	80.40	69.39
4 September 2012	105.44	83.55	79.94	68.87
5 September 2012	105.33	83.67	79.28	68.67
6 September 2012	107.48	86.23	80.20	69.15
7 September 2012	107.92	86.77	81.75	71.70
10 September 2012	107.26	86.51	81.85	71.94
11 September 2012	107.59	87.24	82.11	71.46
12 September 2012	107.82	87.65	82.56	71.66
13 September 2012	109.58	86.99	82.86	71.12
14 September 2012	110.01	88.68	85.57	71.57
17 September 2012	109.67	88.27	85.45	70.04
18 September 2012	109.52	87.35	84.96	69.41
19 September 2012	109.65	87.77	85.18	69.68
20 September 2012	109.60	87.39	84.23	68.24
21 September 2012	109.59	88.15	84.94	68.30
24 September 2012	109.34	87.42	84.75	68.52
25 September 2012	108.19	87.80	84.54	68.39
26 September 2012	107.57	85.63	83.57	67.54
27 September 2012	108.61	85.91	84.24	69.30
Processing math: 100%	108.13	84.55	84.60	70.30

1 October 2012	108.41	86.02	84.81	70.30
2 October 2012	108.51	85.90	84.91	70.30
3 October 2012	108.90	85.87	84.59	70.30
4 October 2012	109.68	85.77	84.85	70.30
5 October 2012	109.65	87.13	85.15	70.30
8 October 2012	109.27	86.00	84.20	69.91
9 October 2012	108.19	85.32	84.09	71.28
10 October 2012	107.52	84.85	83.71	71.44
11 October 2012	107.54	85.76	84.04	70.87
12 October 2012	107.22	85.16	84.10	70.93
15 October 2012	108.08	85.68	83.98	70.73
16 October 2012	109.19	87.37	84.66	70.73
17 October 2012	109.64	88.04	85.30	70.96
18 October 2012	109.38	88.14	85.51	71.84
19 October 2012	107.56	87.21	84.89	71.72

Note: Vertical lines indicate the Draghi Speech on July 26, and the FOMC meeting, September 12-13, 2012.

Source: Bloomberg

Middle-right panel (10) Trade-Weighted Dollar Index

Indexed to 08/01/10

Date	Index
30 July 2010	100.00
2 August 2010	99.52
3 August 2010	99.35
4 August 2010	99.44
5 August 2010	99.35
6 August 2010	99.30
9 August 2010	99.37
10 August 2010	99.89
11 August 2010	100.43
12 August 2010	100.56
13 August 2010	100.72
16 August 2010	100.48
17 August 2010	100.09
18 August 2010	100.03
19 August 2010	100.36
20 August 2010	100.84
23 August 2010	100.95
24 August 2010	101.06
25 August 2010	101.36
26 August 2010	100.99
27 August 2010	100.99
30 August 2010	101.22
31 August 2010	101.34
1 September 2010	100.76
2 September 2010	100.71
3 September 2010	100.33
6 September 2010	100.33
7 September 2010	100.66
8 September 2010	100.41
9 September 2010	100.31
10 September 2010	100.26
13 September 2010	99.67
14 September 2010	99.23
15 September 2010	99.56
16 September 2010	99.54
17 September 2010	99.55
20 September 2010	99.35
21 September 2010	99.25
22 September 2010	98.65
23 September 2010	98.62
24 September 2010	98.21
27 September 2010	98.07
28 September 2010	97.93
29 September 2010	97.73
Processing math: 100%	97.91
1 October 2010	97.42

4 October 2010	97.58
5 October 2010	97.16
6 October 2010	96.73
7 October 2010	96.85
8 October 2010	96.68
11 October 2010	96.68
12 October 2010	96.79
13 October 2010	96.34
14 October 2010	96.08
15 October 2010	96.21
18 October 2010	96.39
19 October 2010	97.06
20 October 2010	96.68
21 October 2010	96.66
22 October 2010	96.91
25 October 2010	96.43
26 October 2010	96.79
27 October 2010	97.33
28 October 2010	96.81
29 October 2010	96.64
1 November 2010	96.59
2 November 2010	96.25
3 November 2010	96.28
4 November 2010	95.56
5 November 2010	95.81
8 November 2010	96.16
9 November 2010	96.09
10 November 2010	96.44
11 November 2010	96.44
12 November 2010	96.72
15 November 2010	97.00
16 November 2010	97.63
17 November 2010	97.48
18 November 2010	97.18
19 November 2010	97.22
22 November 2010	97.22
23 November 2010	97.96
24 November 2010	97.76
25 November 2010	97.76
26 November 2010	98.36
29 November 2010	98.73
30 November 2010	98.67
1 December 2010	98.21
2 December 2010	97.81
3 December 2010	97.43
6 December 2010	97.54
7 December 2010	97.50
8 December 2010	97.90
9 December 2010	97.93
10 December 2010	97.83
13 December 2010	97.46
14 December 2010	97.32
15 December 2010	97.65
16 December 2010	97.93
17 December 2010	98.07
20 December 2010	98.17
21 December 2010	98.02
22 December 2010	97.92
23 December 2010	97.78
24 December 2010	97.78
27 December 2010	97.65
28 December 2010	97.44
29 December 2010	97.22
30 December 2010	96.94
31 December 2010	96.94
3 January 2011	96.39
4 January 2011	96.77
5 January 2011	97.00
Processing math: 100%	97.37

7 January 2011	97.46
10 January 2011	97.51
11 January 2011	97.31
12 January 2011	96.86
13 January 2011	96.37
14 January 2011	96.50
17 January 2011	96.50
18 January 2011	96.27
19 January 2011	96.14
20 January 2011	96.58
21 January 2011	96.19
24 January 2011	96.01
25 January 2011	96.18
26 January 2011	95.96
27 January 2011	96.03
28 January 2011	96.26
31 January 2011	96.17
1 February 2011	95.62
2 February 2011	95.53
3 February 2011	95.69
4 February 2011	95.82
7 February 2011	95.78
8 February 2011	95.53
9 February 2011	95.86
10 February 2011	96.09
11 February 2011	96.31
14 February 2011	96.29
15 February 2011	96.33
16 February 2011	96.14
17 February 2011	95.85
18 February 2011	95.63
21 February 2011	95.63
22 February 2011	95.91
23 February 2011	95.86
24 February 2011	95.68
25 February 2011	95.61
28 February 2011	95.40
1 March 2011	95.29
2 March 2011	95.19
3 March 2011	95.09
4 March 2011	94.94
7 March 2011	94.95
8 March 2011	95.08
9 March 2011	94.97
10 March 2011	95.31
11 March 2011	95.12
14 March 2011	94.96
15 March 2011	95.22
16 March 2011	95.39
17 March 2011	95.07
18 March 2011	94.96
21 March 2011	94.65
22 March 2011	94.51
23 March 2011	94.76
24 March 2011	94.49
25 March 2011	94.58
28 March 2011	94.73
29 March 2011	94.82
30 March 2011	94.66
31 March 2011	94.46
1 April 2011	94.25
4 April 2011	94.27
5 April 2011	94.21
6 April 2011	93.97
7 April 2011	94.01
8 April 2011	93.63
11 April 2011	93.58
12 April 2011	93.77
Processing math: 100%	93.67

14 April 2011	93.54
15 April 2011	93.46
18 April 2011	93.92
19 April 2011	93.52
20 April 2011	93.01
21 April 2011	92.65
22 April 2011	92.80
25 April 2011	92.84
26 April 2011	92.71
27 April 2011	92.69
28 April 2011	92.27
29 April 2011	92.02
2 May 2011	91.93
3 May 2011	92.05
4 May 2011	92.29
5 May 2011	92.88
6 May 2011	92.84
9 May 2011	93.19
10 May 2011	93.01
11 May 2011	93.08
12 May 2011	93.44
13 May 2011	93.74
16 May 2011	93.71
17 May 2011	94.00
18 May 2011	93.66
19 May 2011	93.63
20 May 2011	93.65
23 May 2011	94.26
24 May 2011	94.04
25 May 2011	94.00
26 May 2011	93.93
27 May 2011	93.33
30 May 2011	93.33
31 May 2011	93.03
1 June 2011	92.96
2 June 2011	93.21
3 June 2011	92.79
6 June 2011	92.83
7 June 2011	92.74
8 June 2011	92.93
9 June 2011	92.96
10 June 2011	93.40
13 June 2011	93.43
14 June 2011	93.07
15 June 2011	93.70
16 June 2011	94.04
17 June 2011	93.57
20 June 2011	93.55
21 June 2011	93.21
22 June 2011	93.15
23 June 2011	93.79
24 June 2011	93.83
27 June 2011	93.88
28 June 2011	93.58
29 June 2011	93.16
30 June 2011	92.84
1 July 2011	92.71
4 July 2011	92.71
5 July 2011	92.78
6 July 2011	93.02
7 July 2011	92.82
8 July 2011	92.93
11 July 2011	93.41
12 July 2011	93.49
13 July 2011	92.90
14 July 2011	92.85
15 July 2011	92.85
18 July 2011	93.28
Processing math: 100%	92.77

20 July 2011	92.60
21 July 2011	92.18
22 July 2011	92.18
25 July 2011	92.13
26 July 2011	91.79
27 July 2011	92.02
28 July 2011	92.13
29 July 2011	92.04
1 August 2011	92.31
2 August 2011	92.34
3 August 2011	92.37
4 August 2011	93.24
5 August 2011	93.42
8 August 2011	93.51
9 August 2011	93.72
10 August 2011	93.67
11 August 2011	93.58
12 August 2011	93.43
15 August 2011	93.01
16 August 2011	92.95
17 August 2011	92.81
18 August 2011	93.38
19 August 2011	93.10
22 August 2011	93.33
23 August 2011	93.16
24 August 2011	93.38
25 August 2011	93.49
26 August 2011	93.31
29 August 2011	93.09
30 August 2011	93.24
31 August 2011	93.00
1 September 2011	93.07
2 September 2011	93.39
5 September 2011	93.39
6 September 2011	94.34
7 September 2011	94.15
8 September 2011	94.29
9 September 2011	95.09
12 September 2011	95.37
13 September 2011	95.45
14 September 2011	95.64
15 September 2011	95.31
16 September 2011	95.36
19 September 2011	96.18
20 September 2011	96.13
21 September 2011	96.60
22 September 2011	98.29
23 September 2011	97.91
26 September 2011	98.03
27 September 2011	97.15
28 September 2011	97.28
29 September 2011	97.56
30 September 2011	98.24
3 October 2011	98.72
4 October 2011	99.14
5 October 2011	98.50
6 October 2011	98.16
7 October 2011	97.47
10 October 2011	97.47
11 October 2011	97.13
12 October 2011	96.57
13 October 2011	96.90
14 October 2011	96.47
17 October 2011	96.48
18 October 2011	96.82
19 October 2011	96.55
20 October 2011	97.34
21 October 2011	96.56
Processing math: 100%	96.12

25 October 2011	96.18
26 October 2011	96.30
27 October 2011	95.03
28 October 2011	94.86
31 October 2011	95.47
1 November 2011	96.96
2 November 2011	96.49
3 November 2011	96.54
4 November 2011	96.53
7 November 2011	96.60
8 November 2011	96.39
9 November 2011	96.88
10 November 2011	97.07
11 November 2011	97.07
14 November 2011	96.92
15 November 2011	97.28
16 November 2011	97.30
17 November 2011	97.37
18 November 2011	97.56
21 November 2011	98.18
22 November 2011	98.20
23 November 2011	98.91
24 November 2011	98.91
25 November 2011	99.33
28 November 2011	98.72
29 November 2011	98.43
30 November 2011	97.69
1 December 2011	97.41
2 December 2011	97.53
5 December 2011	97.29
6 December 2011	97.47
7 December 2011	97.42
8 December 2011	97.84
9 December 2011	97.80
12 December 2011	98.51
13 December 2011	98.72
14 December 2011	99.36
15 December 2011	99.05
16 December 2011	98.96
19 December 2011	99.02
20 December 2011	98.60
21 December 2011	98.68
22 December 2011	98.55
23 December 2011	98.54
27 December 2011	98.57
28 December 2011	98.97
29 December 2011	98.87
30 December 2011	98.54
3 January 2012	97.87
4 January 2012	98.14
5 January 2012	98.67
6 January 2012	98.81
9 January 2012	98.84
10 January 2012	98.36
11 January 2012	98.65
12 January 2012	98.32
13 January 2012	98.61
17 January 2012	98.11
18 January 2012	97.79
19 January 2012	97.43
20 January 2012	97.48
23 January 2012	97.10
24 January 2012	97.30
25 January 2012	97.38
26 January 2012	96.52
27 January 2012	96.37
30 January 2012	96.60
31 January 2012	96.64
Processing math: 100%	96.20

2 February 2012	95.96
3 February 2012	95.93
6 February 2012	95.90
7 February 2012	95.70
8 February 2012	95.73
9 February 2012	95.71
10 February 2012	96.18
13 February 2012	95.97
14 February 2012	96.29
15 February 2012	96.28
16 February 2012	96.43
17 February 2012	96.34
21 February 2012	96.11
22 February 2012	96.33
23 February 2012	96.20
24 February 2012	96.01
27 February 2012	96.07
28 February 2012	95.91
29 February 2012	95.85
1 March 2012	95.90
2 March 2012	96.24
5 March 2012	96.39
6 March 2012	96.92
7 March 2012	96.78
8 March 2012	96.37
9 March 2012	96.54
12 March 2012	96.78
13 March 2012	96.67
14 March 2012	97.07
15 March 2012	96.92
16 March 2012	96.67
19 March 2012	96.44
20 March 2012	96.75
21 March 2012	96.82
22 March 2012	96.94
23 March 2012	96.74
26 March 2012	96.48
27 March 2012	96.42
28 March 2012	96.73
29 March 2012	96.86
30 March 2012	96.58
2 April 2012	96.38
3 April 2012	96.31
4 April 2012	96.94
5 April 2012	97.00
6 April 2012	97.06
9 April 2012	97.09
10 April 2012	97.39
11 April 2012	97.29
12 April 2012	96.90
13 April 2012	97.16
16 April 2012	97.35
17 April 2012	96.90
18 April 2012	97.07
19 April 2012	97.22
20 April 2012	96.96
23 April 2012	97.23
24 April 2012	96.97
25 April 2012	96.91
26 April 2012	96.79
27 April 2012	96.49
30 April 2012	96.47
1 May 2012	96.47
2 May 2012	96.75
3 May 2012	96.82
4 May 2012	97.18
7 May 2012	97.22
8 May 2012	97.54
Processing math: 100%	97.90

10 May 2012	97.85
11 May 2012	97.87
14 May 2012	98.41
15 May 2012	98.67
16 May 2012	99.06
17 May 2012	99.10
18 May 2012	99.28
21 May 2012	99.22
22 May 2012	99.23
23 May 2012	100.01
24 May 2012	99.94
25 May 2012	100.10
28 May 2012	100.10
29 May 2012	100.03
30 May 2012	100.47
31 May 2012	100.84
1 June 2012	100.86
4 June 2012	100.66
5 June 2012	100.75
6 June 2012	100.18
7 June 2012	99.93
8 June 2012	100.35
11 June 2012	100.19
12 June 2012	100.23
13 June 2012	100.00
14 June 2012	99.98
15 June 2012	99.70
18 June 2012	99.80
19 June 2012	99.23
20 June 2012	99.34
21 June 2012	99.82
22 June 2012	100.11
25 June 2012	100.35
26 June 2012	100.17
27 June 2012	100.04
28 June 2012	100.18
29 June 2012	99.09
2 July 2012	99.12
3 July 2012	98.84
4 July 2012	98.84
5 July 2012	99.38
6 July 2012	99.86
9 July 2012	99.86
10 July 2012	99.71
11 July 2012	99.77
12 July 2012	100.09
13 July 2012	99.73
16 July 2012	99.57
17 July 2012	99.53
18 July 2012	99.28
19 July 2012	99.23
20 July 2012	99.54
23 July 2012	100.11
24 July 2012	100.43
25 July 2012	100.23
26 July 2012	99.56
27 July 2012	99.13
30 July 2012	99.24
31 July 2012	99.01
1 August 2012	99.05
2 August 2012	99.57
3 August 2012	98.79
6 August 2012	98.60
7 August 2012	98.68
8 August 2012	98.70
9 August 2012	98.76
10 August 2012	98.69
13 August 2012	98.77
Processing math: 100%	98.79

15 August 2012	98.87
16 August 2012	98.78
17 August 2012	98.91
20 August 2012	98.83
21 August 2012	98.51
22 August 2012	98.63
23 August 2012	98.29
24 August 2012	98.46
27 August 2012	98.51
28 August 2012	98.41
29 August 2012	98.59
30 August 2012	98.82
31 August 2012	98.38
3 September 2012	98.38
4 September 2012	98.37
5 September 2012	98.34
6 September 2012	98.11
7 September 2012	97.57
10 September 2012	97.52
11 September 2012	97.28
12 September 2012	97.25
13 September 2012	97.17
14 September 2012	96.33
17 September 2012	96.47
18 September 2012	96.70
19 September 2012	96.65
20 September 2012	96.94
21 September 2012	96.71
24 September 2012	97.00
25 September 2012	96.79
26 September 2012	97.17
27 September 2012	96.92
28 September 2012	96.96
1 October 2012	96.84
2 October 2012	96.78
3 October 2012	97.00
4 October 2012	96.63
5 October 2012	96.43
8 October 2012	96.43
9 October 2012	97.00
10 October 2012	97.02
11 October 2012	96.87
12 October 2012	96.80
15 October 2012	96.76
16 October 2012	96.66
17 October 2012	96.34
18 October 2012	96.48
19 October 2012	96.88

Note: Vertical lines indicate LSAP 2 announcement, November 3, 2010, the Draghi Speech on July 26, 2012, and the FOMC meeting, September 12-13, 2012.

Source: Federal Reserve Board of Governors

Bottom-left panel (11) Euro Area Forward Rate Spreads*

Basis points

Date	Spain	Italy
1 April 2011	231.61	184.53
4 April 2011	227.49	181.29
5 April 2011	228.35	181.38
6 April 2011	215.29	135.27
7 April 2011	215.69	172.10
8 April 2011	208.97	139.40
11 April 2011	203.72	133.29
12 April 2011	198.41	132.10
13 April 2011	203.94	138.16
14 April 2011	212.71	139.61
15 April 2011	229.13	146.04
19 April 2011	253.06	160.42

Processing math: 100%

20 April 2011	248.42	157.99
21 April 2011	246.01	161.20
25 April 2011	244.58	160.32
26 April 2011	250.39	164.34
27 April 2011	247.18	162.92
28 April 2011	243.90	163.86
29 April 2011	235.05	162.83
2 May 2011	234.22	162.46
3 May 2011	228.41	160.28
4 May 2011	225.39	158.60
5 May 2011	226.79	160.22
6 May 2011	234.10	163.54
9 May 2011	247.61	167.80
10 May 2011	240.41	161.54
11 May 2011	238.34	158.70
12 May 2011	237.85	158.50
13 May 2011	248.86	167.75
16 May 2011	244.85	161.32
17 May 2011	255.22	165.95
18 May 2011	255.16	165.48
19 May 2011	258.49	187.41
20 May 2011	264.97	189.44
23 May 2011	268.70	192.91
24 May 2011	258.54	183.42
25 May 2011	247.51	175.24
26 May 2011	248.09	177.73
27 May 2011	246.84	179.79
30 May 2011	253.78	183.86
31 May 2011	249.58	178.73
1 June 2011	248.65	177.07
2 June 2011	249.95	173.92
3 June 2011	240.44	162.94
6 June 2011	247.31	169.65
7 June 2011	247.98	168.68
8 June 2011	253.60	171.90
9 June 2011	262.03	175.85
10 June 2011	271.84	181.76
13 June 2011	274.06	182.59
14 June 2011	265.64	174.94
15 June 2011	278.15	186.44
16 June 2011	292.01	188.64
17 June 2011	281.71	187.13
20 June 2011	280.63	190.39
21 June 2011	269.77	181.58
22 June 2011	276.01	192.55
23 June 2011	288.71	194.30
24 June 2011	292.08	196.31
27 June 2011	285.70	193.12
28 June 2011	279.93	191.63
29 June 2011	275.70	185.96
30 June 2011	260.74	181.81
1 July 2011	254.73	180.68
4 July 2011	256.74	183.64
5 July 2011	257.82	191.49
6 July 2011	273.19	207.77
7 July 2011	273.34	205.17
8 July 2011	292.60	219.80
11 July 2011	325.60	250.28
12 July 2011	315.26	245.89
13 July 2011	309.58	257.15
14 July 2011	313.54	269.84
15 July 2011	336.68	283.33
18 July 2011	358.99	296.43
19 July 2011	343.53	280.14
20 July 2011	326.62	260.85
21 July 2011	304.01	240.68
22 July 2011	313.45	257.50
25 July 2011	336.07	276.42
Processing math: 100%	332.93	274.97

27 July 2011	336.87	303.08
28 July 2011	344.69	311.87
29 July 2011	357.26	323.26
1 August 2011	381.53	346.55
2 August 2011	391.01	359.76
3 August 2011	386.42	361.55
4 August 2011	402.00	356.37
5 August 2011	363.22	335.80
8 August 2011	288.82	282.82
9 August 2011	276.53	265.44
10 August 2011	278.60	269.78
11 August 2011	263.57	241.54
12 August 2011	257.82	238.14
15 August 2011	251.31	237.72
16 August 2011	250.96	236.68
17 August 2011	263.40	246.20
18 August 2011	282.95	260.21
19 August 2011	279.84	258.22
22 August 2011	274.38	260.93
23 August 2011	277.05	259.84
24 August 2011	267.42	259.99
25 August 2011	269.22	266.36
26 August 2011	277.48	272.43
29 August 2011	273.39	269.79
30 August 2011	283.16	280.07
31 August 2011	274.89	277.24
1 September 2011	278.96	283.24
2 September 2011	290.23	309.73
5 September 2011	324.47	345.54
6 September 2011	316.72	325.04
7 September 2011	297.61	318.42
8 September 2011	306.02	325.02
9 September 2011	329.34	335.35
12 September 2011	351.16	318.66
13 September 2011	350.22	320.13
14 September 2011	343.67	303.52
15 September 2011	345.69	303.37
16 September 2011	346.57	308.65
19 September 2011	361.45	331.67
20 September 2011	363.95	349.76
21 September 2011	372.99	353.35
22 September 2011	376.22	364.25
23 September 2011	352.62	348.75
26 September 2011	336.44	336.53
27 September 2011	308.83	316.08
28 September 2011	343.94	327.05
29 September 2011	346.82	319.01
30 September 2011	363.77	313.10
3 October 2011	359.79	320.77
4 October 2011	368.64	325.22
5 October 2011	352.87	319.10
6 October 2011	336.93	306.04
7 October 2011	324.15	309.23
10 October 2011	293.87	309.97
11 October 2011	323.95	310.98
12 October 2011	300.56	309.04
13 October 2011	313.84	321.87
14 October 2011	307.79	305.97
17 October 2011	325.03	311.72
18 October 2011	338.22	325.84
19 October 2011	338.18	326.86
20 October 2011	359.48	339.55
21 October 2011	343.64	324.71
24 October 2011	353.35	331.28
25 October 2011	358.09	337.26
26 October 2011	376.27	325.81
27 October 2011	347.59	304.60
28 October 2011	361.31	308.08
Processing math: 100%	381.86	323.43

1 November 2011	405.06	361.90
2 November 2011	387.08	356.91
3 November 2011	372.56	355.60
4 November 2011	392.03	366.16
7 November 2011	396.52	371.11
8 November 2011	402.71	369.85
9 November 2011	427.18	400.48
10 November 2011	422.74	390.46
11 November 2011	408.97	344.33
14 November 2011	422.63	387.98
15 November 2011	458.28	420.27
16 November 2011	465.80	414.36
17 November 2011	471.28	401.93
18 November 2011	446.15	369.42
21 November 2011	467.21	367.26
22 November 2011	442.06	363.71
23 November 2011	427.45	321.27
24 November 2011	408.68	308.69
25 November 2011	395.00	315.43
28 November 2011	386.57	321.52
29 November 2011	357.66	298.43
30 November 2011	341.21	260.50
1 December 2011	311.74	263.38
2 December 2011	327.34	292.56
5 December 2011	262.71	224.55
6 December 2011	275.66	201.36
7 December 2011	305.33	227.16
8 December 2011	344.69	260.29
9 December 2011	323.93	234.07
12 December 2011	361.70	282.66
13 December 2011	350.41	301.62
14 December 2011	388.95	341.06
15 December 2011	336.41	344.93
16 December 2011	370.36	363.91
19 December 2011	308.47	433.56
20 December 2011	283.56	397.05
21 December 2011	349.51	464.76
22 December 2011	357.46	471.21
23 December 2011	362.60	481.06
26 December 2011	361.90	480.62
27 December 2011	360.77	481.72
28 December 2011	352.79	500.97
29 December 2011	366.23	477.31
30 December 2011	367.60	475.54
2 January 2012	349.79	473.20
3 January 2012	374.85	471.29
4 January 2012	391.99	465.40
5 January 2012	416.57	475.01
6 January 2012	409.66	472.44
9 January 2012	369.11	468.30
10 January 2012	371.03	456.82
11 January 2012	380.51	461.77
12 January 2012	361.96	439.37
13 January 2012	417.44	444.40
16 January 2012	380.25	502.47
17 January 2012	369.08	436.42
18 January 2012	365.74	432.33
19 January 2012	362.62	425.88
20 January 2012	422.00	411.79
23 January 2012	420.65	402.55
24 January 2012	421.33	405.54
25 January 2012	411.79	414.73
26 January 2012	406.12	402.45
27 January 2012	371.33	385.63
30 January 2012	384.58	470.22
31 January 2012	364.72	403.47
1 February 2012	341.79	375.97
2 February 2012	355.93	384.24
Processing math: 100%	346.81	439.16

6 February 2012	353.74	433.59
7 February 2012	354.26	361.75
8 February 2012	369.97	362.69
9 February 2012	368.21	349.25
10 February 2012	406.89	425.77
13 February 2012	402.83	423.47
14 February 2012	407.06	418.11
15 February 2012	429.93	442.01
16 February 2012	414.71	419.03
17 February 2012	398.95	406.11
20 February 2012	374.13	392.64
21 February 2012	373.19	392.61
22 February 2012	359.10	411.96
23 February 2012	359.01	412.15
24 February 2012	355.30	401.71
27 February 2012	359.10	413.76
28 February 2012	370.71	417.77
29 February 2012	367.37	404.93
1 March 2012	347.37	389.40
2 March 2012	358.29	384.75
5 March 2012	363.95	385.21
6 March 2012	400.29	409.79
7 March 2012	392.63	384.62
8 March 2012	385.67	353.56
9 March 2012	374.63	357.38
12 March 2012	387.87	371.50
13 March 2012	373.41	348.92
14 March 2012	366.44	333.76
15 March 2012	373.83	335.32
16 March 2012	372.54	329.86
19 March 2012	388.01	280.29
20 March 2012	398.34	293.14
21 March 2012	412.42	299.44
22 March 2012	427.03	314.89
23 March 2012	414.21	320.42
26 March 2012	397.60	307.58
27 March 2012	404.90	313.90
28 March 2012	387.08	328.03
29 March 2012	391.91	325.84
30 March 2012	383.90	320.79
2 April 2012	378.49	326.55
3 April 2012	385.10	333.15
4 April 2012	401.30	342.14
5 April 2012	419.99	363.13
9 April 2012	449.48	371.55
10 April 2012	472.96	396.81
11 April 2012	432.25	347.92
12 April 2012	425.53	333.85
13 April 2012	455.31	356.71
16 April 2012	473.15	369.66
17 April 2012	454.45	358.63
18 April 2012	450.43	362.51
19 April 2012	463.56	379.29
20 April 2012	471.63	389.06
23 April 2012	478.66	405.77
24 April 2012	456.65	398.42
25 April 2012	422.79	389.76
26 April 2012	424.12	389.39
27 April 2012	425.41	386.30
30 April 2012	410.41	375.31
1 May 2012	409.23	374.33
2 May 2012	419.51	387.96
3 May 2012	421.37	397.80
4 May 2012	413.88	392.03
7 May 2012	449.02	391.62
8 May 2012	467.72	410.07
9 May 2012	492.99	416.79
10 May 2012	486.96	413.11
Processing math: 100%	480.97	415.96

14 May 2012	508.21	434.02
15 May 2012	511.79	441.71
16 May 2012	507.77	435.78
17 May 2012	518.02	433.94
18 May 2012	507.88	427.85
21 May 2012	501.71	425.08
22 May 2012	472.80	394.34
23 May 2012	459.27	408.17
24 May 2012	457.84	392.58
25 May 2012	466.89	405.16
28 May 2012	482.12	397.46
29 May 2012	463.16	398.58
30 May 2012	486.14	410.12
31 May 2012	487.05	413.96
1 June 2012	491.55	397.71
4 June 2012	455.80	400.36
5 June 2012	465.49	396.85
6 June 2012	452.06	396.37
7 June 2012	447.09	407.08
8 June 2012	475.31	414.57
11 June 2012	533.36	437.16
12 June 2012	531.18	426.12
13 June 2012	525.33	411.62
14 June 2012	517.21	396.55
15 June 2012	548.73	382.57
18 June 2012	561.51	401.11
19 June 2012	533.45	376.01
20 June 2012	489.77	357.30
21 June 2012	502.50	377.39
22 June 2012	470.03	378.52
25 June 2012	503.33	391.46
26 June 2012	515.73	390.26
27 June 2012	483.43	390.70
28 June 2012	471.92	398.08
29 June 2012	454.65	385.04
2 July 2012	468.24	384.71
3 July 2012	464.92	382.46
4 July 2012	489.08	405.55
5 July 2012	513.33	426.03
6 July 2012	571.28	430.72
9 July 2012	575.22	423.37
10 July 2012	555.16	405.68
11 July 2012	535.76	409.75
12 July 2012	542.87	418.91
13 July 2012	556.64	450.63
16 July 2012	568.18	474.94
17 July 2012	560.46	451.16
18 July 2012	568.04	457.02
19 July 2012	566.83	445.15
20 July 2012	569.63	457.23
23 July 2012	549.08	454.91
24 July 2012	543.53	452.34
25 July 2012	538.08	440.63
26 July 2012	510.30	421.87
27 July 2012	492.83	409.94
30 July 2012	489.37	422.17
31 July 2012	509.26	429.66
1 August 2012	506.58	415.35
2 August 2012	607.60	493.97
3 August 2012	585.48	472.45
6 August 2012	617.58	473.60
7 August 2012	615.26	449.99
8 August 2012	608.98	449.07
9 August 2012	601.09	436.84
10 August 2012	612.23	438.28
13 August 2012	586.12	430.90
14 August 2012	554.01	415.71
15 August 2012	528.77	401.63
Processing math: 100%	520.22	413.83

17 August 2012	534.63	425.79
20 August 2012	519.13	427.45
21 August 2012	514.44	405.85
22 August 2012	524.38	418.08
23 August 2012	535.39	424.04
24 August 2012	553.31	430.28
27 August 2012	549.92	430.42
28 August 2012	570.52	453.36
29 August 2012	572.38	440.95
30 August 2012	594.66	441.74
31 August 2012	645.35	453.20
3 September 2012	644.64	445.25
4 September 2012	642.20	453.72
5 September 2012	591.95	422.89
6 September 2012	537.56	389.91
7 September 2012	486.88	371.95
10 September 2012	477.48	380.98
11 September 2012	479.74	360.05
12 September 2012	477.81	367.99
13 September 2012	479.07	364.70
14 September 2012	464.13	346.11
17 September 2012	480.43	357.02
18 September 2012	479.33	357.66
19 September 2012	469.11	348.37
20 September 2012	483.21	358.48
21 September 2012	485.24	360.64
24 September 2012	482.54	358.46
25 September 2012	482.89	358.32
26 September 2012	531.26	385.16
27 September 2012	520.51	376.79
28 September 2012	513.30	379.85
1 October 2012	510.02	385.91
2 October 2012	508.66	383.42
3 October 2012	512.68	386.52
4 October 2012	525.88	395.27
5 October 2012	504.19	383.63
8 October 2012	514.71	389.96
9 October 2012	521.39	386.02
10 October 2012	514.49	379.20
11 October 2012	510.60	366.81
12 October 2012	510.90	371.72
15 October 2012	531.35	403.24
16 October 2012	522.82	353.34
17 October 2012	475.82	357.09
18 October 2012	458.65	354.91
19 October 2012	464.03	361.28

* 5-year, 5-year forward rate spreads to Germany. [Return to text](#)

Note: Vertical lines indicate the Draghi Speech on July 26, and OMT Details Announced on September 6, 2012.

Source: Bloomberg

Bottom-right panel (12) Uncertainty-Related Indicators

Baker-Bloom-Davis Policy Uncertainty Index

Date	Index Level
30 July 2010	175.31
30 August 2010	151.46
30 September 2010	185.47
30 October 2010	179.05
30 November 2010	176.07
30 December 2010	153.98
30 January 2011	152.35
2 March 2011	154.95
30 March 2011	181.76
30 April 2011	156.52
30 May 2011	139.21
30 June 2011	175.22
Processing math: 100%	205.80

30 August 2011	267.56
30 September 2011	230.69
30 October 2011	200.29
30 November 2011	207.13
30 December 2011	202.05
30 January 2012	167.33
1 March 2012	148.94
30 March 2012	136.23
30 April 2012	125.65
30 May 2012	178.69
30 June 2012	212.26
30 July 2012	201.37
30 August 2012	163.33
30 September 2012	185.30

Source: Baker, Bloom, and Davis (2012)

VIX Index

Date	Percent
30 July 2010	23.50
2 August 2010	22.01
3 August 2010	22.63
4 August 2010	22.21
5 August 2010	22.10
6 August 2010	21.74
9 August 2010	22.14
10 August 2010	22.37
11 August 2010	25.39
12 August 2010	25.73
13 August 2010	26.24
16 August 2010	26.10
17 August 2010	24.33
18 August 2010	24.59
19 August 2010	26.44
20 August 2010	25.49
23 August 2010	25.66
24 August 2010	27.46
25 August 2010	26.70
26 August 2010	27.37
27 August 2010	24.45
30 August 2010	27.21
31 August 2010	26.05
1 September 2010	23.89
2 September 2010	23.19
3 September 2010	21.31
6 September 2010	21.31
7 September 2010	23.80
8 September 2010	23.25
9 September 2010	22.81
10 September 2010	21.99
13 September 2010	21.21
14 September 2010	21.56
15 September 2010	22.10
16 September 2010	21.72
17 September 2010	22.01
20 September 2010	21.50
21 September 2010	22.35
22 September 2010	22.51
23 September 2010	23.87
24 September 2010	21.71
27 September 2010	22.54
28 September 2010	22.60
29 September 2010	23.25
30 September 2010	23.70
1 October 2010	22.50
4 October 2010	23.53
5 October 2010	21.76
6 October 2010	21.49
Processing math: 100%	21.56

8 October 2010	20.71
11 October 2010	18.96
12 October 2010	18.93
13 October 2010	19.07
14 October 2010	19.88
15 October 2010	19.03
18 October 2010	19.09
19 October 2010	20.63
20 October 2010	19.79
21 October 2010	19.27
22 October 2010	18.78
25 October 2010	19.85
26 October 2010	20.22
27 October 2010	20.71
28 October 2010	20.88
29 October 2010	21.20
1 November 2010	21.83
2 November 2010	21.57
3 November 2010	19.56
4 November 2010	18.52
5 November 2010	18.26
8 November 2010	18.29
9 November 2010	19.08
10 November 2010	18.47
11 November 2010	18.64
12 November 2010	20.61
15 November 2010	20.20
16 November 2010	22.58
17 November 2010	21.76
18 November 2010	18.75
19 November 2010	18.04
22 November 2010	18.37
23 November 2010	20.63
24 November 2010	19.56
25 November 2010	19.56
26 November 2010	22.22
29 November 2010	21.53
30 November 2010	23.54
1 December 2010	21.36
2 December 2010	19.39
3 December 2010	18.01
6 December 2010	18.02
7 December 2010	17.99
8 December 2010	17.74
9 December 2010	17.25
10 December 2010	17.61
13 December 2010	17.55
14 December 2010	17.61
15 December 2010	17.94
16 December 2010	17.39
17 December 2010	16.11
20 December 2010	16.41
21 December 2010	16.49
22 December 2010	15.45
23 December 2010	16.47
24 December 2010	16.47
27 December 2010	17.67
28 December 2010	17.52
29 December 2010	17.28
30 December 2010	17.52
31 December 2010	17.75
3 January 2011	17.61
4 January 2011	17.38
5 January 2011	17.02
6 January 2011	17.40
7 January 2011	17.14
10 January 2011	17.54
11 January 2011	16.89
Processing math: 100%	16.24

13 January 2011	16.39
14 January 2011	15.46
17 January 2011	15.46
18 January 2011	15.87
19 January 2011	17.31
20 January 2011	17.99
21 January 2011	18.47
24 January 2011	17.65
25 January 2011	17.59
26 January 2011	16.64
27 January 2011	16.15
28 January 2011	20.04
31 January 2011	19.53
1 February 2011	17.63
2 February 2011	17.30
3 February 2011	16.69
4 February 2011	15.93
7 February 2011	16.28
8 February 2011	15.81
9 February 2011	15.87
10 February 2011	16.09
11 February 2011	15.69
14 February 2011	15.95
15 February 2011	16.37
16 February 2011	16.72
17 February 2011	16.59
18 February 2011	16.43
21 February 2011	16.43
22 February 2011	20.80
23 February 2011	22.13
24 February 2011	21.32
25 February 2011	19.22
28 February 2011	18.35
1 March 2011	21.01
2 March 2011	20.70
3 March 2011	18.60
4 March 2011	19.06
7 March 2011	20.66
8 March 2011	19.82
9 March 2011	20.22
10 March 2011	21.88
11 March 2011	20.08
14 March 2011	21.13
15 March 2011	24.32
16 March 2011	29.40
17 March 2011	26.37
18 March 2011	24.44
21 March 2011	20.61
22 March 2011	20.21
23 March 2011	19.17
24 March 2011	18.00
25 March 2011	17.91
28 March 2011	19.44
29 March 2011	18.16
30 March 2011	17.71
31 March 2011	17.74
1 April 2011	17.40
4 April 2011	17.50
5 April 2011	17.25
6 April 2011	16.90
7 April 2011	17.11
8 April 2011	17.87
11 April 2011	16.59
12 April 2011	17.09
13 April 2011	16.92
14 April 2011	16.27
15 April 2011	15.32
18 April 2011	16.96
Processing math: 100%	15.83

20 April 2011	15.07
21 April 2011	14.69
22 April 2011	14.69
25 April 2011	15.77
26 April 2011	15.62
27 April 2011	15.35
28 April 2011	14.62
29 April 2011	14.75
2 May 2011	15.99
3 May 2011	16.70
4 May 2011	17.08
5 May 2011	18.20
6 May 2011	18.40
9 May 2011	17.16
10 May 2011	15.91
11 May 2011	16.95
12 May 2011	16.03
13 May 2011	17.07
16 May 2011	18.24
17 May 2011	17.55
18 May 2011	16.23
19 May 2011	15.52
20 May 2011	17.43
23 May 2011	18.27
24 May 2011	17.82
25 May 2011	17.07
26 May 2011	16.09
27 May 2011	15.98
30 May 2011	15.98
31 May 2011	15.45
1 June 2011	18.30
2 June 2011	18.09
3 June 2011	17.95
6 June 2011	18.49
7 June 2011	18.07
8 June 2011	18.79
9 June 2011	17.77
10 June 2011	18.86
13 June 2011	19.61
14 June 2011	18.26
15 June 2011	21.32
16 June 2011	22.73
17 June 2011	21.85
20 June 2011	19.99
21 June 2011	18.86
22 June 2011	18.52
23 June 2011	19.29
24 June 2011	21.10
27 June 2011	20.56
28 June 2011	19.17
29 June 2011	17.27
30 June 2011	16.52
1 July 2011	15.87
4 July 2011	15.87
5 July 2011	16.06
6 July 2011	16.34
7 July 2011	15.95
8 July 2011	15.95
11 July 2011	18.39
12 July 2011	19.87
13 July 2011	19.91
14 July 2011	20.80
15 July 2011	19.53
18 July 2011	20.95
19 July 2011	19.21
20 July 2011	19.09
21 July 2011	17.56
22 July 2011	17.52
Processing math: 100%	19.35

26 July 2011	20.23
27 July 2011	22.98
28 July 2011	23.74
29 July 2011	25.25
1 August 2011	23.66
2 August 2011	24.79
3 August 2011	23.38
4 August 2011	31.66
5 August 2011	32.00
8 August 2011	48.00
9 August 2011	35.06
10 August 2011	42.99
11 August 2011	39.00
12 August 2011	36.36
15 August 2011	31.87
16 August 2011	32.85
17 August 2011	31.58
18 August 2011	42.67
19 August 2011	43.05
22 August 2011	42.44
23 August 2011	36.27
24 August 2011	35.90
25 August 2011	39.76
26 August 2011	35.59
29 August 2011	32.28
30 August 2011	32.89
31 August 2011	31.62
1 September 2011	31.82
2 September 2011	33.92
5 September 2011	33.92
6 September 2011	37.00
7 September 2011	33.38
8 September 2011	34.32
9 September 2011	38.52
12 September 2011	38.59
13 September 2011	36.91
14 September 2011	34.60
15 September 2011	31.97
16 September 2011	30.98
19 September 2011	32.73
20 September 2011	32.86
21 September 2011	37.32
22 September 2011	41.35
23 September 2011	41.25
26 September 2011	39.02
27 September 2011	37.71
28 September 2011	41.08
29 September 2011	38.84
30 September 2011	42.96
3 October 2011	45.45
4 October 2011	40.82
5 October 2011	37.81
6 October 2011	36.27
7 October 2011	36.20
10 October 2011	33.02
11 October 2011	32.86
12 October 2011	31.26
13 October 2011	30.70
14 October 2011	28.24
17 October 2011	33.39
18 October 2011	31.56
19 October 2011	34.44
20 October 2011	34.78
21 October 2011	31.32
24 October 2011	29.26
25 October 2011	32.22
26 October 2011	29.86
27 October 2011	25.46
Processing math: 100%	24.53

31 October 2011	29.96
1 November 2011	34.77
2 November 2011	32.74
3 November 2011	30.50
4 November 2011	30.16
7 November 2011	29.85
8 November 2011	27.48
9 November 2011	36.16
10 November 2011	32.81
11 November 2011	30.04
14 November 2011	31.13
15 November 2011	31.22
16 November 2011	33.51
17 November 2011	34.51
18 November 2011	32.00
21 November 2011	32.91
22 November 2011	31.97
23 November 2011	33.98
24 November 2011	33.98
25 November 2011	34.47
28 November 2011	32.13
29 November 2011	30.64
30 November 2011	27.80
1 December 2011	27.41
2 December 2011	27.52
5 December 2011	27.84
6 December 2011	28.13
7 December 2011	28.67
8 December 2011	30.59
9 December 2011	26.38
12 December 2011	25.67
13 December 2011	25.41
14 December 2011	26.04
15 December 2011	25.11
16 December 2011	24.29
19 December 2011	24.92
20 December 2011	23.22
21 December 2011	21.43
22 December 2011	21.16
23 December 2011	20.73
26 December 2011	20.73
27 December 2011	21.91
28 December 2011	23.52
29 December 2011	22.65
30 December 2011	23.40
2 January 2012	23.40
3 January 2012	22.97
4 January 2012	22.22
5 January 2012	21.48
6 January 2012	20.63
9 January 2012	21.07
10 January 2012	20.69
11 January 2012	21.05
12 January 2012	20.47
13 January 2012	20.91
16 January 2012	20.91
17 January 2012	22.20
18 January 2012	20.89
19 January 2012	19.87
20 January 2012	18.28
23 January 2012	18.67
24 January 2012	18.91
25 January 2012	18.31
26 January 2012	18.57
27 January 2012	18.53
30 January 2012	19.40
31 January 2012	19.44
1 February 2012	18.55
Processing math: 100%	17.98

3 February 2012	17.10
6 February 2012	17.76
7 February 2012	17.65
8 February 2012	18.16
9 February 2012	18.63
10 February 2012	20.79
13 February 2012	19.04
14 February 2012	19.54
15 February 2012	21.14
16 February 2012	19.22
17 February 2012	17.78
20 February 2012	17.78
21 February 2012	18.19
22 February 2012	18.19
23 February 2012	16.80
24 February 2012	17.31
27 February 2012	18.19
28 February 2012	17.96
29 February 2012	18.43
1 March 2012	17.26
2 March 2012	17.29
5 March 2012	18.05
6 March 2012	20.87
7 March 2012	19.07
8 March 2012	17.95
9 March 2012	17.11
12 March 2012	15.64
13 March 2012	14.80
14 March 2012	15.31
15 March 2012	15.42
16 March 2012	14.47
19 March 2012	15.04
20 March 2012	15.58
21 March 2012	15.13
22 March 2012	15.57
23 March 2012	14.82
26 March 2012	14.26
27 March 2012	15.59
28 March 2012	15.47
29 March 2012	15.48
30 March 2012	15.50
2 April 2012	15.64
3 April 2012	15.66
4 April 2012	16.44
5 April 2012	16.70
6 April 2012	16.70
9 April 2012	18.81
10 April 2012	20.39
11 April 2012	20.02
12 April 2012	17.20
13 April 2012	19.55
16 April 2012	19.55
17 April 2012	18.46
18 April 2012	18.64
19 April 2012	18.36
20 April 2012	17.44
23 April 2012	18.97
24 April 2012	18.10
25 April 2012	16.82
26 April 2012	16.24
27 April 2012	16.32
30 April 2012	17.15
1 May 2012	16.60
2 May 2012	16.88
3 May 2012	17.56
4 May 2012	19.16
7 May 2012	18.94
8 May 2012	19.05
Processing math: 100%	20.08

10 May 2012	18.83
11 May 2012	19.89
14 May 2012	21.87
15 May 2012	21.97
16 May 2012	22.27
17 May 2012	24.49
18 May 2012	25.10
21 May 2012	22.01
22 May 2012	22.48
23 May 2012	22.33
24 May 2012	21.54
25 May 2012	21.76
28 May 2012	21.76
29 May 2012	21.03
30 May 2012	24.14
31 May 2012	24.06
1 June 2012	26.66
4 June 2012	26.12
5 June 2012	24.68
6 June 2012	22.16
7 June 2012	21.72
8 June 2012	21.23
11 June 2012	23.56
12 June 2012	22.09
13 June 2012	24.27
14 June 2012	21.68
15 June 2012	21.11
18 June 2012	18.32
19 June 2012	18.38
20 June 2012	17.24
21 June 2012	20.08
22 June 2012	18.11
25 June 2012	20.38
26 June 2012	19.72
27 June 2012	19.45
28 June 2012	19.71
29 June 2012	17.08
2 July 2012	16.80
3 July 2012	16.66
4 July 2012	16.66
5 July 2012	17.50
6 July 2012	17.10
9 July 2012	17.98
10 July 2012	18.72
11 July 2012	17.95
12 July 2012	18.33
13 July 2012	16.74
16 July 2012	17.11
17 July 2012	16.48
18 July 2012	16.16
19 July 2012	15.45
20 July 2012	16.27
23 July 2012	18.62
24 July 2012	20.47
25 July 2012	19.34
26 July 2012	17.53
27 July 2012	16.70
30 July 2012	18.03
31 July 2012	18.93
1 August 2012	18.96
2 August 2012	17.57
3 August 2012	15.64
6 August 2012	15.95
7 August 2012	15.99
8 August 2012	15.32
9 August 2012	15.28
10 August 2012	14.74
13 August 2012	13.70
Processing math: 100%	14.85

15 August 2012	14.63
16 August 2012	14.29
17 August 2012	13.45
20 August 2012	14.02
21 August 2012	15.02
22 August 2012	15.11
23 August 2012	15.96
24 August 2012	15.18
27 August 2012	16.35
28 August 2012	16.49
29 August 2012	17.06
30 August 2012	17.83
31 August 2012	17.47
3 September 2012	17.47
4 September 2012	17.98
5 September 2012	17.74
6 September 2012	15.60
7 September 2012	14.38
10 September 2012	16.28
11 September 2012	16.41
12 September 2012	15.80
13 September 2012	14.05
14 September 2012	14.51
17 September 2012	14.59
18 September 2012	14.18
19 September 2012	13.88
20 September 2012	14.07
21 September 2012	13.98
24 September 2012	14.15
25 September 2012	15.43
26 September 2012	16.81
27 September 2012	14.84
28 September 2012	15.73
1 October 2012	16.32
2 October 2012	15.71
3 October 2012	15.43
4 October 2012	14.55
5 October 2012	14.33
8 October 2012	15.11
9 October 2012	16.37
10 October 2012	16.29
11 October 2012	15.59
12 October 2012	16.14
15 October 2012	15.27
16 October 2012	15.22
17 October 2012	15.07
18 October 2012	15.03
19 October 2012	17.06

Source: Bloomberg

Exhibit 3

Top-left panel (13) Projected MBS Purchases and Issuance

\$ Billions

Period	Gross Issuance	Purchases
October 2011	70.08	22.22
November 2011	80.56	27.77
December 2011	86.76	28.44
January 2012	77.79	26.87
February 2012	81.44	22.93
March 2012	103.55	30.32
April 2012	71.69	29.15
May 2012	82.04	24.95
June 2012	81.88	25.32
July 2012	80.80	25.46
Processing math: 100%	99.85	32.18

September 2012	103.62	59.38
October 2012	90.80	70.13
November 2012	93.92	73.61
December 2012	101.83	75.91
January 2013	102.03	76.39
February 2013	95.21	77.56
March 2013	94.54	77.92
April 2013	95.57	77.36
May 2013	91.44	76.65
June 2013	88.16	75.30

* Adjusted TBA-eligible issuance. [Return to table](#)

** Reinvestment projections based on baseline forecast for rate path. [Return to table](#)

Note: A vertical line indicates the forecast period, which begins in October 2012.

Source: Federal Reserve Bank of New York, BlackRock, eMBS, KDS

Top-right panel (14) MBS Purchase Allocations

	30-Year				15-Year
	2.5%	3.0%	3.5%	4.0%	
Reinvestments*	0%	13%	56%	21%	10%
Post-FOMC**	1%	60%	20%	0%	19%
Current	2%	59%	18%	0%	21%

* Average over entire reinvestment period until September FOMC. [Return to table](#)

** Average over post-FOMC period. [Return to table](#)

Source: Federal Reserve Bank of New York

Middle-left panel (15) Dollar Roll Implied Financing Rates*

Basis points

Date	3.5% Front Month	3.0% Next Month
1 August 2011	11.27	ND
2 August 2011	7.40	ND
3 August 2011	6.14	ND
4 August 2011	2.38	ND
5 August 2011	11.20	ND
8 August 2011	-4.23	ND
9 August 2011	-8.87	ND
10 August 2011	-24.61	ND
11 August 2011	-14.56	ND
12 August 2011	-16.94	ND
15 August 2011	-19.41	ND
16 August 2011	-21.68	ND
17 August 2011	-21.95	ND
18 August 2011	-14.00	ND
19 August 2011	-16.91	ND
22 August 2011	-16.45	ND
23 August 2011	-19.67	ND
24 August 2011	-12.21	ND
25 August 2011	-14.01	ND
26 August 2011	-15.06	ND
29 August 2011	-17.34	ND
30 August 2011	-15.37	ND
31 August 2011	-13.44	ND
1 September 2011	-10.66	ND
2 September 2011	-13.39	ND
6 September 2011	-4.36	ND
7 September 2011	6.30	ND
8 September 2011	-10.18	ND
9 September 2011	-12.45	ND
12 September 2011	-2.52	ND
13 September 2011	-1.41	ND
14 September 2011	-1.53	ND
15 September 2011	0.13	ND
16 September 2011	-4.24	ND
Processing math: 100%	-7.70	ND

20 September 2011	-7.26	ND
21 September 2011	-15.48	ND
22 September 2011	-40.78	ND
23 September 2011	-38.98	ND
26 September 2011	-24.32	ND
27 September 2011	-20.22	ND
28 September 2011	-21.10	ND
29 September 2011	-23.53	ND
30 September 2011	-24.47	ND
3 October 2011	-23.37	ND
4 October 2011	-16.81	ND
5 October 2011	-9.90	ND
6 October 2011	-3.82	ND
7 October 2011	-20.89	ND
11 October 2011	-9.61	ND
12 October 2011	-13.03	ND
13 October 2011	-10.49	ND
14 October 2011	-7.12	ND
17 October 2011	-15.61	ND
18 October 2011	-16.12	ND
19 October 2011	-20.59	ND
20 October 2011	-19.47	ND
21 October 2011	-19.20	ND
24 October 2011	-17.80	ND
25 October 2011	-22.47	ND
26 October 2011	-19.65	ND
27 October 2011	-14.06	ND
28 October 2011	-19.09	ND
31 October 2011	-19.20	ND
1 November 2011	-12.12	ND
2 November 2011	-11.74	ND
3 November 2011	-4.17	ND
4 November 2011	-0.99	ND
7 November 2011	8.00	ND
8 November 2011	15.38	ND
9 November 2011	13.74	ND
10 November 2011	11.10	ND
14 November 2011	11.12	ND
15 November 2011	11.53	ND
16 November 2011	15.10	ND
17 November 2011	26.87	ND
18 November 2011	28.81	ND
21 November 2011	31.84	ND
22 November 2011	31.13	ND
23 November 2011	30.64	ND
25 November 2011	33.31	ND
28 November 2011	31.96	ND
29 November 2011	35.91	ND
30 November 2011	35.53	ND
1 December 2011	45.47	ND
2 December 2011	43.21	ND
5 December 2011	30.13	ND
6 December 2011	26.02	ND
7 December 2011	-1.29	ND
8 December 2011	-15.16	ND
9 December 2011	-7.76	ND
12 December 2011	-8.45	ND
13 December 2011	-10.41	ND
14 December 2011	-9.08	ND
15 December 2011	-7.46	ND
16 December 2011	-8.58	ND
19 December 2011	-5.31	ND
20 December 2011	-2.21	ND
21 December 2011	-1.38	ND
22 December 2011	-1.88	ND
23 December 2011	0.67	ND
27 December 2011	-0.09	ND
28 December 2011	-3.68	ND
Processing math: 100%	-4.83	ND

30 December 2011	-5.60	ND
3 January 2012	0.76	ND
4 January 2012	0.66	ND
5 January 2012	-0.37	ND
6 January 2012	-10.17	ND
9 January 2012	-32.56	ND
10 January 2012	-20.41	ND
11 January 2012	-17.44	ND
12 January 2012	-17.93	ND
13 January 2012	-22.76	ND
17 January 2012	-21.18	ND
18 January 2012	-18.17	ND
19 January 2012	-19.61	ND
20 January 2012	-18.08	ND
23 January 2012	-17.86	ND
24 January 2012	-18.52	ND
25 January 2012	-17.30	ND
26 January 2012	-22.17	ND
27 January 2012	-28.86	ND
30 January 2012	-30.23	ND
31 January 2012	-31.18	ND
1 February 2012	-27.54	ND
2 February 2012	-28.81	ND
3 February 2012	-24.99	ND
6 February 2012	-27.13	ND
7 February 2012	-30.66	ND
8 February 2012	-51.12	ND
9 February 2012	-50.12	ND
10 February 2012	-57.61	ND
13 February 2012	-61.52	ND
14 February 2012	-74.80	ND
15 February 2012	-88.36	ND
16 February 2012	-91.61	ND
17 February 2012	-94.30	ND
21 February 2012	-90.85	ND
22 February 2012	-85.80	ND
23 February 2012	-87.53	ND
24 February 2012	-86.45	ND
27 February 2012	-88.54	ND
28 February 2012	-89.04	ND
29 February 2012	-76.95	ND
1 March 2012	-69.45	ND
2 March 2012	-58.20	ND
5 March 2012	-53.77	ND
6 March 2012	-51.72	ND
7 March 2012	-35.60	ND
8 March 2012	-33.88	ND
9 March 2012	-34.95	ND
12 March 2012	-36.26	ND
13 March 2012	-30.94	ND
14 March 2012	-25.32	ND
15 March 2012	-30.83	ND
16 March 2012	-31.95	ND
19 March 2012	-29.96	ND
20 March 2012	-29.96	ND
21 March 2012	-26.29	ND
22 March 2012	-22.26	ND
23 March 2012	-23.16	ND
26 March 2012	-24.28	ND
27 March 2012	-27.89	ND
28 March 2012	-22.76	ND
29 March 2012	-20.49	ND
30 March 2012	-17.92	ND
2 April 2012	-16.73	ND
3 April 2012	-7.13	ND
4 April 2012	-5.27	ND
5 April 2012	-7.92	ND
6 April 2012	-13.99	ND
Processing math: 100%	-31.17	ND

10 April 2012	-37.16	ND
11 April 2012	-38.46	ND
12 April 2012	-37.11	ND
13 April 2012	-35.68	ND
16 April 2012	-36.99	ND
17 April 2012	-33.85	ND
18 April 2012	-29.01	ND
19 April 2012	-31.57	ND
20 April 2012	-30.45	ND
23 April 2012	-32.26	ND
24 April 2012	-30.66	ND
25 April 2012	-29.70	ND
26 April 2012	-30.94	ND
27 April 2012	-32.34	ND
30 April 2012	-33.09	ND
1 May 2012	-31.85	ND
2 May 2012	-37.91	ND
3 May 2012	-38.32	ND
4 May 2012	-34.88	ND
7 May 2012	-30.63	ND
8 May 2012	-31.38	ND
9 May 2012	-43.77	ND
10 May 2012	-39.77	ND
11 May 2012	-42.64	ND
14 May 2012	-45.92	ND
15 May 2012	-46.31	ND
16 May 2012	-53.58	ND
17 May 2012	-59.34	ND
18 May 2012	-58.16	ND
21 May 2012	-54.20	ND
22 May 2012	-46.79	ND
23 May 2012	-50.25	ND
24 May 2012	-48.40	ND
25 May 2012	-44.34	ND
29 May 2012	-44.23	ND
30 May 2012	-45.87	ND
31 May 2012	-44.40	ND
1 June 2012	-40.24	-67.27
4 June 2012	-30.39	-77.95
5 June 2012	-32.65	-76.87
6 June 2012	-36.62	-50.55
7 June 2012	-34.55	-51.50
8 June 2012	-52.66	-80.16
11 June 2012	-57.82	-81.68
12 June 2012	-52.24	-79.88
13 June 2012	-56.25	-41.64
14 June 2012	-61.45	-33.04
15 June 2012	-63.95	-38.18
18 June 2012	-66.78	-39.08
19 June 2012	-71.01	-43.56
20 June 2012	-93.07	-41.24
21 June 2012	-96.83	-42.29
22 June 2012	-92.55	-40.87
25 June 2012	-101.06	-43.21
26 June 2012	-96.88	-42.01
27 June 2012	-99.04	-42.92
28 June 2012	-90.52	-31.16
29 June 2012	-94.46	-28.93
2 July 2012	-97.60	-31.86
3 July 2012	-90.28	-25.95
5 July 2012	-81.78	-27.06
6 July 2012	-92.34	-16.57
9 July 2012	-128.99	-40.58
10 July 2012	-136.54	-42.65
11 July 2012	-135.70	-33.01
12 July 2012	-138.14	-33.65
13 July 2012	-131.95	-31.37
16 July 2012	-140.31	-38.87
Processing math: 100%	-137.73	-37.50

18 July 2012	-150.43	-39.99
19 July 2012	-149.10	-39.20
20 July 2012	-152.39	-42.16
23 July 2012	-154.35	-44.59
24 July 2012	-152.62	-56.23
25 July 2012	-155.34	-59.73
26 July 2012	-151.64	-63.34
27 July 2012	-141.21	-66.77
30 July 2012	-148.66	-70.12
31 July 2012	-151.35	-71.55
1 August 2012	-154.95	-67.17
2 August 2012	-158.52	-68.38
3 August 2012	-160.12	-74.73
6 August 2012	-166.75	-70.58
7 August 2012	-176.94	-53.60
8 August 2012	-131.07	10.74
9 August 2012	-128.72	11.00
10 August 2012	-128.51	-49.97
13 August 2012	-130.25	-46.24
14 August 2012	-114.45	-43.61
15 August 2012	-102.71	-39.90
16 August 2012	-106.13	-42.73
17 August 2012	-112.62	-42.99
20 August 2012	-118.92	-39.76
21 August 2012	-124.36	-39.75
22 August 2012	-140.27	-43.78
23 August 2012	-149.77	-46.61
24 August 2012	-141.74	-44.61
27 August 2012	-147.65	-42.30
28 August 2012	-149.82	-42.49
29 August 2012	-142.84	-40.76
30 August 2012	-144.19	-38.12
31 August 2012	-147.13	-33.31
4 September 2012	-140.88	-33.25
5 September 2012	-131.46	-29.15
6 September 2012	-120.46	-22.95
7 September 2012	-143.36	-25.27
10 September 2012	-91.87	-115.08
11 September 2012	-96.17	-115.27
12 September 2012	-98.60	-45.94
13 September 2012	-159.68	-85.35
14 September 2012	-150.85	-87.18
17 September 2012	-136.91	-81.70
18 September 2012	-132.18	-63.41
19 September 2012	-135.53	-57.43
20 September 2012	-147.49	-74.16
21 September 2012	-169.49	-184.97
24 September 2012	-179.17	-203.22
25 September 2012	-188.60	-105.06
26 September 2012	-192.76	-110.39
27 September 2012	-171.69	-82.66
28 September 2012	-167.29	-74.88
1 October 2012	-106.63	-64.70
2 October 2012	-92.20	-68.52
3 October 2012	-77.28	-70.82
4 October 2012	-86.14	-64.99
5 October 2012	-126.46	-77.43
9 October 2012	-103.82	-77.40
10 October 2012	-96.76	-65.53
11 October 2012	-102.47	-56.40
12 October 2012	-102.62	-60.68
15 October 2012	-108.49	-55.12
16 October 2012	-99.36	-49.94
17 October 2012	-82.79	-41.12
18 October 2012	-86.72	-38.04
19 October 2012	-98.27	-39.19

* 30-year FNMA dollar rolls. Front month is currently November-December roll; next month is currently December-January roll. [Return to text](#)

Processing math: 100% indicates Fails Charge at -200 basis points, and a vertical line indicates the FOMC meeting, September 12-13, 2012.

Source: J.P. Morgan

Middle-right panel (16) MBS Purchase Settlements*

	\$ Billions
LSAP 1 Avg**	75.99
November 2011	3.55
December 2011	40.00
January 2012	19.70
February 2012	27.00
March 2012	22.00
April 2012	38.30
May 2012	27.75
June 2012	26.80
July 2012	23.35
August 2012	18.65
September 2012	23.60
October 2012	45.65
November 2012	65.00
December 2012	17.60, and a dotted outline indicates 57.40 to be purchased

* Settlements net of realized dollar roll sales. [Return to text](#)

** Maximum settled monthly amount during LSAP 1 was \$170 billion. [Return to table](#)

Note: Vertical lines indicate reinvestments, beginning in November 2011, and projected settlements, beginning in October 2012.

Source: Federal Reserve Bank of New York, TradeWeb

Bottom-left panel (17) Increase in SOMA Portfolio Holdings* (Median Mid-2014 Forecasts)

\$ Billions

	Total	Treasuries	Agencies
October Survey Median	1140	540	600
Lower End of October Interquartile Range	903.75	371.25	532.5
Upper End of October Interquartile Range	1447.5	720	727.5
Post-FOMC Flash Survey Median	998	427.5	570.5
Pre-FOMC Flash Survey Median	597.5	300.5	297
September Survey Median	445.5	186	259.5

* Excluding one dealer. [Return to text](#)

Source: Federal Reserve Bank of New York Survey

Bottom-right panel (18) Probability Distribution of SOMA Portfolio Holdings* (Average End-2014 Forecasts)

Par Amount (\$ Billions)	Probability (Percent)
<2,500	0.6
2,500-3,000	4.7
3,000-3,500	23.2
3,500-4,000	35.9
4,000-4,500	19.1
4,500-5,000	8.3
>5,000	8.3

* Excluding one dealer. [Return to text](#)

Source: Federal Reserve Bank of New York Survey

Exhibit 3 (Cont.) (Last)

Top-left panel (19) Responses to "Substantial Improvement" in Labor Market Outlook

A word cloud. Some of the more prominent words are FOMC, unemployment, rate, month, labor, improvement, payrolls, growth, think, and market.

Source: Federal Reserve Bank of New York Survey

Top-right panel (20) Thresholds for "Substantial Improvement" in Labor Market Outlook

- 14 dealers mentioned declining unemployment rate
 - 8 gave specific level, all between 6.5% and 7.5%
- 13 dealers mentioned monthly pace of job creation

Processing math: 100% | ve specific level, median pace of 200k jobs per month

- 9 gave necessary duration of these job gains, median 6 months

- Others: Participation rate (8), above-trend growth (3)

Middle panel (21) Probability of Change in Pace of Asset Purchases*

Percent

	Within 6 Months	Within 1 Year
Treasuries Decrease	28.60	40.75
Treasuries Unch.	54.90	41.00
Treasuries Increase	17.00	19.00
MBS Decrease	11.30	34.55
MBS Unch.	76.80	49.45
MBS Increase	11.40	17.00

* Average probabilities from dealer responses, excluding one dealer. [Return to text](#)

Source: Federal Reserve Bank of New York Survey

Appendix 3: Materials used by Mr. Wilcox

Material for

Forecast Summary

David Wilcox

October 23, 2012

Class II FOMC - Restricted (FR)

Forecast Summary

Confidence Intervals Based on Tealbook Track Record

Top-left panel Real GDP

Percent change, annual rate

Period	October TB	September TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	2.48	ND	ND	ND
2011:Q3	1.28	ND	ND	ND
2011:Q4	4.09	ND	ND	ND
2012:Q1	1.96	1.96	ND	ND
2012:Q2	1.25	1.68	1.25	1.25
2012:Q3	2.01	1.29	1.31	2.61
2012:Q4	2.05	1.65	-0.25	4.20
2013:Q1	1.80	1.97	-0.56	4.42
2013:Q2	2.52	2.25	0.04	5.49
2013:Q3	3.04	2.61	0.55	6.13
2013:Q4	3.15	2.81	0.50	6.28
2014:Q1	3.41	2.94	0.54	6.42
2014:Q2	3.48	3.13	0.41	6.37
2014:Q3	3.50	3.34	0.25	6.27
2014:Q4	3.57	3.46	0.13	6.29

Top-right panel Unemployment Rate

Percent

Period	October TB	September TB	70% confidence interval, lower bound	70% confidence interval, upper bound	Natural Rate	Natural Rate with EEB
2011:Q2	9.10	ND	ND	ND	5.99	6.31
2011:Q3	9.10	ND	ND	ND	5.99	6.28
2011:Q4	8.70	ND	ND	ND	5.99	6.26
2012:Q1	8.20	ND	ND	ND	6.00	6.26
2012:Q2	8.20	8.17	8.20	8.20	6.00	6.22
2012:Q3	8.05	8.26	8.01	8.10	6.00	6.18
2012:Q4	8.02	8.27	7.85	8.18	6.00	6.16
2013:Q1	7.97	8.16	7.67	8.24	6.00	6.02
2013:Q2	7.95	8.15	7.50	8.34	6.00	6.00
2013:Q3	7.88	8.09	7.27	8.39	6.00	6.00
2013:Q4	7.78	8.04	7.00	8.41	6.00	6.00
2014:Q1	7.64	7.98	6.70	8.37	6.00	6.00

Processing math: 100%

2014:Q2	7.49	7.88	6.42	8.33	6.00	6.00
2014:Q3	7.33	7.75	6.18	8.26	6.00	6.00
2014:Q4	7.16	7.61	5.98	8.16	6.00	6.00

* Effect of emergency unemployment compensation and state-federal extended benefit programs. [Return to table](#)

Middle-left panel PCE Prices

Percent change, annual rate

Period	October TB	September TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	3.58	ND	ND	ND
2011:Q3	2.34	ND	ND	ND
2011:Q4	1.05	ND	ND	ND
2012:Q1	2.49	2.49	ND	ND
2012:Q2	0.68	0.74	0.68	0.68
2012:Q3	1.70	1.86	1.29	2.13
2012:Q4	2.15	1.72	0.76	3.62
2013:Q1	0.93	1.25	-0.52	2.45
2013:Q2	1.42	1.51	-0.12	2.96
2013:Q3	1.39	1.44	-0.12	2.93
2013:Q4	1.32	1.34	-0.22	2.84
2014:Q1	1.39	1.34	-0.20	2.94
2014:Q2	1.37	1.35	-0.24	3.01
2014:Q3	1.38	1.37	-0.23	3.00
2014:Q4	1.41	1.40	-0.19	2.99

Middle-right panel PCE Prices Excluding Food and Energy

Percent change, annual rate

Period	October TB	September TB	70% confidence interval, lower bound	70% confidence interval, upper bound
2011:Q2	2.28	ND	ND	ND
2011:Q3	1.95	ND	ND	ND
2011:Q4	1.30	ND	ND	ND
2012:Q1	2.23	2.23	ND	ND
2012:Q2	1.71	1.77	1.71	1.71
2012:Q3	1.19	1.34	0.94	1.49
2012:Q4	1.36	1.52	0.50	2.32
2013:Q1	1.59	1.60	0.67	2.58
2013:Q2	1.60	1.61	0.62	2.62
2013:Q3	1.60	1.61	0.57	2.62
2013:Q4	1.60	1.62	0.53	2.67
2014:Q1	1.68	1.64	0.59	2.77
2014:Q2	1.67	1.63	0.56	2.79
2014:Q3	1.67	1.64	0.53	2.77
2014:Q4	1.66	1.64	0.50	2.80

Bottom-left panel Monthly Change in Government Payroll Employment

Thousands

Period	Three-month moving average	October TB
January 2011	-14.00	ND
February 2011	-22.00	ND
March 2011	-20.33	ND
April 2011	-21.67	ND
May 2011	-27.33	ND
June 2011	-28.33	ND
July 2011	-50.33	ND
August 2011	-21.33	ND
September 2011	-20.00	ND
October 2011	-2.67	ND
November 2011	-20.67	ND
December 2011	-19.67	ND
January 2012	-11.33	ND
February 2012	-2.67	ND
March 2012	-0.33	ND
Processing math: 100%	-5.33	ND
May 2012	-16.67	ND

June 2012		-21.33	ND
July 2012		-9.67	ND
August 2012		15.00	ND
September 2012		24.33	24.33
October 2012		ND	17.00
November 2012		ND	0.67
December 2012		ND	-3.67

Bottom-right panel
Measures of Monthly Change in Private Payroll Employment

Thousands

Period	Establishment survey	Model estimate (current)	Model estimate (September TB)
January 2011	119	159.29	159.26
February 2011	257	182.21	182.17
March 2011	261	213.45	213.42
April 2011	264	222.73	222.70
May 2011	108	166.31	166.26
June 2011	102	143.67	143.60
July 2011	175	159.17	159.12
August 2011	52	147.87	147.82
September 2011	216	166.85	166.83
October 2011	139	159.54	159.50
November 2011	178	172.98	172.96
December 2011	234	186.75	186.75
January 2012	277	213.14	213.21
February 2012	254	219.40	219.69
March 2012	147	172.30	173.05
April 2012	85	144.01	145.94
May 2012	116	134.72	139.59
June 2012	63	113.17	125.37
July 2012	163	130.62	152.67
August 2012	97	108.55	ND
September 2012	104	108.75	ND

Note: The Kalman filter estimates treat the household survey measure (not shown) and the establishment survey measure as noisy observations of the underlying signal.

Appendix 4: Materials used by Mr. English

Material for
FOMC Briefing on Monetary Policy Alternatives

Bill English
October 23-24, 2012

Class I FOMC - Restricted Controlled (FR)

Federal Reserve Security Purchases and Holdings

Top panel
Modal Unemployment Rate at Expected End of Security Purchases: Dealer Survey

Expected End of Security Purchases	Unemployment Rate (Percent)	Alternative
2012:Q4	8.00	Alternative C
2013:Q2	7.70	
2013:Q2	7.90	
2013:Q2	8.00	Alternative B
2013:Q3	7.90	
2013:Q4	7.10	
2013:Q4	7.68	Alternative A
2013:Q4	7.70	
2013:Q4	7.70	
2014:Q1	7.40	
2014:Q1	7.45	
2014:Q1	7.50	
2014:Q1	7.60	
2014:Q2	7.10	
Processing math: 100%	7.55	

2014:Q4	7.30
2015:Q1	7.15
2015:Q3	6.59

Note. Primary dealer unemployment rates are interpolated from average Q4 values reported in the survey. Excludes six primary dealers who did not report an unemployment rate at long enough horizons. Larger dot denotes two observations.

Bottom panel Total Projected SOMA Security Holdings

Billions of dollars

Period	Alternative A	Alternative B	Alternative C
January 2006	748.82	748.82	748.82
February 2006	754.68	754.68	754.68
March 2006	758.54	758.54	758.54
April 2006	759.69	759.69	759.69
May 2006	762.41	762.41	762.41
June 2006	766.36	766.36	766.36
July 2006	764.81	764.81	764.81
August 2006	766.74	766.74	766.74
September 2006	768.92	768.92	768.92
October 2006	768.49	768.49	768.49
November 2006	772.60	772.60	772.60
December 2006	778.91	778.91	778.91
January 2007	778.86	778.86	778.86
February 2007	780.79	780.79	780.79
March 2007	780.90	780.90	780.90
April 2007	787.19	787.19	787.19
May 2007	790.27	790.27	790.27
June 2007	790.52	790.52	790.52
July 2007	790.80	790.80	790.80
August 2007	779.64	779.64	779.64
September 2007	779.63	779.63	779.63
October 2007	779.59	779.59	779.59
November 2007	779.70	779.70	779.70
December 2007	740.61	740.61	740.61
January 2008	713.38	713.38	713.38
February 2008	713.35	713.35	713.35
March 2008	591.23	591.23	591.23
April 2008	548.69	548.69	548.69
May 2008	486.90	486.90	486.90
June 2008	478.84	478.84	478.84
July 2008	479.24	479.24	479.24
August 2008	479.70	479.70	479.70
September 2008	491.13	491.13	491.13
October 2008	490.09	490.09	490.09
November 2008	488.62	488.62	488.62
December 2008	495.63	495.63	495.63
January 2009	510.79	510.79	510.79
February 2009	581.68	581.68	581.68
March 2009	779.35	779.35	779.35
April 2009	983.18	983.18	983.18
May 2009	1113.52	1113.52	1113.52
June 2009	1215.52	1215.52	1215.52
July 2009	1354.07	1354.07	1354.07
August 2009	1491.50	1491.50	1491.50
September 2009	1592.70	1592.70	1592.70
October 2009	1697.80	1697.80	1697.80
November 2009	1783.76	1783.76	1783.76
December 2009	1844.84	1844.84	1844.84
January 2010	1910.42	1910.42	1910.42
February 2010	1970.83	1970.83	1970.83
March 2010	2014.39	2014.39	2014.39
April 2010	2042.12	2042.12	2042.12
May 2010	2057.14	2057.14	2057.14
June 2010	2059.88	2059.88	2059.88
July 2010	2053.99	2053.99	2053.99
August 2010	2045.95	2045.95	2045.95
September 2010	2044.31	2044.31	2044.31
October 2010	2040.23	2040.23	2040.23

Processing math: 100%

November 2010	2081.47	2081.47	2081.47
December 2010	2161.09	2161.09	2161.09
January 2011	2238.30	2238.30	2238.30
February 2011	2319.84	2319.84	2319.84
March 2011	2410.10	2410.10	2410.10
April 2011	2472.32	2472.32	2472.32
May 2011	2567.25	2567.25	2567.25
June 2011	2645.10	2645.10	2645.10
July 2011	2647.93	2647.93	2647.93
August 2011	2646.83	2646.83	2646.83
September 2011	2643.81	2643.81	2643.81
October 2011	2619.75	2619.75	2619.75
November 2011	2605.00	2605.00	2605.00
December 2011	2605.12	2605.12	2605.12
January 2012	2597.45	2597.45	2597.45
February 2012	2603.21	2603.21	2603.21
March 2012	2594.40	2594.40	2594.40
April 2012	2603.40	2603.40	2603.40
May 2012	2606.44	2606.44	2606.44
June 2012	2606.40	2606.40	2606.40
July 2012	2589.00	2589.00	2589.00
August 2012	2573.34	2573.34	2573.34
September 2012	2563.68	2563.68	2563.68
October 2012	2567.78	2567.78	2567.78
November 2012	2600.08	2600.46	2604.35
December 2012	2648.72	2649.86	2660.71
January 2013	2733.64	2735.62	2707.86
February 2013	2819.61	2822.05	2734.40
March 2013	2906.11	2908.78	2739.96
April 2013	2993.20	2995.84	2740.49
May 2013	3081.05	3083.80	2741.80
June 2013	3169.42	3172.06	2743.78
July 2013	3257.86	3215.39	2745.74
August 2013	3345.72	3240.31	2747.27
September 2013	3433.35	3246.95	2748.47
October 2013	3520.56	3248.98	2749.31
November 2013	3607.09	3250.39	2749.85
December 2013	3693.00	3251.39	2750.21
January 2014	3733.71	3252.30	2750.51
February 2014	3756.41	3253.18	2750.80
March 2014	3761.26	3254.08	2746.06
April 2014	3762.25	3254.98	2736.37
May 2014	3763.46	3255.89	2725.83
June 2014	3764.56	3256.72	2715.53
July 2014	3765.30	3257.34	2705.42
August 2014	3765.74	3257.68	2695.40
September 2014	3765.91	3257.86	2685.41
October 2014	3765.91	3257.91	2675.41
November 2014	3765.80	3257.88	2665.35
December 2014	3765.67	3257.81	2655.24
January 2015	3766.60	3258.82	2646.16
February 2015	3767.13	3259.41	2629.84
March 2015	3761.13	3254.13	2613.51
April 2015	3748.96	3243.35	2597.19
May 2015	3735.42	3231.40	2580.86
June 2015	3721.85	3219.43	2564.54
July 2015	3708.25	3207.49	2548.22
August 2015	3694.62	3195.57	2531.89
September 2015	3680.99	3183.68	2515.57
October 2015	3667.38	3171.85	2499.25
November 2015	3653.79	3160.08	2482.92
December 2015	3640.24	3148.39	2466.60
January 2016	3619.45	3129.50	2443.00
February 2016	3558.15	3071.87	2389.14
March 2016	3509.88	3027.26	2348.31
April 2016	3457.46	2978.51	2303.33
May 2016	3393.52	2918.24	2246.83
June 2016	3355.27	2883.65	2216.02
Processing math: 100%	3320.34	2852.39	2188.53

August 2016	3282.33	2818.05	2157.96
September 2016	3250.83	2790.20	2133.89
October 2016	3219.62	2762.66	2110.12
November 2016	3170.83	2717.54	2068.76
December 2016	3134.44	2684.82	2039.82
January 2017	3100.84	2654.88	2013.65
February 2017	3058.05	2615.76	1978.31
March 2017	3022.57	2583.95	1950.27
April 2017	2985.29	2550.33	1920.42
May 2017	2930.36	2499.07	1872.93
June 2017	2895.39	2467.76	1845.39
July 2017	2857.67	2433.71	1820.79
August 2017	2807.69	2387.39	1783.93
September 2017	2773.14	2356.50	1762.49
October 2017	2741.18	2328.21	1743.64
November 2017	2694.25	2284.95	1709.83
December 2017	2651.10	2245.47	1679.80
January 2018	2606.07	2209.78	1647.88
February 2018	2546.64	2159.69	1601.57
March 2018	2503.06	2125.46	1584.57
April 2018	2456.67	2088.41	1592.50
May 2018	2385.13	2026.21	1600.44
June 2018	2341.42	1991.84	1608.38
July 2018	2293.43	1947.52	1616.32
August 2018	2232.39	1890.14	1624.26
September 2018	2196.94	1858.36	1632.21
October 2018	2152.12	1817.21	1640.17
November 2018	2078.74	1747.49	1648.15
December 2018	2038.03	1710.44	1656.10
January 2019	2002.84	1684.06	1664.58
February 2019	1935.65	1637.18	1673.08
March 2019	1891.35	1646.08	1681.56
April 2019	1838.43	1655.24	1690.06
May 2019	1758.19	1664.16	1698.57
June 2019	1712.79	1673.08	1707.08
July 2019	1677.10	1682.98	1715.61
August 2019	1657.06	1691.92	1724.16
September 2019	1666.14	1700.82	1732.67
October 2019	1674.15	1711.25	1741.20
November 2019	1683.27	1720.18	1749.75
December 2019	1692.39	1729.12	1758.29
January 2020	1701.47	1740.73	1767.39
February 2020	1711.15	1750.22	1776.09
March 2020	1720.82	1759.71	1784.77
April 2020	1729.97	1771.29	1793.48
May 2020	1739.66	1780.80	1802.21
June 2020	1749.34	1790.30	1810.92
July 2020	1759.05	1800.82	1819.66
August 2020	1768.74	1810.34	1828.41
September 2020	1778.40	1819.82	1837.13
October 2020	1788.67	1829.31	1845.88
November 2020	1798.36	1838.82	1854.65
December 2020	1808.05	1848.34	1863.44
January 2021	1818.53	1857.61	1872.57
February 2021	1827.87	1866.90	1881.72
March 2021	1837.19	1876.18	1890.86
April 2021	1855.33	1885.47	1900.02
May 2021	1864.68	1894.78	1909.20
June 2021	1873.99	1904.06	1918.35
July 2021	1892.79	1913.35	1927.53
August 2021	1902.14	1922.67	1936.73
September 2021	1911.48	1931.97	1945.93
October 2021	1931.01	1941.31	1955.15
November 2021	1940.40	1950.66	1964.40
December 2021	1949.73	1959.96	1973.60
January 2022	1965.53	1969.80	1983.34
February 2022	1975.42	1979.67	1993.10
March 2022	1985.34	1989.56	2002.88
Processing math: 100%	1995.28	1999.47	2012.69

May 2022	2005.25	2009.41	2022.53
June 2022	2015.24	2019.37	2032.40
July 2022	2025.26	2029.35	2042.30
August 2022	2035.30	2039.37	2052.23
September 2022	2045.36	2049.39	2062.17
October 2022	2055.45	2059.45	2072.14
November 2022	2065.56	2069.53	2082.14
December 2022	2075.69	2079.63	2092.16
January 2023	2086.39	2090.30	2102.74
February 2023	2097.12	2101.00	2113.36
March 2023	2107.86	2111.71	2123.98
April 2023	2118.64	2122.45	2134.64
May 2023	2129.43	2133.22	2145.32
June 2023	2140.26	2144.01	2156.03
July 2023	2151.12	2154.83	2166.76
August 2023	2162.00	2165.68	2177.53
September 2023	2172.90	2176.55	2188.31
October 2023	2183.83	2187.45	2199.13
November 2023	2194.79	2198.37	2209.97
December 2023	2205.77	2209.32	2220.84
January 2024	2217.31	2220.82	2232.26
February 2024	2228.87	2232.35	2243.71
March 2024	2240.46	2243.91	2255.18
April 2024	2252.08	2255.50	2266.69
May 2024	2263.73	2267.12	2278.23
June 2024	2275.42	2278.77	2289.80
July 2024	2287.13	2290.45	2301.40
August 2024	2298.87	2302.15	2313.02
September 2024	2310.64	2313.89	2324.68
October 2024	2322.44	2325.66	2336.37
November 2024	2334.28	2337.46	2348.10
December 2024	2346.13	2349.29	2359.84

Median dealer projection

Period	Billions of dollars
September 2012	2564
October 2012	2604
November 2012	2644
2012:H2	2684
2013:H1	3194
2013:H2	3554
2014:H1	3749
2014:H2	3749
2015:H1	3689
2015:H2	3639
2016:H1	3382
2016:H2	3259

Alternative Monetary Policy Scenarios

Top panel Federal Funds Rate

Percent

Period	Alternative A	Alternative B	Alternative C
2012:Q4	0.13	0.13	0.13
2013:Q1	0.13	0.13	0.13
2013:Q2	0.13	0.13	0.13
2013:Q3	0.13	0.13	0.13
2013:Q4	0.13	0.13	0.13
2014:Q1	0.13	0.13	0.13
2014:Q2	0.13	0.13	0.13
2014:Q3	0.13	0.13	0.30
2014:Q4	0.13	0.13	0.70
2015:Q1	0.13	0.13	0.93
2015:Q2	0.13	0.13	1.12
2015:Q3	0.30	0.30	1.34
2015:Q4	0.70	0.70	1.60

Processing math: 100%

2016:Q1	1.22	1.22	1.90
2016:Q2	1.72	1.72	2.18
2016:Q3	2.17	2.17	2.42
2016:Q4	2.57	2.57	2.64
2017:Q1	3.17	2.94	2.85
2017:Q2	3.72	3.29	3.06
2017:Q3	4.15	3.61	3.25
2017:Q4	4.43	3.92	3.44
2018:Q1	4.56	4.16	3.57
2018:Q2	4.57	4.26	3.64
2018:Q3	4.51	4.26	3.68
2018:Q4	4.42	4.21	3.72
2019:Q1	4.33	4.16	3.75
2019:Q2	4.26	4.12	3.81
2019:Q3	4.22	4.12	3.89
2019:Q4	4.21	4.13	3.99
2020:Q1	4.21	4.16	4.10
2020:Q2	4.22	4.19	4.20
2020:Q3	4.23	4.22	4.29
2020:Q4	4.24	4.25	4.36

Middle panel Unemployment Rate

Percent

Period	Alternative A	Alternative B	Alternative C
2012:Q4	8.02	8.02	8.01
2013:Q1	7.95	7.97	7.99
2013:Q2	7.92	7.95	8.03
2013:Q3	7.82	7.88	8.03
2013:Q4	7.68	7.78	8.00
2014:Q1	7.51	7.64	7.94
2014:Q2	7.33	7.49	7.87
2014:Q3	7.13	7.33	7.78
2014:Q4	6.94	7.16	7.68
2015:Q1	6.68	6.92	7.50
2015:Q2	6.43	6.68	7.32
2015:Q3	6.18	6.44	7.13
2015:Q4	5.94	6.21	6.93
2016:Q1	5.71	5.98	6.72
2016:Q2	5.52	5.78	6.53
2016:Q3	5.36	5.62	6.35
2016:Q4	5.24	5.49	6.19
2017:Q1	5.14	5.38	6.04
2017:Q2	5.07	5.28	5.90
2017:Q3	5.01	5.20	5.76
2017:Q4	4.96	5.12	5.62
2018:Q1	4.99	5.13	5.56
2018:Q2	5.03	5.15	5.52
2018:Q3	5.09	5.18	5.50
2018:Q4	5.14	5.22	5.48
2019:Q1	5.19	5.26	5.46
2019:Q2	5.23	5.28	5.44
2019:Q3	5.25	5.30	5.41
2019:Q4	5.26	5.30	5.38
2020:Q1	5.27	5.29	5.34
2020:Q2	5.27	5.28	5.31
2020:Q3	5.26	5.27	5.28
2020:Q4	5.26	5.26	5.25

Bottom panel PCE Inflation

Four-quarter average

Percent

Period	Alternative A	Alternative B	Alternative C
2012:Q4	1.79	1.75	1.66
2013:Q1	1.42	1.36	1.20
2013:Q2	1.64	1.55	1.31

Processing math: 100%

2013:Q3	1.59	1.47	1.15
2013:Q4	1.38	1.26	0.94
2014:Q1	1.50	1.38	1.04
2014:Q2	1.50	1.37	1.01
2014:Q3	1.50	1.36	1.00
2014:Q4	1.52	1.39	1.01
2015:Q1	1.55	1.41	1.03
2015:Q2	1.58	1.43	1.05
2015:Q3	1.61	1.46	1.08
2015:Q4	1.64	1.48	1.10
2016:Q1	1.69	1.54	1.16
2016:Q2	1.77	1.61	1.23
2016:Q3	1.84	1.69	1.31
2016:Q4	1.93	1.78	1.41
2017:Q1	1.99	1.85	1.48
2017:Q2	2.04	1.90	1.55
2017:Q3	2.07	1.94	1.61
2017:Q4	2.10	1.97	1.67
2018:Q1	2.11	1.99	1.71
2018:Q2	2.11	2.01	1.76
2018:Q3	2.11	2.02	1.80
2018:Q4	2.10	2.02	1.84
2019:Q1	2.08	2.02	1.87
2019:Q2	2.07	2.02	1.91
2019:Q3	2.05	2.01	1.94
2019:Q4	2.03	2.01	1.97
2020:Q1	2.02	2.01	2.00
2020:Q2	2.01	2.00	2.02
2020:Q3	2.00	2.00	2.05
2020:Q4	1.99	2.00	2.07

September FOMC Statement

- Information received since the Federal Open Market Committee met in August suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment appears to have slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation has been subdued, although the prices of some key commodities have increased recently. Longer-term inflation expectations have remained stable.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee is concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.
- 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 agreed today to increase policy accommodation by purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about \$85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.
- The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.
- To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015.

[Note: In the October 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.]

October FOMC Statement--Alternative A

- Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment ~~appears to have~~ **has** slowed. The housing sector has shown some

further signs of improvement, albeit from a depressed level. Inflation ~~has been subdued, although the prices of some key commodities have increased~~ recently **picked up somewhat, reflecting higher energy prices**. 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 ~~is~~ **remains** concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.

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 agreed today to ~~increase policy accommodation by~~ **continue** purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month ~~after the end of the year~~. The Committee also ~~will continue through the end of the year~~ **agreed to purchase longer-term Treasury securities at a pace of \$45 billion per month** after its program to extend the average maturity of its holdings of **Treasury securities as announced in June, and it ends in December**. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about \$85 billion each month ~~through the end of the year~~, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

4. The Committee will closely monitor incoming information on economic and financial developments ~~in coming months~~. ~~If the outlook for the labor market does not improve substantially,~~ The Committee will continue its purchases of agency mortgage-backed securities **and Treasury securities**, ~~undertake additional asset purchases,~~ and employ its other policy tools as appropriate, until ~~such improvement is achieved~~ **it judges that data on economic activity and labor market conditions are consistent with an outlook for sustained progress toward maximum employment** in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015.

October FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has ~~continued to advance~~ **advanced a bit more quickly**, but growth in business fixed investment ~~appears to have~~ **has** slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation ~~has been subdued, although the prices of some key commodities have increased~~ recently **picked up somewhat, reflecting higher energy prices**. 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 ~~is~~ **remains** concerned that, without ~~further~~ **sufficient** policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.

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 ~~agreed today to increase policy accommodation by~~ **will continue** purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of **Treasury securities as announced in June**, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about \$85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

4. The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015.

October FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months **despite the adverse effects of the drought on agricultural production**. ~~Growth in~~ Employment has **increased further** ~~been slow,~~ and the unemployment rate, **remains though still elevated, has declined**. ~~Household spending~~ **Private domestic demand** has continued to advance, but growth in business fixed investment ~~appears to have~~ **has** slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation ~~has been subdued, although the prices of some key commodities have increased~~ recently **picked up, mainly reflecting higher energy prices; 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 ~~is concerned that,~~ without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions **expects economic growth to be moderate over coming quarters and then to pick up gradually, supported in part by the highly accommodative stance of monetary policy, and consequently anticipates that the unemployment rate will continue to decline toward levels that the Committee judges consistent with its dual mandate**. ~~Furthermore~~ **However,** strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term ~~likely would~~ **will** run at or

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 agreed today to ~~increase policy accommodation by~~ **continue** purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month **through the end of the year**. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of **Treasury** securities ~~as announced in June~~, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about \$85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

4. The Committee will closely monitor incoming information on economic and financial developments ~~in coming months~~. ~~If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved and is prepared to take further action as needed to promote sustained improvement in labor market conditions in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.~~

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for [a considerable | **some**] time after the economic recovery strengthens. In particular, the Committee ~~also~~ decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through ~~mid-2015~~ [**late 2014** | **mid-2014** | **late 2013**].

OR

5'. To support continued progress toward maximum employment ~~and in a context of~~ price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for [a considerable | **some**] time after the economic recovery strengthens. In particular, the Committee ~~also~~ decided today to keep the target range for the federal funds rate at 0 to 1/4 percent ~~and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015~~. **As rates of resource utilization rise toward levels consistent with maximum employment, the Committee will need to make monetary policy less accommodative in order to foster sustained economic expansion with inflation at its longer-run objective. In determining the appropriate time to increase its target for the federal funds rate, the Committee will consider a range of factors, including actual and projected labor market conditions, the medium-term outlook for inflation, and the risks to the achievement of the Committee's objectives.**

September 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 announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to begin purchasing agency mortgage-backed securities at a pace of about \$40 billion per month. 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.

[Note: In the October 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.]

October 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 announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about \$40 billion per month. 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.

October 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 announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about \$40 billion per month. 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.

October 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 announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about \$40 billion per month **until the end of 2012**. 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.

Appendix 5: Materials used by Mr. Rudd

Material for
Staff Presentation on the Experimental Consensus Forecast

Jeremy Rudd
October 24, 2012

Class I FOMC - Restricted Controlled (FR)

Exhibit 1 Review of the Consensus Forecast Initiative

Top panel Key lessons from the consensus forecast exercises

- A consensus forecast would necessarily go beyond the Committee's post-meeting policy statement (as it is currently designed) by outlining the Committee's intentions over the next several years.
 - Reaching a consensus on the appropriate medium- and longer-term policy path could be extremely difficult.
 - Presenting a consensus medium- and longer-term policy path could lead to communications challenges.
- Exercises also revealed some important production-related challenges.
 - Impossible to guarantee the production of a forecast that incorporates the Committee's policy decision in time for the Chairman's press conference.
 - Participants appear to be unclear about how they should determine whether they support the proposed consensus outlook.

Bottom-left panel Avenues for further exploration?

- Explore the possibility of formally voting on the medium- and longer-term policy path and incorporating the resulting decision into the post-meeting statement.
- Examine the feasibility of conditioning the consensus forecast on market expectations for policy.
- Publish projections under a set of "bracketing" policy alternatives.

Bottom-right panel Possible enhancements to the SEP

- Include medians of the projections of participants who voted for or otherwise supported the policy action.
- Distinguish voters from non voters in the SEP.
- Publish the full matrix of SEP submissions, with or without attribution.

Exhibit 2 Questions for Discussion

1. Questions pertaining to the development of an FOMC consensus forecast

If the Committee decides to continue with the consensus forecast initiative, it would have to arrive at shared views on several issues. We seek your opinions on the following:

- A. Given the limited information provided in FOMC statements about the likely future paths of the the federal funds rate and the balance sheet, how should those paths on which a consensus forecast would be conditioned be selected from among the wide range of paths that are consistent with the FOMC statement?

Processing math: 100% | consensus forecast be conditioned on the policy decision taken at the meeting, even though this would require that publication of the consensus forecast be pushed back to some significant period of time after the meeting? Or should the forecast be conditioned on a policy

assumption that would allow publication immediately following the meeting, but does not necessarily reflect the policy decision taken at the meeting?

- C. Does asking participants whether they broadly endorse the forecast (perhaps subject to specific qualifications) or, alternatively, have essentially different views, provide sufficient clarity about the support for the consensus forecast? Does support for the policy decision taken at the meeting (*i.e.*, voting for the policy decision—or, for nonvoting participants, indicating support for the decision) imply endorsement of the consensus forecast, and vice versa?
- D. Would the Committee endorse producing a consensus forecast at each FOMC meeting?

2. Questions pertaining to possible enhancements of the SEP

If the Committee were to pursue enhancements of the SEP instead of a consensus forecast, which of the following steps would you support?

- A. Publishing the median projection of voters supporting the statement.
- B. Publishing the scatterplot of the combinations of unemployment and inflation expected to prevail at the time of first increase of the federal funds rate.
- C. Publishing information about whether a particular projection was made by a current voting member.
- D. Publishing additional information related to balance sheet actions (such as the time and/or conditions at which asset purchases are expected to end, or a path for the size of the balance sheet).
- E. Releasing with the SEP the full matrix of multivariate projections, with or without the names associated with individual multivariate forecasts.
- F. Circulating among FOMC participants individual SEP submissions with the names of participants attached.
- G. Releasing additional information, and if so, what and when.

3. Assessment of the direction of the consensus forecast initiative

In your view, should the Committee aim to publish a consensus forecast, including a narrative explaining its economic rationale and a diversity-of-views section, or should it aim to enhance the SEP?

With respect to your preferred outcome, what other types of exercises should the Committee undertake before it released new information to the public? In what timeframe do you expect the Committee would be ready to go public?

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