

Meeting of the Federal Open Market Committee January 29-30, 2008 Presentation Materials -- Text Version

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

Pages 195 to 249 of the Transcript

Appendix 1: Materials used by Mr. Dudley

Class II FOMC - Restricted FR

Page 1

Top panel

(1)

Title: U.S. Equity Indices Decline Sharply

Series: S&P 500 index, Nasdaq index, and Russell 2000 index

Horizon: August 1, 2007 - January 25, 2008

Description: U.S. equity indices have declined sharply since the December FOMC meeting.

Source: Bloomberg

Middle panel

(2)

Title: Global Equities Weaken

Series: S&P 500 index, Nikkei index, MSCI World Ex U.S. index, and Euro Stoxx 50 index

Horizon: August 1, 2007 - January 25, 2008

Description: Global equity indices have declined sharply since the December FOMC meeting.

Source: Bloomberg

Bottom panel

(3)

Title: Corporate Credit Option-Adjusted Spreads and Yields

Series: Investment grade and high-yield debt spreads

Horizon: January 1, 2007 - January 25, 2008

Description: Investment grade and high-yield debt option-adjusted spreads widen while yields on high-yield debt rise and yields on investment grade debt remain stable over the intermeeting period.

Source: Bloomberg

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(4)

Title: Global Credit Default Swap Spreads

Series: ITRAXX Crossover Series 7, high-yield CDX, and investment grade CDX spreads

Horizon: March 1, 2007 - January 25, 2008

Description: ITRAXX Crossover Series 7, high-yield CDX, and investment grade CDX spreads have widened since the December FOMC meeting.

Source: Bloomberg

Middle panel

(5)

Title: Implied Volatility Increases in Recent Days

Series: VIX index, MOVE index, 1-month Euro-Dollar volatility index, and 1-month Dollar-Yen volatility index

Horizon: January 1, 2007 - January 25, 2008

Description: During the inter-meeting period, implied volatility across asset classes has increased.

Source: Bloomberg

Bottom panel

(6)

Title: Financial Guarantors Business Mix by Company

Series: Amount in billions of U.S. public finance, U.S. ABS/structured finance, and international business, for Ambac, AGO, FGIC, FSA, MBIA, and SCA

Horizon: Third quarter 2007

Description: Ambac and MBIA have the most U.S. public finance, U.S. ABS/structured finance, and international business

Source: Company Documents and UBS

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(7)

Title: Financial Guarantors Claims Paying Resources

Series: Amount in billions of statutory capital, soft capital, unearned premiums, and present value of future premiums, for Ambac, AGO, FGIC, FSA, MBIA, and SCA

Horizon: Third quarter 2007

Description: Ambac and MBIA have the most statutory capital, soft capital, and unearned premiums, and the highest present value of future premiums to pay claims.

Source: Company Documents and UBS

Middle panel

(8)

Title: ABS CDO Net Par Exposure* as a Percent of Claims Paying Resources

Series: ABS CDO net par exposure as a percent of claims paying resources for Ambac, AGO, FGIC, FSA, MBIA, and SCA

Horizon: Third quarter 2007

Description: SCA has the largest ABS CDO net par exposure as a percent of claims paying resources.

* Collateralized to some degree by subprime mtg. assets [Return to text](#)

Source: Company Documents and UBS

Bottom panel

(9)

Title: Large Commercial Banks' Equity Prices and CDS Spreads

Series: Average credit default swap spreads and average indexed equity prices for Bank of America, Citigroup, JP Morgan, Wells Fargo, and Wachovia

Horizon: January 1, 2007 - January 25, 2008

Description: While credit default swap spreads widened for Bank of America, Citigroup, JP Morgan, Wells Fargo, and Wachovia, their equity prices declined.

Source: Markit and Bloomberg

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(10)

Title: Large Investment Banks' Equity Prices and CDS Spreads

Series: Average credit default swap spreads and average indexed equity prices for Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley, and Bear Stearns

Horizon: January 1, 2007 - January 25, 2008

Description: While credit default swap spreads widened for Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley, and Bear Stearns, their equity prices declined.

Source: Markit and Bloomberg

Bottom panel

(11) Reported Write-downs** for Selected Banks

Q3 2007 - Q4 2007

Institution	3Q07	4Q07*	Total Reported/Estimated
Bank of America	1.5	5.3	6.8
Barclays	1.0	1.6	2.6
Bear Stearns	0.7	1.9	2.6
Citigroup	3.8	18.0	21.8
Countrywide	1.0	N/A	1.0
Credit Suisse	1.9	N/A	1.9
Deutsche Bank	3.1	N/A	3.1
Goldman Sachs	1.5	0.0	1.5
HSBC	0.9	N/A	0.9
JPMorgan Chase	1.6	1.3	2.9
Lehman Brothers	0.7	0.8	1.5

Institution	3Q07	4Q07*	Total Reported/Estimated
Merrill Lynch	8.4	14.1	22.5
Morgan Stanley	1.4	9.4	10.8
UBS	4.4	10.0	14.4
Wachovia	1.3	1.7	3.0
Washington Mutual	0.3	1.6	1.9
Wells Fargo	0.5	0.3	0.8
TOTAL	34.0	66.0	100.0

* Values in *Italics* are estimates [Return to table](#)

** In billions of dollars [Return to text](#)

Source: JP Morgan

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(12) Capital Ratios Continue to Fall

Q2 2007 - Q4 2007

Holding Co.	2Q07	3Q07	4Q07	Change 4Q07 - 2Q07*
Bank of America	8.52	8.22	6.87	-165
Citigroup	7.91	7.32	7.10	-81
JPMorgan Chase	8.40	8.37	8.40	0
Wachovia	7.47	7.10	7.20	-27
Wells Fargo	8.57	8.21	7.59	-98
Average	8.17	7.84	7.43	-74

* In basis points [Return to table](#)

Source: JP Morgan

Middle panel

(13)

Title: Fed Funds Futures Rate Expectations Fall

Series: Fed funds futures curve as of 12/10/2007, 1/18/2008, and 1/25/2008

Horizon: December 10, 2007 - January 25, 2008

Description: The fed funds futures curve has shifted lower since the December FOMC meeting and the January intermeeting rate cut.

Source: Bloomberg

Bottom panel

(14)

Title: Eurodollar Futures Curve Shifts Lower

Series: Eurodollar futures curve as of 12/10/2007, 1/18/2008, and 1/25/2008

Horizon: December 10, 2007 - January 25, 2008

Description: The Eurodollar futures curve has steepened and shifted lower in the front-end since the January intermeeting rate cut.

Source: Bloomberg

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(15)

Title: Distribution of Expected Policy Target Among Primary Dealers Prior to January 29-30 FOMC Meeting

Series: Dealer expectations for policy target rate by quarter, average forecast for policy target by quarter, and market rate for policy expectation by quarter as of 1/23/2007

Horizon: 2008:Q1 - 2009:Q4

Description: Compared to the December policy survey, there is more dispersion of policy rate expectation for 2008 and 2009. Dealers on average expect slightly higher rates than what is currently priced into market.

Source: Dealer Policy Survey

Middle panel

(16)

Title: Distribution of Expected Policy Target Among Primary Dealers Prior to December 11 FOMC Meeting

Series: Dealer expectations for policy target rate by quarter, average forecast for policy target by quarter, and market rate for policy expectation by quarter as of 12/3/2007

Horizon: 2007:Q4 - 2008:Q4

Description: There was less dispersion regarding where dealers expect the policy rate to be in 2007 as compared to the January 2008 policy survey. Dealers on average expect higher rates than what is currently priced into Eurodollar futures for 2008.

Source: Dealer Policy Survey

Bottom panel

(17)

Title: Probabilities for Policy Rate Outcomes for January FOMC Meeting

Series: Probabilities for a 2.75, 3.00, 3.25, 3.50, 3.75, or 4.00 percent target rate at the January FOMC meeting as of 1/18/2008 and 1/25/2008

Horizon: January 18, 2008 - January 25, 2008

Description: After the 75 bps intermeeting rate cut, there was an increase in probabilities for a 2.75, 3.00, or 3.25 percent target rate at the January 30 FOMC meeting.

Source: Cleveland Fed

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(18)

Title: Probability Distribution on Eurodollar Futures Contract

Series: Probability distribution on Eurodollar futures contract as of 12/10/2007 and 1/25/2008

Horizon: December 10, 2007 - January 25, 2008

Description: Since the December FOMC meeting, the probability of a policy rate cut has increased.

Source: CME Options

Middle panel

(19)

Title: TIPS Implied Average Rate of Inflation: 5-10 Year Horizon

Series: Federal Reserve Board's 5-10 Year horizon TIPS inflation compensation and Barclays' 5-10 Year horizon TIPS inflation compensation

Horizon: June 1, 2006 - January 25, 2008

Description: TIPS inflation compensation over a 5-10 year horizon has increased significantly since the December FOMC meeting as measured by both the Federal Reserve Board and Barclays.

Source: Federal Reserve Board and Barclays Capital

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(20)

Title: Spreads between U.S. Term Funding Rates and OIS Rates Decline

Series: Spread between one-month Libor rate and one-month interest rate swap rates and spread between three-month Libor rate and three-month interest rate swap rate

Horizon: July 1, 2007 - January 25, 2008

Description: The spread between one-month Libor rate and one-month interest rate swap rates and the spread between three-month Libor rate and three-month interest rate swap rate have narrowed since the December FOMC meeting.

Source: Bloomberg

Bottom panel

(21) Central Bank Term Funding Facilities

Federal Reserve Term Auction Facility:

Auction Settlement	Term	Amount	Minimum Bid Rate	Stop-out Rate	Propositions	Bid/Cover	Bidders
12/20/2007	28 Days	\$20 b	4.17%	4.65%	\$61.6 b	3.08	93
12/27/2007	35 Days	\$20 b	4.15%	4.67%	\$57.7 b	2.88	73
1/17/2008	28 Days	\$30 b	3.88%	3.95%	\$55.5 b	1.85	56
1/31/2008	28 Days	\$30 b	TBD	TBD	TBD	TBD	TBD

European Central Bank:

Auction	Term	Amount	Fixed	% of All at Fixed	Propositions	Bid/Cover	Bidders
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Settlement		Rate		Rate			
12/20/2007	28 Days	\$10 b	4.65%	45.29%	\$22.08	2.21	39
12/27/2007	35 Days	\$10 b	4.67%	70.85%	\$14.12 b	1.41	27
1/17/2008	28 Days	\$10 b	3.95%	67.61%	\$14.79 b	1.48	22

Swiss National Bank:

Auction Settlement	Term	Amount	Marginal Interest Rate	% of All at Fixed Rate	Weighted Avg. Interest Rate	Propositions	Bid/Cover	Bidders
12/20/2007	28 Days	\$4 b	4.50%	30.28%	4.79%	\$17.01 b	4.25	17
1/17/2008	28 Days	\$4 b	3.88%	15.03%	3.91%	\$10.87 b	2.72	10

Source: Federal Reserve Board, European Central Bank, and Swiss National Bank

APPENDIX: Reference Exhibits

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Top panel (22)

Title: Euro Term Funding Pressures Decrease

Series: Spread between one-month Euribor rates and one-month EONIA swap rates and spread between three-month Euribor rates and three-month EONIA swap rates

Horizon: July 1, 2007 - January 25, 2008

Description: The spread between one-month Euribor rate and one-month EONIA swap rates and the spread between three-month Euribor rate and three-month EONIA swap rate have narrowed.

Source: Bloomberg

Middle panel (23)

Title: Sterling Term Funding Pressures Decrease

Series: Spread between one-month sterling LIBOR rates and one-month SONIA swap rates and spread between three-month sterling LIBOR rates and three-month SONIA swap rates

Horizon: July 1, 2007 - January 25, 2008

Description: The spread between one-month sterling LIBOR rate and one-month SONIA swap rates and the spread between three-month sterling LIBOR rate and three-month SONIA swap rate have narrowed.

Source: Bloomberg

Bottom panel (24)

Title: One-Month LIBOR to OIS Spread

Series: Market-implied expectation for one-month LIBOR to OIS rate spread after year-end as of early December and actual spread between one-month LIBOR to OIS rate spread

Horizon: July 1, 2007 - March 11, 2008

Description: The one-month LIBOR to OIS rate spread has declined much faster than originally expected in early December 2007.

Source: Bloomberg

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(25)

Title: Secured CP Rate Spreads Narrow

Series: One-month secured commercial paper rate, spread between secured and one-month overnight index swaps rates, and spread between secured commercial paper discount rates and one-month LIBOR rates

Horizon: January 1, 2007 - January 25, 2008

Description: Since the December FOMC meeting, one-month secured commercial paper rate, spread between secured and one-month overnight index swaps rates, and spread between secured commercial paper discount rates and one-month LIBOR rates have all declined.

Source: Federal Reserve Board

Middle panel

(26)

Title: Spread between Jumbo and Conforming Mortgage Rates Widen Once Again

Series: Jumbo mortgage rates and conforming mortgage rates

Horizon: January 1, 2007 - January 25, 2008

Description: The spread between jumbo and conforming rates has widened since the December FOMC meeting.

Source: Bloomberg

Bottom panel

(27)

Title: Dollar Sells Off After Year-End Rally

Series: Yen-USD and Euro-USD

Horizon: January 1, 2007 - January 25, 2008

Description: Since mid-June, the U.S. dollar has softened against the Euro and Japanese Yen.

Source: Bloomberg

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(28)

Title: Fed Funds Target Rate and Two-Year Treasury Yield

Series: Fed funds target rate and two-year Treasury yield

Horizon: January 1985 - January 2008

Description: Since late 2004, the spread between two-year Treasury yield and the fed funds target rate has declined.

Source: Bloomberg

Middle panel

(29)

Title: Treasury Yield Curve Shifts Lower and Continues to Steepen

Series: Constant maturity Treasury yield curve as of 10/30/2007, 12/11/2007, 1/18/2008, and 1/25/2008

Horizon: October 30, 2007 - January 25, 2008

Description: The Treasury yield curve has shifted lower and steepened since the last FOMC meetings.

Source: Bloomberg

Bottom panel

(30)

Title: Effective Fed Funds Rate Relative to Target Rate

Series: Rolling cumulative effective rate (12/12-1/21), rolling cumulative effective rate (1/23-1/27), target fed funds rate, and effective fed funds rate

Horizon: December 12, 2007 - January 25, 2008

Description: The rolling cumulative effective rate since 12/12 has been trending below the target rate during most of the intermeeting period.

Source: Federal Reserve Bank of New York

Appendix 2: Materials used by Mr. Reifschneider, Ms. Liang, and Mr. Sheets

Material for **Staff Presentation on the Economic Outlook**

January 29, 2008

CLASS II FOMC - Restricted (FR)

Exhibit 1

Gauging the Cyclical State of the Economy

Top panel

Data Surprises Since the December Greenbook

Negative	Positive
Private payroll employment	Construction put-in-place
Unemployment rate	Defense spending
Industrial production	Retail sales
Housing starts and permits	
New home sales	
Orders and shipments	
Business sentiment	
Financial market conditions	

Middle-left panel

Recession Probability Estimates

Percent

Period	Nonfinancial-based	Financial-based
January 2005	5.51	1.65
February 2005	4.74	1.94
March 2005	10.43	2.02
April 2005	9.28	3.04
May 2005	9.82	4.19
June 2005	5.73	5.08
July 2005	6.57	5.06
August 2005	7.29	5.49
September 2005	17.35	5.69
October 2005	9.77	6.07
November 2005	5.02	7.14
December 2005	1.87	8.60
January 2006	2.79	11.23
February 2006	6.01	11.20
March 2006	7.03	10.73
April 2006	8.82	10.56
May 2006	10.26	11.17
June 2006	10.11	13.59
July 2006	11.76	17.46
August 2006	10.36	19.11
September 2006	17.30	18.23
October 2006	23.27	18.67
November 2006	32.64	19.25
December 2006	17.05	17.15
January 2007	24.67	15.36
February 2007	19.84	15.85
March 2007	29.42	17.86
April 2007	16.61	17.73
May 2007	16.76	16.18
June 2007	18.76	13.71
July 2007	15.19	24.83
August 2007	21.44	33.30
September 2007	25.44	35.17
October 2007	44.21	33.72
November 2007	34.49	40.39
December 2007	44.75	50.31

Period	Nonfinancial-based	Financial-based
January 2008	<u>ND</u>	62.96

Note: Estimates based on monthly data for 85 nonfinancial indicators and 20 financial indicators.

ND No data [Return to table](#)

Middle-right panel

Reasons for Not Calling a Recession

- Estimated probabilities not uniformly high
- No apparent inventory overhang
- Weakness in labor market and spending indicators still limited
- Monetary and fiscal stimulus in process

...but it was a close call.

Bottom-left panel

Greenbook-Consistent Short-Run R*

Period	Percent
1998:Q1	4.33
1998:Q2	4.16
1998:Q3	4.30
1998:Q4	3.47
1999:Q1	3.90
1999:Q2	4.08
1999:Q3	4.29
1999:Q4	4.37
2000:Q1	5.26
2000:Q2	5.63
2000:Q3	5.24
2000:Q4	4.55
2001:Q1	3.10
2001:Q2	1.94
2001:Q3	1.72
2001:Q4	0.51
2002:Q1	0.66
2002:Q2	0.54
2002:Q3	0.29
2002:Q4	-0.01
2003:Q1	0.33
2003:Q2	0.44
2003:Q3	0.03

Period	Percent
2003:Q4	0.18
2004:Q1	0.48
2004:Q2	0.67
2004:Q3	0.90
2004:Q4	1.29
2005:Q1	1.88
2005:Q2	1.44
2005:Q3	1.78
2005:Q4	2.16
2006:Q1	2.61
2006:Q2	2.57
2006:Q3	2.61
2006:Q4	2.80
2007:Q1	2.96
2007:Q2	3.22
2007:Q3	3.08
2007:Q4	2.52
2008:Q1	0.82

Bottom-right panel

R* Revisions

- R* down 1¼ percentage point since December
- Jump in equity premium main culprit

Exhibit 2

Forecast Summary

Top-left panel

Real GDP

Percent change, Q4/Q4

Period	Real GDP	Dec. GB	Jan. GB
2004	3.15	ND	ND
2005	2.88	ND	ND
2006	2.60	ND	ND
2007	ND	2.34	2.43
2008	ND	1.31	1.52
2009	ND	2.06	2.18

Top-right panel

Real GDP

Quarterly percent change

(annual rate)

Dec. GB Jan. GB

2007:	Q3	5.0	4.9
	Q4	0.1	0.5
2008:	Q1	0.7	0.6
	Q2	1.4	1.2

Middle-left panel

Unemployment Rate

Percent

Period	Unemployment Rate	Dec. GB	Forecast
2004:Q1	5.68	ND	ND
2004:Q2	5.59	ND	ND
2004:Q3	5.44	ND	ND
2004:Q4	5.39	ND	ND
2005:Q1	5.27	ND	ND
2005:Q2	5.11	ND	ND
2005:Q3	4.98	ND	ND
2005:Q4	4.94	ND	ND
2006:Q1	4.71	ND	ND
2006:Q2	4.67	ND	ND
2006:Q3	4.66	ND	ND
2006:Q4	4.44	ND	ND
2007:Q1	4.50	ND	ND
2007:Q2	4.51	ND	ND
2007:Q3	4.68	4.66	ND
2007:Q4	4.80	4.72	ND
2008:Q1	ND	4.76	4.98
2008:Q2	ND	4.80	5.06
2008:Q3	ND	4.85	5.10
2008:Q4	ND	4.90	5.14
2009:Q1	ND	4.94	5.17
2009:Q2	ND	4.96	5.18
2009:Q3	ND	4.97	5.17
2009:Q4	ND	4.97	5.15

Middle-right panel Unemployment Rate

Percent

		Dec. GB	Jan. GB
2007:	Q3	4.7	4.7
	Q4	4.7	4.8
2008:	Q1	4.8	5.0
	Q2	4.8	5.1

Bottom-left panel Core PCE Prices

4-quarter percent change

Period	Core PCE Prices	Dec. GB	Forecast
2004:Q1	1.77	ND	ND
2004:Q2	2.12	ND	ND
2004:Q3	2.10	ND	ND
2004:Q4	2.23	ND	ND
2005:Q1	2.27	ND	ND
2005:Q2	2.13	ND	ND
2005:Q3	2.12	ND	ND
2005:Q4	2.17	ND	ND
2006:Q1	2.04	ND	ND
2006:Q2	2.24	ND	ND
2006:Q3	2.40	ND	ND
2006:Q4	2.29	ND	ND
2007:Q1	2.39	ND	ND
2007:Q2	2.01	2.01	ND
2007:Q3	1.92	1.88	ND
2007:Q4	2.13	1.96	ND
2008:Q1	ND	1.87	2.13
2008:Q2	ND	2.03	2.31
2008:Q3	ND	2.07	2.31
2008:Q4	ND	1.99	2.12
2009:Q1	ND	1.96	2.01
2009:Q2	ND	1.94	1.97
2009:Q3	ND	1.93	1.94
2009:Q4	ND	1.92	1.93

Bottom-right panel

Total PCE Prices

4-quarter percent change

Period	Total PCE Prices	Dec. GB	Forecast
2004:Q1	2.00	ND	ND
2004:Q2	2.80	ND	ND
2004:Q3	2.69	ND	ND
2004:Q4	3.09	ND	ND
2005:Q1	2.76	ND	ND
2005:Q2	2.64	ND	ND
2005:Q3	3.22	ND	ND
2005:Q4	3.17	ND	ND
2006:Q1	3.05	ND	ND
2006:Q2	3.27	ND	ND
2006:Q3	2.85	ND	ND
2006:Q4	1.91	ND	ND
2007:Q1	2.33	ND	ND
2007:Q2	2.33	2.33	ND
2007:Q3	2.14	2.10	ND
2007:Q4	3.36	3.23	ND
2008:Q1	ND	3.00	3.24
2008:Q2	ND	2.43	2.70
2008:Q3	ND	2.46	2.73
2008:Q4	ND	2.01	2.21
2009:Q1	ND	1.80	1.90
2009:Q2	ND	1.74	1.83
2009:Q3	ND	1.73	1.77
2009:Q4	ND	1.74	1.75

Exhibit 3 Key Conditioning Assumptions

Top-left panel Target Federal Funds Rate

Percent

Period	Target Federal Funds Rate	Dec. GB	Forecast
14 December 2004	2.25	ND	ND
2 February 2005	2.50	ND	ND
22 March 2005	2.75	ND	ND

Period	Target Federal Funds Rate	Dec. GB	Forecast
3 May 2005	3.00	ND	ND
30 June 2005	3.25	ND	ND
9 August 2005	3.50	ND	ND
20 September 2005	3.75	ND	ND
1 November 2005	4.00	ND	ND
13 December 2005	4.25	ND	ND
31 January 2006	4.50	ND	ND
28 March 2006	4.75	ND	ND
10 May 2006	5.00	ND	ND
29 June 2006	5.25	ND	ND
8 August 2006	5.25	ND	ND
20 September 2006	5.25	ND	ND
25 October 2006	5.25	ND	ND
12 December 2006	5.25	ND	ND
31 January 2007	5.25	ND	ND
21 March 2007	5.25	ND	ND
9 May 2007	5.25	ND	ND
28 June 2007	5.25	ND	ND
7 August 2007	5.25	ND	ND
18 September 2007	4.75	ND	ND
31 October 2007	4.50	ND	ND
2007:Q4	ND	4.50	ND
11 December 2007	4.25	ND	ND
22 January 2008	3.50	ND	ND
2008:Q1	ND	4.25	3.35
2008:Q2	ND	4.25	3.00
2008:Q3	ND	4.25	3.00
2008:Q4	ND	4.25	3.00
2009:Q1	ND	4.25	3.00
2009:Q2	ND	4.25	3.00
2009:Q3	ND	4.00	3.00
2009:Q4	ND	4.00	3.00

[Note: Except 22 January 2008, the dates are those of regularly scheduled Federal Open Market Committee meetings.]

Top-right panel
Wilshire 5000

Period	Wilshire 5000	Dec. GB	Forecast
2005:Q1	11638	ND	ND
2005:Q2	11877	ND	ND
2005:Q3	12289	ND	ND
2005:Q4	12518	ND	ND
2006:Q1	13155	ND	ND
2006:Q2	12850	ND	ND
2006:Q3	13346	ND	ND
2006:Q4	14258	ND	ND
2007:Q1	14409	ND	ND
2007:Q2	15211	ND	ND
2007:Q3	15362	ND	ND
2007:Q4	14820	14820	ND
2008:Q1	ND	11635	13345
2008:Q2	ND	11815	13555
2008:Q3	ND	12410	13975
2008:Q4	ND	13035	14410
2009:Q1	ND	13675	14855
2009:Q2	ND	14340	15315
2009:Q3	ND	15030	15790
2009:Q4	ND	15745	16280

Middle-left panel

Fiscal Stimulus Package

- \$125 billion placeholder package includes:
 - \$75 billion in personal tax rebates
 - \$50 billion bonus depreciation
- Economic effects:
 - Temporary boost to PCE
 - Small investment response
 - Inventory and import offset

Middle-right panel

Effects of the Fiscal Stimulus Package

Percentage points, annual rate

Period	Total effect on real GDP growth	Contribution of PCE and E&S
2008:H1	0.02	0.02
2008:H2	0.82	1.82
2009:H1	-0.50	-1.33

Period	Total effect on real GDP growth	Contribution of PCE and E&S
2009:H2	-0.11	-0.11

Bottom-left panel Potential GDP Growth

Percent

Period	Potential GDP Growth	Dec. GB	Jan. GB
2004	2.27	ND	ND
2005	ND	2.18	2.32
2006	ND	2.22	2.43
2007	ND	2.25	2.44
2008	ND	2.19	2.29
2009	ND	2.06	2.29

Bottom-right panel Output Gap

Percent

Period	Output Gap	Dec. GB	Forecast
2005:Q1	-0.41	-0.43	ND
2005:Q2	-0.29	-0.27	ND
2005:Q3	0.22	0.28	ND
2005:Q4	-0.05	0.03	ND
2006:Q1	0.52	0.66	ND
2006:Q2	0.53	0.72	ND
2006:Q3	0.19	0.43	ND
2006:Q4	0.11	0.40	ND
2007:Q1	-0.34	-0.00	ND
2007:Q2	-0.01	0.38	ND
2007:Q3	0.59	1.04	ND
2007:Q4	0.10	0.49	ND
2008:Q1	ND	0.12	-0.32
2008:Q2	ND	-0.08	-0.59
2008:Q3	ND	-0.26	-0.69
2008:Q4	ND	-0.37	-0.65
2009:Q1	ND	-0.42	-0.83
2009:Q2	ND	-0.41	-0.89
2009:Q3	ND	-0.39	-0.83
2009:Q4	ND	-0.37	-0.76

Exhibit 4

Housing, Investment, and Consumption

Top-left panel

New Home Sales

Millions of units, annual rate

Period	New Home Sales	Dec. GB	Forecast
1999:Q1	0.86	ND	ND
1999:Q2	0.91	ND	ND
1999:Q3	0.87	ND	ND
1999:Q4	0.87	ND	ND
2000:Q1	0.88	ND	ND
2000:Q2	0.83	ND	ND
2000:Q3	0.88	ND	ND
2000:Q4	0.93	ND	ND
2001:Q1	0.95	ND	ND
2001:Q2	0.89	ND	ND
2001:Q3	0.87	ND	ND
2001:Q4	0.92	ND	ND
2002:Q1	0.92	ND	ND
2002:Q2	0.96	ND	ND
2002:Q3	1.00	ND	ND
2002:Q4	1.03	ND	ND
2003:Q1	0.98	ND	ND
2003:Q2	1.09	ND	ND
2003:Q3	1.17	ND	ND
2003:Q4	1.12	ND	ND
2004:Q1	1.20	ND	ND
2004:Q2	1.20	ND	ND
2004:Q3	1.16	ND	ND
2004:Q4	1.24	ND	ND
2005:Q1	1.28	ND	ND
2005:Q2	1.27	ND	ND
2005:Q3	1.30	ND	ND
2005:Q4	1.26	ND	ND
2006:Q1	1.13	ND	ND
2006:Q2	1.09	ND	ND

Period	New Home Sales	Dec. GB	Forecast
2006:Q3	0.99	ND	ND
2006:Q4	0.99	ND	ND
2007:Q1	0.85	ND	ND
2007:Q2	0.86	ND	ND
2007:Q3	0.73	0.74	ND
2007:Q4	0.65	0.71	ND
2008:Q1	ND	0.70	0.58
2008:Q2	ND	0.70	0.59
2008:Q3	ND	0.71	0.60
2008:Q4	ND	0.72	0.61
2009:Q1	ND	0.73	0.61
2009:Q2	ND	0.74	0.62
2009:Q3	ND	0.75	0.62
2009:Q4	ND	0.75	0.62

Top-right panel **Single-Family Housing Starts**

Millions of units, annual rate

Period	Single-Family Housing Starts	Dec. GB	Forecast
1999:Q1	1.34	ND	ND
1999:Q2	1.27	ND	ND
1999:Q3	1.29	ND	ND
1999:Q4	1.34	ND	ND
2000:Q1	1.28	ND	ND
2000:Q2	1.24	ND	ND
2000:Q3	1.19	ND	ND
2000:Q4	1.22	ND	ND
2001:Q1	1.26	ND	ND
2001:Q2	1.30	ND	ND
2001:Q3	1.28	ND	ND
2001:Q4	1.26	ND	ND
2002:Q1	1.36	ND	ND
2002:Q2	1.34	ND	ND
2002:Q3	1.34	ND	ND
2002:Q4	1.41	ND	ND
2003:Q1	1.41	ND	ND
2003:Q2	1.43	ND	ND

Period	Single-Family Housing Starts	Dec. GB	Forecast
2003:Q3	1.53	ND	ND
2003:Q4	1.66	ND	ND
2004:Q1	1.56	ND	ND
2004:Q2	1.61	ND	ND
2004:Q3	1.64	ND	ND
2004:Q4	1.61	ND	ND
2005:Q1	1.71	ND	ND
2005:Q2	1.70	ND	ND
2005:Q3	1.75	ND	ND
2005:Q4	1.73	ND	ND
2006:Q1	1.75	ND	ND
2006:Q2	1.52	ND	ND
2006:Q3	1.39	ND	ND
2006:Q4	1.23	ND	ND
2007:Q1	1.17	ND	ND
2007:Q2	1.17	ND	ND
2007:Q3	0.99	1.00	ND
2007:Q4	0.83	0.86	ND
2008:Q1	ND	0.81	0.71
2008:Q2	ND	0.81	0.66
2008:Q3	ND	0.81	0.66
2008:Q4	ND	0.81	0.67
2009:Q1	ND	0.82	0.68
2009:Q2	ND	0.82	0.70
2009:Q3	ND	0.83	0.71
2009:Q4	ND	0.83	0.72

Middle-left panel

Inventory of Unsold New Homes*

Period	Months' supply	Dec. GB
March 1999	4.02	ND
April 1999	3.97	ND
May 1999	3.98	ND
June 1999	3.89	ND
July 1999	3.94	ND
August 1999	3.95	ND
September 1999	4.14	ND

Period	Months' supply	Dec. GB
October 1999	4.21	ND
November 1999	4.29	ND
December 1999	4.25	ND
January 2000	4.29	ND
February 2000	4.14	ND
March 2000	4.29	ND
April 2000	4.23	ND
May 2000	4.23	ND
June 2000	4.42	ND
July 2000	4.30	ND
August 2000	4.30	ND
September 2000	4.08	ND
October 2000	4.02	ND
November 2000	4.03	ND
December 2000	3.84	ND
January 2001	3.81	ND
February 2001	3.70	ND
March 2001	3.70	ND
April 2001	3.77	ND
May 2001	3.89	ND
June 2001	4.05	ND
July 2001	4.15	ND
August 2001	4.22	ND
September 2001	4.29	ND
October 2001	4.28	ND
November 2001	4.19	ND
December 2001	4.00	ND
January 2002	4.01	ND
February 2002	4.01	ND
March 2002	4.14	ND
April 2002	4.16	ND
May 2002	4.15	ND
June 2002	4.11	ND
July 2002	4.15	ND
August 2002	4.11	ND
September 2002	3.98	ND
October 2002	3.94	ND

Period	Months' supply	Dec. GB
November 2002	3.96	ND
December 2002	3.96	ND
January 2003	4.00	ND
February 2003	4.12	ND
March 2003	4.15	ND
April 2003	4.15	ND
May 2003	4.00	ND
June 2003	3.76	ND
July 2003	3.58	ND
August 2003	3.49	ND
September 2003	3.59	ND
October 2003	3.73	ND
November 2003	3.91	ND
December 2003	3.96	ND
January 2004	3.98	ND
February 2004	3.88	ND
March 2004	3.81	ND
April 2004	3.81	ND
May 2004	3.72	ND
June 2004	3.82	ND
July 2004	4.10	ND
August 2004	4.23	ND
September 2004	4.25	ND
October 2004	4.02	ND
November 2004	4.07	ND
December 2004	4.08	ND
January 2005	4.38	ND
February 2005	4.27	ND
March 2005	4.16	ND
April 2005	4.10	ND
May 2005	4.18	ND
June 2005	4.29	ND
July 2005	4.23	ND
August 2005	4.37	ND
September 2005	4.51	ND
October 2005	4.60	ND
November 2005	4.76	ND

Period	Months' supply	Dec. GB
December 2005	4.86	ND
January 2006	5.17	ND
February 2006	5.53	ND
March 2006	5.86	ND
April 2006	6.15	ND
May 2006	6.13	ND
June 2006	6.25	ND
July 2006	6.59	ND
August 2006	6.70	ND
September 2006	6.76	ND
October 2006	6.71	ND
November 2006	6.63	ND
December 2006	6.51	ND
January 2007	6.66	ND
February 2007	7.12	ND
March 2007	7.71	ND
April 2007	7.64	ND
May 2007	7.52	ND
June 2007	7.59	ND
July 2007	7.89	ND
August 2007	8.36	8.31
September 2007	8.66	8.53
October 2007	8.70	8.60
November 2007	8.81	8.51
December 2007	ND	8.37
January 2008	ND	8.27
February 2008	ND	8.05
March 2008	ND	7.84
April 2008	ND	7.65
May 2008	ND	7.46
June 2008	ND	7.27
July 2008	ND	7.07
August 2008	ND	6.87
September 2008	ND	6.67
October 2008	ND	6.49
November 2008	ND	6.31
December 2008	ND	6.14

Period	Months' supply	Dec. GB
January 2009	ND	5.98
February 2009	ND	5.83
March 2009	ND	5.67
April 2009	ND	5.53
May 2009	ND	5.39
June 2009	ND	5.25
July 2009	ND	5.14
August 2009	ND	5.03
September 2009	ND	4.92
October 2009	ND	4.83
November 2009	ND	4.73
December 2009	ND	4.63

As shown in the figure, the current forecast begins in December 2007 at about 9.1 months' supply, increases to about 9.3 by January 2008, then begins to decrease rapidly after March until it meets the December Greenbook forecast by the end of the period at about 4.6 months' supply in December 2009.

* Relative to three-month moving average of sales. [Return to text](#)

Middle-right panel

Real Business Fixed Investment

Percent change, annual rate

Period	Fixed investment	Dec. GB	Jan. GB
2005	5.1	ND	ND
2006	5.2	ND	ND
2007:H1	6.5	ND	ND
2007:H2	ND	7.3	8.4
2008:H1	ND	0.6	-0.6
2008:H2	ND	0.5	1.5
2009:H1	ND	2.1	2.4
2009:H2	ND	2.7	3.3

Bottom-left panel

Personal Consumption Expenditures

Percent change, annual rate

Period	Real PCE	Excl. fiscal package
2005	2.77	ND
2006	3.36	ND
2007	2.55	ND
2008:H1	1.15	1.14

Period	Real PCE	Excl. fiscal package
2008:H2	3.38	0.93
2009:H1	0.39	2.28
2009:H2	2.41	2.50

Bottom-right panel **Contribution of Wealth to PCE Growth**

Percentage points

Period	Contribution	Dec. GB	Jan. GB
2005	0.69	ND	ND
2006	0.66	ND	ND
2007	0.54	ND	ND
2008	ND	-0.15	-0.52
2009	ND	-0.55	-0.69

Exhibit 5 **Inflation**

Top-left panel **Core PCE Prices**

Percent, annual rate

Period	3-month moving average	12-month moving average
January 2005	2.45	2.29
February 2005	2.31	2.26
March 2005	2.97	2.27
April 2005	2.24	2.13
May 2005	2.37	2.19
June 2005	1.67	2.07
July 2005	1.81	2.08
August 2005	1.33	2.11
September 2005	1.90	2.16
October 2005	2.22	2.18
November 2005	2.64	2.16
December 2005	2.21	2.19
January 2006	1.96	2.06
February 2006	1.75	2.02
March 2006	2.39	2.04
April 2006	2.81	2.20

Period	3-month moving average	12-month moving average
May 2006	2.97	2.17
June 2006	2.87	2.34
July 2006	2.28	2.32
August 2006	2.45	2.45
September 2006	2.29	2.44
October 2006	2.48	2.38
November 2006	1.74	2.23
December 2006	1.51	2.26
January 2007	2.20	2.44
February 2007	2.69	2.46
March 2007	2.37	2.26
April 2007	1.42	2.09
May 2007	1.17	2.01
June 2007	1.50	1.91
July 2007	1.71	1.95
August 2007	1.91	1.88
September 2007	2.38	1.94
October 2007	2.63	1.99
November 2007	2.89	2.16
December 2007	2.78	2.26

Note: December is staff estimate.

Top-right panel PCE Energy Prices

Four-quarter percent change

Period	PCE Energy Prices	Dec. GB	Forecast
2005:Q1	11.48	ND	ND
2005:Q2	11.51	ND	ND
2005:Q3	23.83	ND	ND
2005:Q4	21.12	ND	ND
2006:Q1	20.29	ND	ND
2006:Q2	22.09	ND	ND
2006:Q3	10.23	ND	ND
2006:Q4	-4.03	ND	ND
2007:Q1	0.49	ND	ND
2007:Q2	4.00	ND	ND
2007:Q3	0.94	0.94	ND

Period	PCE Energy Prices	Dec. GB	Forecast
2007:Q4	ND	18.60	18.78
2008:Q1	ND	16.62	17.66
2008:Q2	ND	5.43	6.42
2008:Q3	ND	7.10	8.55
2008:Q4	ND	1.79	3.20
2009:Q1	ND	-0.64	0.10
2009:Q2	ND	-1.26	-0.50
2009:Q3	ND	-1.38	-0.97
2009:Q4	ND	-1.26	-0.98

Middle-left panel **PCE Food Prices**

Four-quarter percent change

Period	PCE Food Prices	Dec. GB	Forecast
2005:Q1	2.42	ND	ND
2005:Q2	2.40	ND	ND
2005:Q3	2.15	ND	ND
2005:Q4	2.23	ND	ND
2006:Q1	2.57	ND	ND
2006:Q2	1.99	ND	ND
2006:Q3	2.39	ND	ND
2006:Q4	2.28	ND	ND
2007:Q1	2.88	ND	ND
2007:Q2	3.66	ND	ND
2007:Q3	4.09	4.09	ND
2007:Q4	ND	4.66	4.52
2008:Q1	ND	4.15	3.95
2008:Q2	ND	3.50	3.36
2008:Q3	ND	2.78	2.69
2008:Q4	ND	2.21	2.30
2009:Q1	ND	2.02	2.18
2009:Q2	ND	1.99	2.10
2009:Q3	ND	2.00	2.04
2009:Q4	ND	2.01	1.98

Middle-right panel **Core Nonfuel Import Prices**

Four-quarter percent change

Period	Core Nonfuel Import Prices	Dec. GB	Forecast
2005:Q1	3.51	ND	ND
2005:Q2	2.89	ND	ND
2005:Q3	2.23	ND	ND
2005:Q4	2.19	ND	ND
2006:Q1	1.26	ND	ND
2006:Q2	1.66	ND	ND
2006:Q3	2.73	ND	ND
2006:Q4	2.40	ND	ND
2007:Q1	2.77	ND	ND
2007:Q2	2.85	2.85	ND
2007:Q3	2.65	2.59	ND
2007:Q4	ND	2.89	3.11
2008:Q1	ND	2.81	3.20
2008:Q2	ND	2.06	2.59
2008:Q3	ND	1.55	2.15
2008:Q4	ND	1.14	1.69
2009:Q1	ND	0.79	1.27
2009:Q2	ND	0.85	1.28
2009:Q3	ND	0.87	1.25
2009:Q4	ND	0.86	1.22

Bottom-left panel
Long-Run Inflation Expectations

Michigan Survey

Period	Percent
January 2005	2.7
February 2005	2.8
March 2005	2.9
April 2005	3.0
May 2005	2.9
June 2005	2.8
July 2005	2.9
August 2005	2.8
September 2005	3.1
October 2005	3.2
November 2005	3.0

Period	Percent
December 2005	3.1
January 2006	2.9
February 2006	2.9
March 2006	2.9
April 2006	3.1
May 2006	3.2
June 2006	2.9
July 2006	2.9
August 2006	3.2
September 2006	3.0
October 2006	3.1
November 2006	3.0
December 2006	3.0
January 2007	3.0
February 2007	2.9
March 2007	2.9
April 2007	3.1
May 2007	3.1
June 2007	2.9
July 2007	3.1
August 2007	2.9
September 2007	2.9
October 2007	2.8
November 2007	2.9
December 2007	3.1
January 2008	3.0

**Survey of
Professional
Forecasters**

Period	Percent
2005:Q1	2.45
2005:Q2	2.50
2005:Q3	2.50
2005:Q4	2.50
2006:Q1	2.50
2006:Q2	2.50
2006:Q3	2.50

Period	Percent
2006:Q4	2.50
2007:Q1	2.35
2007:Q2	2.40
2007:Q3	2.40
2007:Q4	2.40

TIPS inflation compensation*

Date	Percent
3 January 2005	2.77
4 January 2005	2.79
5 January 2005	2.75
6 January 2005	2.77
7 January 2005	2.73
10 January 2005	2.71
11 January 2005	2.67
12 January 2005	2.68
13 January 2005	2.67
14 January 2005	2.70
17 January 2005	ND
18 January 2005	2.69
19 January 2005	2.70
20 January 2005	2.72
21 January 2005	2.70
24 January 2005	2.67
25 January 2005	2.64
26 January 2005	2.66
27 January 2005	2.68
28 January 2005	2.68
31 January 2005	2.67
1 February 2005	2.67
2 February 2005	2.59
3 February 2005	2.56
4 February 2005	2.54
7 February 2005	2.52
8 February 2005	2.53
9 February 2005	2.57
10 February 2005	2.56

Date	Percent
11 February 2005	2.59
14 February 2005	2.58
15 February 2005	2.56
16 February 2005	2.56
17 February 2005	2.60
18 February 2005	2.66
21 February 2005	ND
22 February 2005	2.65
23 February 2005	2.66
24 February 2005	2.68
25 February 2005	2.66
28 February 2005	2.69
1 March 2005	2.73
2 March 2005	2.76
3 March 2005	2.77
4 March 2005	2.71
7 March 2005	2.72
8 March 2005	2.75
9 March 2005	2.81
10 March 2005	2.77
11 March 2005	2.80
14 March 2005	2.78
15 March 2005	2.83
16 March 2005	2.81
17 March 2005	2.83
18 March 2005	2.83
21 March 2005	2.83
22 March 2005	2.81
23 March 2005	2.78
24 March 2005	2.80
25 March 2005	ND
28 March 2005	2.78
29 March 2005	2.77
30 March 2005	2.73
31 March 2005	2.75
1 April 2005	2.76
4 April 2005	2.75

Date	Percent
5 April 2005	2.73
6 April 2005	2.73
7 April 2005	2.72
8 April 2005	2.70
11 April 2005	2.69
12 April 2005	2.71
13 April 2005	2.76
14 April 2005	2.79
15 April 2005	2.76
18 April 2005	2.74
19 April 2005	2.70
20 April 2005	2.73
21 April 2005	2.74
22 April 2005	2.70
25 April 2005	2.64
26 April 2005	2.66
27 April 2005	2.62
28 April 2005	2.65
29 April 2005	2.64
2 May 2005	2.64
3 May 2005	2.63
4 May 2005	2.65
5 May 2005	2.65
6 May 2005	2.66
9 May 2005	2.67
10 May 2005	2.64
11 May 2005	2.63
12 May 2005	2.63
13 May 2005	2.60
16 May 2005	2.61
17 May 2005	2.60
18 May 2005	2.54
19 May 2005	2.52
20 May 2005	2.56
23 May 2005	2.54
24 May 2005	2.53
25 May 2005	2.54

Date	Percent
26 May 2005	2.51
27 May 2005	2.53
30 May 2005	ND
31 May 2005	2.47
1 June 2005	2.47
2 June 2005	2.45
3 June 2005	2.50
6 June 2005	2.47
7 June 2005	2.44
8 June 2005	2.45
9 June 2005	2.44
10 June 2005	2.44
13 June 2005	2.45
14 June 2005	2.47
15 June 2005	2.49
16 June 2005	2.48
17 June 2005	2.46
20 June 2005	2.47
21 June 2005	2.43
22 June 2005	2.37
23 June 2005	2.37
24 June 2005	2.36
27 June 2005	2.36
28 June 2005	2.38
29 June 2005	2.40
30 June 2005	2.34
1 July 2005	2.39
4 July 2005	ND
5 July 2005	2.41
6 July 2005	2.38
7 July 2005	2.35
8 July 2005	2.35
11 July 2005	2.37
12 July 2005	2.39
13 July 2005	2.37
14 July 2005	2.35
15 July 2005	2.34

Date	Percent
18 July 2005	2.37
19 July 2005	2.42
20 July 2005	2.41
21 July 2005	2.47
22 July 2005	2.46
25 July 2005	2.42
26 July 2005	2.43
27 July 2005	2.47
28 July 2005	2.44
29 July 2005	2.50
1 August 2005	2.47
2 August 2005	2.46
3 August 2005	2.47
4 August 2005	2.49
5 August 2005	2.48
8 August 2005	2.49
9 August 2005	2.47
10 August 2005	2.51
11 August 2005	2.48
12 August 2005	2.43
15 August 2005	2.47
16 August 2005	2.46
17 August 2005	2.52
18 August 2005	2.48
19 August 2005	2.50
22 August 2005	2.47
23 August 2005	2.49
24 August 2005	2.51
25 August 2005	2.46
26 August 2005	2.47
29 August 2005	2.48
30 August 2005	2.50
31 August 2005	2.40
1 September 2005	2.45
2 September 2005	2.49
5 September 2005	ND
6 September 2005	2.51

Date	Percent
7 September 2005	2.54
8 September 2005	2.51
9 September 2005	2.48
12 September 2005	2.51
13 September 2005	2.50
14 September 2005	2.53
15 September 2005	2.56
16 September 2005	2.59
19 September 2005	2.61
20 September 2005	2.58
21 September 2005	2.52
22 September 2005	2.55
23 September 2005	2.57
26 September 2005	2.60
27 September 2005	2.60
28 September 2005	2.61
29 September 2005	2.62
30 September 2005	2.61
3 October 2005	2.59
4 October 2005	2.58
5 October 2005	2.58
6 October 2005	2.55
7 October 2005	2.54
10 October 2005	ND
11 October 2005	2.49
12 October 2005	2.50
13 October 2005	2.58
14 October 2005	2.56
17 October 2005	2.60
18 October 2005	2.63
19 October 2005	2.62
20 October 2005	2.61
21 October 2005	2.56
24 October 2005	2.58
25 October 2005	2.61
26 October 2005	2.66
27 October 2005	2.66

Date	Percent
28 October 2005	2.68
31 October 2005	2.69
1 November 2005	2.73
2 November 2005	2.75
3 November 2005	2.79
4 November 2005	2.80
7 November 2005	2.76
8 November 2005	2.71
9 November 2005	2.74
10 November 2005	2.68
11 November 2005	ND
14 November 2005	2.64
15 November 2005	2.62
16 November 2005	2.61
17 November 2005	2.61
18 November 2005	2.59
21 November 2005	2.57
22 November 2005	2.57
23 November 2005	2.56
24 November 2005	ND
25 November 2005	2.51
28 November 2005	2.54
29 November 2005	2.56
30 November 2005	2.60
1 December 2005	2.57
2 December 2005	2.56
5 December 2005	2.57
6 December 2005	2.53
7 December 2005	2.54
8 December 2005	2.53
9 December 2005	2.54
12 December 2005	2.58
13 December 2005	2.59
14 December 2005	2.52
15 December 2005	2.51
16 December 2005	2.52
19 December 2005	2.53

Date	Percent
20 December 2005	2.53
21 December 2005	2.53
22 December 2005	2.48
23 December 2005	2.48
26 December 2005	ND
27 December 2005	2.45
28 December 2005	2.45
29 December 2005	2.43
30 December 2005	2.44
2 January 2006	ND
3 January 2006	2.47
4 January 2006	2.48
5 January 2006	2.46
6 January 2006	2.44
9 January 2006	2.43
10 January 2006	2.47
11 January 2006	2.50
12 January 2006	2.52
13 January 2006	2.50
16 January 2006	ND
17 January 2006	2.51
18 January 2006	2.53
19 January 2006	2.54
20 January 2006	2.55
23 January 2006	2.51
24 January 2006	2.50
25 January 2006	2.52
26 January 2006	2.56
27 January 2006	2.58
30 January 2006	2.58
31 January 2006	2.60
1 February 2006	2.59
2 February 2006	2.58
3 February 2006	2.56
6 February 2006	2.56
7 February 2006	2.58
8 February 2006	2.56

Date	Percent
9 February 2006	2.57
10 February 2006	2.57
13 February 2006	2.57
14 February 2006	2.57
15 February 2006	2.55
16 February 2006	2.56
17 February 2006	2.52
20 February 2006	ND
21 February 2006	2.51
22 February 2006	2.49
23 February 2006	2.50
24 February 2006	2.52
27 February 2006	2.52
28 February 2006	2.53
1 March 2006	2.54
2 March 2006	2.58
3 March 2006	2.61
6 March 2006	2.62
7 March 2006	2.61
8 March 2006	2.58
9 March 2006	2.59
10 March 2006	2.60
13 March 2006	2.59
14 March 2006	2.61
15 March 2006	2.61
16 March 2006	2.57
17 March 2006	2.59
20 March 2006	2.55
21 March 2006	2.55
22 March 2006	2.55
23 March 2006	2.57
24 March 2006	2.54
27 March 2006	2.55
28 March 2006	2.56
29 March 2006	2.56
30 March 2006	2.58
31 March 2006	2.60

Date	Percent
3 April 2006	2.60
4 April 2006	2.59
5 April 2006	2.60
6 April 2006	2.61
7 April 2006	2.63
10 April 2006	2.64
11 April 2006	2.63
12 April 2006	2.62
13 April 2006	2.63
14 April 2006	ND
17 April 2006	2.63
18 April 2006	2.67
19 April 2006	2.72
20 April 2006	2.72
21 April 2006	2.71
24 April 2006	2.70
25 April 2006	2.73
26 April 2006	2.75
27 April 2006	2.77
28 April 2006	2.82
1 May 2006	2.83
2 May 2006	2.79
3 May 2006	2.77
4 May 2006	2.75
5 May 2006	2.75
8 May 2006	2.74
9 May 2006	2.76
10 May 2006	2.74
11 May 2006	2.80
12 May 2006	2.78
15 May 2006	2.77
16 May 2006	2.76
17 May 2006	2.79
18 May 2006	2.74
19 May 2006	2.69
22 May 2006	2.71
23 May 2006	2.70

Date	Percent
24 May 2006	2.69
25 May 2006	2.69
26 May 2006	2.71
29 May 2006	ND
30 May 2006	2.73
31 May 2006	2.75
1 June 2006	2.74
2 June 2006	2.72
5 June 2006	2.70
6 June 2006	2.64
7 June 2006	2.61
8 June 2006	2.61
9 June 2006	2.59
12 June 2006	2.59
13 June 2006	2.60
14 June 2006	2.61
15 June 2006	2.65
16 June 2006	2.66
19 June 2006	2.64
20 June 2006	2.64
21 June 2006	2.63
22 June 2006	2.64
23 June 2006	2.65
26 June 2006	2.66
27 June 2006	2.64
28 June 2006	2.67
29 June 2006	2.68
30 June 2006	2.68
3 July 2006	2.66
4 July 2006	ND
5 July 2006	2.66
6 July 2006	2.65
7 July 2006	2.64
10 July 2006	2.64
11 July 2006	2.62
12 July 2006	2.59
13 July 2006	2.61

Date	Percent
14 July 2006	2.63
17 July 2006	2.64
18 July 2006	2.64
19 July 2006	2.64
20 July 2006	2.65
21 July 2006	2.62
24 July 2006	2.62
25 July 2006	2.67
26 July 2006	2.68
27 July 2006	2.68
28 July 2006	2.68
31 July 2006	2.69
1 August 2006	2.68
2 August 2006	2.68
3 August 2006	2.68
4 August 2006	2.69
7 August 2006	2.68
8 August 2006	2.72
9 August 2006	2.74
10 August 2006	2.72
11 August 2006	2.71
14 August 2006	2.70
15 August 2006	2.71
16 August 2006	2.71
17 August 2006	2.71
18 August 2006	2.70
21 August 2006	2.71
22 August 2006	2.73
23 August 2006	2.73
24 August 2006	2.71
25 August 2006	2.73
28 August 2006	2.72
29 August 2006	2.68
30 August 2006	2.68
31 August 2006	2.68
1 September 2006	2.67
4 September 2006	ND

Date	Percent
5 September 2006	2.67
6 September 2006	2.68
7 September 2006	2.66
8 September 2006	2.65
11 September 2006	2.64
12 September 2006	2.64
13 September 2006	2.65
14 September 2006	2.66
15 September 2006	2.64
18 September 2006	2.64
19 September 2006	2.61
20 September 2006	2.59
21 September 2006	2.59
22 September 2006	2.58
25 September 2006	2.57
26 September 2006	2.55
27 September 2006	2.53
28 September 2006	2.57
29 September 2006	2.57
2 October 2006	2.57
3 October 2006	2.56
4 October 2006	2.56
5 October 2006	2.57
6 October 2006	2.59
9 October 2006	ND
10 October 2006	2.57
11 October 2006	2.56
12 October 2006	2.56
13 October 2006	2.58
16 October 2006	2.59
17 October 2006	2.57
18 October 2006	2.57
19 October 2006	2.60
20 October 2006	2.61
23 October 2006	2.60
24 October 2006	2.61
25 October 2006	2.61

Date	Percent
26 October 2006	2.64
27 October 2006	2.63
30 October 2006	2.61
31 October 2006	2.60
1 November 2006	2.59
2 November 2006	2.57
3 November 2006	2.64
6 November 2006	2.63
7 November 2006	2.65
8 November 2006	2.65
9 November 2006	2.64
10 November 2006	2.61
13 November 2006	2.63
14 November 2006	2.59
15 November 2006	2.58
16 November 2006	2.57
17 November 2006	2.57
20 November 2006	2.54
21 November 2006	2.50
22 November 2006	2.51
23 November 2006	ND
24 November 2006	2.50
27 November 2006	2.50
28 November 2006	2.50
29 November 2006	2.50
30 November 2006	2.53
1 December 2006	2.55
4 December 2006	2.54
5 December 2006	2.55
6 December 2006	2.55
7 December 2006	2.54
8 December 2006	2.57
11 December 2006	2.54
12 December 2006	2.53
13 December 2006	2.55
14 December 2006	2.54
15 December 2006	2.51

Date	Percent
18 December 2006	2.50
19 December 2006	2.48
20 December 2006	2.48
21 December 2006	2.44
22 December 2006	2.44
25 December 2006	ND
26 December 2006	2.44
27 December 2006	2.43
28 December 2006	2.46
29 December 2006	2.47
1 January 2007	ND
2 January 2007	2.47
3 January 2007	2.47
4 January 2007	2.44
5 January 2007	2.46
8 January 2007	2.45
9 January 2007	2.42
10 January 2007	2.42
11 January 2007	2.41
12 January 2007	2.40
15 January 2007	ND
16 January 2007	2.46
17 January 2007	2.47
18 January 2007	2.48
19 January 2007	2.49
22 January 2007	2.50
23 January 2007	2.53
24 January 2007	2.55
25 January 2007	2.55
26 January 2007	2.56
29 January 2007	2.54
30 January 2007	2.55
31 January 2007	2.55
1 February 2007	2.52
2 February 2007	2.52
5 February 2007	2.51
6 February 2007	2.46

Date	Percent
7 February 2007	2.49
8 February 2007	2.47
9 February 2007	2.49
12 February 2007	2.48
13 February 2007	2.48
14 February 2007	2.49
15 February 2007	2.48
16 February 2007	2.49
19 February 2007	ND
20 February 2007	2.49
21 February 2007	2.48
22 February 2007	2.50
23 February 2007	2.51
26 February 2007	2.49
27 February 2007	2.47
28 February 2007	2.49
1 March 2007	2.49
2 March 2007	2.48
5 March 2007	2.44
6 March 2007	2.45
7 March 2007	2.44
8 March 2007	2.44
9 March 2007	2.43
12 March 2007	2.42
13 March 2007	2.44
14 March 2007	2.46
15 March 2007	2.48
16 March 2007	2.48
19 March 2007	2.47
20 March 2007	2.46
21 March 2007	2.50
22 March 2007	2.54
23 March 2007	2.54
26 March 2007	2.55
27 March 2007	2.56
28 March 2007	2.56
29 March 2007	2.55

Date	Percent
30 March 2007	2.55
2 April 2007	2.55
3 April 2007	2.53
4 April 2007	2.54
5 April 2007	2.57
6 April 2007	2.59
9 April 2007	2.58
10 April 2007	2.58
11 April 2007	2.56
12 April 2007	2.56
13 April 2007	2.55
16 April 2007	2.54
17 April 2007	2.53
18 April 2007	2.51
19 April 2007	2.51
20 April 2007	2.52
23 April 2007	2.51
24 April 2007	2.49
25 April 2007	2.51
26 April 2007	2.51
27 April 2007	2.53
30 April 2007	2.48
1 May 2007	2.48
2 May 2007	2.50
3 May 2007	2.49
4 May 2007	2.46
7 May 2007	2.44
8 May 2007	2.45
9 May 2007	2.45
10 May 2007	2.45
11 May 2007	2.45
14 May 2007	2.44
15 May 2007	2.42
16 May 2007	2.41
17 May 2007	2.40
18 May 2007	2.43
21 May 2007	2.44

Date	Percent
22 May 2007	2.47
23 May 2007	2.50
24 May 2007	2.52
25 May 2007	2.52
28 May 2007	ND
29 May 2007	2.51
30 May 2007	2.53
31 May 2007	2.55
1 June 2007	2.55
4 June 2007	2.54
5 June 2007	2.55
6 June 2007	2.56
7 June 2007	2.60
8 June 2007	2.62
11 June 2007	2.63
12 June 2007	2.66
13 June 2007	2.65
14 June 2007	2.66
15 June 2007	2.64
18 June 2007	2.63
19 June 2007	2.63
20 June 2007	2.65
21 June 2007	2.68
22 June 2007	2.71
25 June 2007	2.69
26 June 2007	2.66
27 June 2007	2.65
28 June 2007	2.63
29 June 2007	2.61
2 July 2007	2.62
3 July 2007	2.62
4 July 2007	ND
5 July 2007	2.63
6 July 2007	2.64
9 July 2007	2.64
10 July 2007	2.62
11 July 2007	2.62

Date	Percent
12 July 2007	2.61
13 July 2007	2.62
16 July 2007	2.61
17 July 2007	2.63
18 July 2007	2.63
19 July 2007	2.65
20 July 2007	2.62
23 July 2007	2.63
24 July 2007	2.67
25 July 2007	2.69
26 July 2007	2.64
27 July 2007	2.68
30 July 2007	2.69
31 July 2007	2.70
1 August 2007	2.67
2 August 2007	2.66
3 August 2007	2.62
6 August 2007	2.63
7 August 2007	2.65
8 August 2007	2.67
9 August 2007	2.67
10 August 2007	2.71
13 August 2007	2.68
14 August 2007	2.65
15 August 2007	2.67
16 August 2007	2.70
17 August 2007	2.71
20 August 2007	2.69
21 August 2007	2.70
22 August 2007	2.70
23 August 2007	2.68
24 August 2007	2.68
27 August 2007	2.69
28 August 2007	2.70
29 August 2007	2.68
30 August 2007	2.68
31 August 2007	2.67

Date	Percent
3 September 2007	ND
4 September 2007	2.68
5 September 2007	2.69
6 September 2007	2.68
7 September 2007	2.69
10 September 2007	2.68
11 September 2007	2.70
12 September 2007	2.71
13 September 2007	2.72
14 September 2007	2.73
17 September 2007	2.75
18 September 2007	2.81
19 September 2007	2.81
20 September 2007	2.85
21 September 2007	2.81
24 September 2007	2.79
25 September 2007	2.78
26 September 2007	2.79
27 September 2007	2.81
28 September 2007	2.80
1 October 2007	2.79
2 October 2007	2.79
3 October 2007	2.78
4 October 2007	2.78
5 October 2007	2.79
8 October 2007	ND
9 October 2007	2.79
10 October 2007	2.80
11 October 2007	2.80
12 October 2007	2.79
15 October 2007	2.77
16 October 2007	2.77
17 October 2007	2.76
18 October 2007	2.74
19 October 2007	2.73
22 October 2007	2.73
23 October 2007	2.75

Date	Percent
24 October 2007	2.74
25 October 2007	2.74
26 October 2007	2.78
29 October 2007	2.76
30 October 2007	2.77
31 October 2007	2.74
1 November 2007	2.75
2 November 2007	2.77
5 November 2007	2.79
6 November 2007	2.80
7 November 2007	2.81
8 November 2007	2.82
9 November 2007	2.80
12 November 2007	ND
13 November 2007	2.78
14 November 2007	2.75
15 November 2007	2.73
16 November 2007	2.75
19 November 2007	2.77
20 November 2007	2.77
21 November 2007	2.79
22 November 2007	ND
23 November 2007	2.77
26 November 2007	2.74
27 November 2007	2.77
28 November 2007	2.72
29 November 2007	2.75
30 November 2007	2.77
3 December 2007	2.76
4 December 2007	2.72
5 December 2007	2.67
6 December 2007	2.72
7 December 2007	2.76
10 December 2007	2.75
11 December 2007	2.71
12 December 2007	2.72
13 December 2007	2.73

Date	Percent
14 December 2007	2.74
17 December 2007	2.74
18 December 2007	2.75
19 December 2007	2.71
20 December 2007	2.73
21 December 2007	2.77
24 December 2007	2.77
25 December 2007	ND
26 December 2007	2.78
27 December 2007	2.74
28 December 2007	2.69
31 December 2007	2.72
1 January 2008	ND
2 January 2008	2.71
3 January 2008	2.65
4 January 2008	2.67
7 January 2008	2.64
8 January 2008	2.65
9 January 2008	2.64
10 January 2008	2.70
11 January 2008	2.75
14 January 2008	2.78
15 January 2008	2.76
16 January 2008	2.75
17 January 2008	2.78
18 January 2008	2.79
21 January 2008	ND
22 January 2008	2.89
23 January 2008	2.96
24 January 2008	2.96
25 January 2008	2.93
28 January 2008	2.95

* Five-to-ten years ahead [Return to table](#)

Bottom-right panel
PCE Price Projection

(Percent change, Q4/Q4)

	2007	2008	2009
Total	3.4	2.2	1.7
<i>Prev.</i>	3.2	2.0	1.7
Core	2.1	2.1	1.9
<i>Prev.</i>	2.0	2.0	1.9

Exhibit 6

Financial Market Developments

Top-left panel

Equity Valuation for S&P 500

Percent

Period	Trend E/P*	Real Treasury perpetuity yield
January 1986	9.36	6.41
February 1986	9.36	5.86
March 1986	8.76	4.74
April 1986	8.34	3.96
May 1986	8.48	4.36
June 1986	8.10	4.64
July 1986	8.00	4.32
August 1986	8.52	4.31
September 1986	7.97	4.83
October 1986	8.74	4.82
November 1986	8.31	4.52
December 1986	8.14	4.41
January 1987	8.39	4.09
February 1987	7.42	4.17
March 1987	7.16	4.07
April 1987	6.98	4.68
May 1987	7.06	5.03
June 1987	7.02	4.89
July 1987	6.71	4.63
August 1987	6.06	4.93
September 1987	6.81	5.55
October 1987	8.90	5.56
November 1987	8.47	4.95
December 1987	8.32	4.92

Period	Trend E/P*	Real Treasury perpetuity yield
January 1988	8.18	4.91
February 1988	8.03	4.64
March 1988	7.67	4.84
April 1988	8.04	5.14
May 1988	8.35	5.45
June 1988	7.70	5.14
July 1988	7.90	5.34
August 1988	8.21	5.39
September 1988	8.01	5.03
October 1988	7.84	4.89
November 1988	8.30	4.90
December 1988	8.01	4.64
January 1989	7.76	4.54
February 1989	7.63	4.63
March 1989	7.64	4.76
April 1989	7.45	4.65
May 1989	7.29	4.54
June 1989	7.22	4.01
July 1989	7.04	4.11
August 1989	6.91	4.09
September 1989	6.99	4.10
October 1989	7.15	3.86
November 1989	7.26	3.79
December 1989	7.09	3.78
January 1990	7.42	4.41
February 1990	7.73	4.66
March 1990	7.68	4.69
April 1990	7.68	4.65
May 1990	7.47	4.62
June 1990	7.32	4.35
July 1990	7.40	4.47
August 1990	8.00	5.00
September 1990	8.67	5.19
October 1990	9.26	5.10
November 1990	8.70	4.79
December 1990	8.51	4.45
January 1991	8.95	4.57

Period	Trend E/P*	Real Treasury perpetuity yield
February 1991	7.72	4.39
March 1991	7.66	4.65
April 1991	7.39	4.51
May 1991	7.88	4.54
June 1991	7.79	4.74
July 1991	7.70	4.69
August 1991	7.56	4.42
September 1991	7.65	4.25
October 1991	7.55	4.45
November 1991	7.48	4.52
December 1991	7.76	4.42
January 1992	7.08	4.32
February 1992	7.30	4.52
March 1992	7.29	4.61
April 1992	7.24	4.39
May 1992	7.17	4.37
June 1992	7.43	4.48
July 1992	7.18	4.65
August 1992	7.16	4.45
September 1992	7.14	4.59
October 1992	7.32	4.82
November 1992	7.09	4.62
December 1992	6.95	4.37
January 1993	6.93	4.46
February 1993	6.94	4.32
March 1993	6.71	4.06
April 1993	6.72	3.92
May 1993	6.75	4.01
June 1993	6.77	3.86
July 1993	6.74	3.85
August 1993	6.66	3.50
September 1993	6.59	3.37
October 1993	6.61	3.34
November 1993	6.57	3.60
December 1993	6.63	3.57
January 1994	6.47	3.61
February 1994	6.50	3.72

Period	Trend E/P*	Real Treasury perpetuity yield
March 1994	6.57	4.04
April 1994	6.93	4.32
May 1994	6.84	4.43
June 1994	6.76	4.52
July 1994	6.96	4.56
August 1994	6.74	4.51
September 1994	6.71	4.83
October 1994	6.72	5.00
November 1994	6.81	4.96
December 1994	7.01	4.55
January 1995	6.82	4.70
February 1995	6.65	4.61
March 1995	6.59	4.57
April 1995	6.46	4.55
May 1995	6.23	4.11
June 1995	6.16	3.71
July 1995	6.05	4.03
August 1995	6.00	4.17
September 1995	5.85	3.88
October 1995	5.82	3.84
November 1995	5.81	3.69
December 1995	5.60	3.48
January 1996	5.80	3.50
February 1996	5.42	3.82
March 1996	5.62	4.20
April 1996	5.66	4.38
May 1996	5.51	4.48
June 1996	5.60	4.54
July 1996	5.91	4.47
August 1996	5.72	4.35
September 1996	5.62	4.47
October 1996	5.50	4.27
November 1996	5.35	3.98
December 1996	5.40	4.03
January 1997	5.20	4.30
February 1997	4.96	4.17
March 1997	5.18	4.40

Period	Trend E/P*	Real Treasury perpetuity yield
April 1997	5.38	4.65
May 1997	4.96	4.46
June 1997	4.71	4.32
July 1997	4.51	3.87
August 1997	4.63	3.94
September 1997	4.57	3.80
October 1997	4.51	3.96
November 1997	4.65	3.79
December 1997	4.60	3.62
January 1998	4.68	3.53
February 1998	4.39	3.61
March 1998	4.21	3.64
April 1998	4.13	3.71
May 1998	4.17	3.69
June 1998	4.26	3.39
July 1998	4.05	3.44
August 1998	4.38	3.36
September 1998	4.64	3.24
October 1998	4.88	3.29
November 1998	4.32	3.37
December 1998	4.29	3.25
January 1999	4.08	3.50
February 1999	4.15	3.65
March 1999	3.94	3.85
April 1999	3.88	3.65
May 1999	3.87	3.84
June 1999	3.94	4.03
July 1999	3.77	3.94
August 1999	3.98	4.02
September 1999	4.05	4.14
October 1999	4.18	4.25
November 1999	3.83	4.09
December 1999	3.85	4.26
January 2000	3.76	4.34
February 2000	3.97	3.76
March 2000	3.99	3.64
April 2000	3.91	3.48

Period	Trend E/P*	Real Treasury perpetuity yield
May 2000	3.89	3.78
June 2000	3.86	3.61
July 2000	3.86	3.56
August 2000	3.89	3.38
September 2000	3.91	3.55
October 2000	4.36	3.58
November 2000	4.24	3.52
December 2000	4.37	3.30
January 2001	4.51	3.41
February 2001	4.59	3.37
March 2001	5.22	3.31
April 2001	4.96	3.69
May 2001	4.81	3.78
June 2001	5.03	3.67
July 2001	5.21	3.60
August 2001	5.38	3.46
September 2001	6.41	3.59
October 2001	5.94	3.38
November 2001	5.63	3.25
December 2001	5.61	3.66
January 2002	5.72	3.64
February 2002	5.78	3.56
March 2002	5.61	3.82
April 2002	5.75	3.77
May 2002	5.93	3.79
June 2002	6.42	3.75
July 2002	7.31	3.73
August 2002	6.91	3.49
September 2002	7.59	3.19
October 2002	7.26	3.48
November 2002	7.05	3.47
December 2002	7.20	3.43
January 2003	6.95	3.40
February 2003	7.59	3.25
March 2003	7.25	3.25
April 2003	7.10	3.32
May 2003	6.69	2.93

Period	Trend E/P*	Real Treasury perpetuity yield
June 2003	6.36	2.79
July 2003	6.43	3.34
August 2003	6.36	3.78
September 2003	6.05	3.61
October 2003	5.97	3.62
November 2003	6.05	3.53
December 2003	5.74	3.45
January 2004	5.51	3.38
February 2004	5.43	3.29
March 2004	5.55	3.11
April 2004	5.51	3.49
May 2004	5.71	3.69
June 2004	5.50	3.65
July 2004	5.66	3.47
August 2004	5.72	3.33
September 2004	5.57	3.16
October 2004	5.69	3.09
November 2004	5.32	3.08
December 2004	5.25	3.03
January 2005	5.40	2.85
February 2005	5.32	2.58
March 2005	5.40	2.79
April 2005	5.57	2.62
May 2005	5.47	2.42
June 2005	5.42	2.16
July 2005	5.35	2.22
August 2005	5.47	2.25
September 2005	5.47	2.28
October 2005	5.75	2.45
November 2005	5.49	2.51
December 2005	5.42	2.41
January 2006	5.40	2.31
February 2006	5.43	2.31
March 2006	5.41	2.51
April 2006	5.44	2.89
May 2006	5.71	3.02
June 2006	5.80	2.91

Period	Trend E/P*	Real Treasury perpetuity yield
July 2006	5.90	2.86
August 2006	5.74	2.72
September 2006	5.71	2.56
October 2006	5.57	2.57
November 2006	5.50	2.40
December 2006	5.46	2.42
January 2007	5.52	2.71
February 2007	5.46	2.71
March 2007	5.78	2.63
April 2007	5.54	2.72
May 2007	5.44	2.75
June 2007	5.47	3.01
July 2007	5.42	2.89
August 2007	6.04	2.82
September 2007	5.67	2.66
October 2007	5.66	2.64
November 2007	6.21	2.42
December 2007	6.09	2.48
28 January 2008	6.74 [±]	2.42 ⁺

+ Denotes latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S. [Return to table](#)

* Estimated using analyst year-ahead earnings from I/B/E/S. [Return to table](#)

Top-right panel Estimated Equity Premium*

Period	Percent
January 2005	2.55
February 2005	2.75
March 2005	2.62
April 2005	2.95
May 2005	3.05
June 2005	3.26
July 2005	3.13
August 2005	3.22
September 2005	3.19
October 2005	3.30
November 2005	2.99
December 2005	3.00

Period	Percent
January 2006	3.09
February 2006	3.12
March 2006	2.91
April 2006	2.55
May 2006	2.69
June 2006	2.89
July 2006	3.04
August 2006	3.02
September 2006	3.16
October 2006	3.00
November 2006	3.09
December 2006	3.04
January 2007	2.80
February 2007	2.76
March 2007	3.16
April 2007	2.81
May 2007	2.70
June 2007	2.46
July 2007	2.53
August 2007	3.22
September 2007	3.01
October 2007	3.02
November 2007	3.80
December 2007	3.61
28 January 2008	4.32

* Trend E/P ratio less real Treasury perpetuity yield. [Return to text](#)

Middle panel

Corporate Bond Spreads

Basis points

Date	10-year high-yield	10-year BBB	10-year A
2 January 1997	326.53	81.95	61.18
3 January 1997	324.41	82.65	61.87
6 January 1997	327.76	83.44	61.79
7 January 1997	325.28	82.88	62.11
8 January 1997	327.07	82.20	61.52
9 January 1997	337.78	83.68	62.87

Date	10-year high-yield	10-year BBB	10-year A
10 January 1997	329.58	82.34	61.94
13 January 1997	321.02	82.31	61.87
14 January 1997	322.97	82.60	62.33
15 January 1997	323.35	81.60	61.48
16 January 1997	317.43	81.01	60.87
17 January 1997	324.96	81.47	61.17
20 January 1997	ND	ND	ND
21 January 1997	315.84	81.69	61.42
22 January 1997	327.97	81.19	60.84
23 January 1997	325.21	81.20	60.88
24 January 1997	316.63	80.85	60.67
27 January 1997	316.68	80.63	60.50
28 January 1997	320.06	80.68	60.35
29 January 1997	320.22	80.99	60.71
30 January 1997	321.32	80.77	60.60
31 January 1997	317.09	81.22	61.30
3 February 1997	320.84	80.23	60.48
4 February 1997	322.52	80.59	60.71
5 February 1997	316.52	79.30	59.61
6 February 1997	315.08	79.76	59.86
7 February 1997	317.48	78.91	58.89
10 February 1997	316.95	79.97	59.87
11 February 1997	314.92	80.01	60.17
12 February 1997	ND	ND	ND
13 February 1997	318.02	78.98	58.78
14 February 1997	320.05	79.55	59.21
17 February 1997	ND	ND	ND
18 February 1997	316.35	78.69	58.53
19 February 1997	312.32	78.80	58.57
20 February 1997	303.72	77.32	57.43
21 February 1997	304.73	78.29	58.76
24 February 1997	301.49	77.75	58.25
25 February 1997	300.74	77.62	58.23
26 February 1997	289.73	76.55	57.23
27 February 1997	290.54	76.06	57.20
28 February 1997	292.82	76.12	56.99
3 March 1997	295.98	74.40	55.61

Date	10-year high-yield	10-year BBB	10-year A
4 March 1997	291.40	74.30	55.38
5 March 1997	293.94	74.07	55.19
6 March 1997	291.09	73.50	54.62
7 March 1997	295.75	73.71	54.76
10 March 1997	295.42	73.09	54.29
11 March 1997	294.85	72.71	54.16
12 March 1997	291.86	72.95	54.46
13 March 1997	285.58	72.86	54.66
14 March 1997	289.46	73.45	55.38
17 March 1997	288.94	73.64	55.67
18 March 1997	289.17	73.74	55.53
19 March 1997	291.62	73.40	55.40
20 March 1997	294.81	74.51	56.58
21 March 1997	296.00	74.62	56.12
24 March 1997	298.74	74.29	56.02
25 March 1997	298.19	75.12	57.10
26 March 1997	299.26	74.74	56.81
27 March 1997	294.24	74.19	56.71
28 March 1997	ND	ND	ND
31 March 1997	280.05	72.81	55.15
1 April 1997	285.14	72.46	54.97
2 April 1997	291.00	73.67	55.73
3 April 1997	296.34	73.89	55.75
4 April 1997	290.64	74.34	56.01
7 April 1997	293.08	74.83	56.35
8 April 1997	290.60	74.65	56.10
9 April 1997	290.31	74.42	55.90
10 April 1997	289.66	74.29	55.94
11 April 1997	285.76	74.27	56.00
14 April 1997	288.39	74.61	56.50
15 April 1997	295.88	75.00	56.41
16 April 1997	293.60	74.85	56.45
17 April 1997	294.16	74.75	56.26
18 April 1997	294.82	74.51	55.98
21 April 1997	290.26	74.24	55.64
22 April 1997	290.80	73.44	54.76
23 April 1997	283.64	73.73	55.28

Date	10-year high-yield	10-year BBB	10-year A
24 April 1997	279.86	74.06	55.31
25 April 1997	278.81	74.50	55.98
28 April 1997	282.16	74.85	56.47
29 April 1997	290.17	75.25	56.75
30 April 1997	294.37	75.49	56.90
1 May 1997	292.82	75.45	56.58
2 May 1997	291.18	74.78	55.97
5 May 1997	291.66	76.66	57.76
6 May 1997	288.92	77.05	57.96
7 May 1997	281.17	75.83	57.21
8 May 1997	283.85	80.32	62.20
9 May 1997	285.09	76.87	58.36
12 May 1997	283.40	77.11	58.82
13 May 1997	275.58	76.55	58.74
14 May 1997	273.75	74.94	56.96
15 May 1997	273.80	76.19	58.14
16 May 1997	271.38	76.28	58.26
19 May 1997	271.19	77.32	59.23
20 May 1997	271.29	77.02	59.00
21 May 1997	267.87	76.29	58.10
22 May 1997	265.79	77.00	58.92
23 May 1997	271.30	81.27	63.06
26 May 1997	ND	ND	ND
27 May 1997	262.93	77.04	58.85
28 May 1997	261.56	76.37	58.26
29 May 1997	262.98	76.05	57.90
30 May 1997	267.71	77.06	58.66
2 June 1997	282.13	75.57	57.03
3 June 1997	282.15	75.39	57.07
4 June 1997	283.09	75.99	57.71
5 June 1997	281.82	76.36	58.07
6 June 1997	288.55	76.77	58.33
9 June 1997	279.25	75.53	56.92
10 June 1997	274.35	74.70	56.37
11 June 1997	273.23	74.19	55.94
12 June 1997	277.55	74.57	55.50
13 June 1997	280.83	75.10	56.02

Date	10-year high-yield	10-year BBB	10-year A
16 June 1997	282.33	75.12	55.92
17 June 1997	279.46	74.74	55.62
18 June 1997	283.63	74.45	55.43
19 June 1997	282.88	74.54	55.43
20 June 1997	285.93	74.98	55.90
23 June 1997	282.62	74.92	55.65
24 June 1997	283.85	75.21	56.07
25 June 1997	280.63	74.77	55.75
26 June 1997	280.46	74.46	55.81
27 June 1997	278.82	71.25	52.58
30 June 1997	278.89	73.88	55.73
1 July 1997	284.22	74.65	56.42
2 July 1997	284.53	74.66	56.46
3 July 1997	294.71	75.49	57.19
4 July 1997	ND	ND	ND
7 July 1997	295.33	74.81	56.86
8 July 1997	294.19	74.71	56.76
9 July 1997	294.69	74.78	56.84
10 July 1997	293.08	74.82	56.67
11 July 1997	294.19	74.86	57.40
14 July 1997	291.54	74.72	57.38
15 July 1997	288.79	74.66	57.22
16 July 1997	293.28	74.82	57.84
17 July 1997	291.83	74.66	57.83
18 July 1997	288.09	73.78	57.13
21 July 1997	285.74	74.10	57.48
22 July 1997	293.19	73.80	56.96
23 July 1997	292.38	74.22	57.34
24 July 1997	290.72	74.82	57.86
25 July 1997	288.09	74.57	57.74
28 July 1997	287.58	73.02	56.00
29 July 1997	294.40	75.97	59.33
30 July 1997	294.35	74.16	57.28
31 July 1997	292.34	74.50	57.27
1 August 1997	277.26	73.87	57.22
4 August 1997	275.78	74.30	57.83
5 August 1997	278.33	73.88	57.33

Date	10-year high-yield	10-year BBB	10-year A
6 August 1997	276.87	75.46	59.01
7 August 1997	276.29	75.55	58.98
8 August 1997	266.76	71.49	54.80
11 August 1997	266.73	71.50	54.73
12 August 1997	265.37	70.97	54.43
13 August 1997	267.97	69.57	54.47
14 August 1997	274.19	70.10	54.46
15 August 1997	274.33	70.12	53.61
18 August 1997	278.19	69.88	54.73
19 August 1997	278.27	69.70	54.14
20 August 1997	276.53	69.92	54.83
21 August 1997	272.32	71.05	54.66
22 August 1997	268.61	71.40	54.97
25 August 1997	266.76	70.19	54.82
26 August 1997	267.48	69.38	53.97
27 August 1997	269.10	69.82	54.31
28 August 1997	275.44	71.13	55.35
29 August 1997	272.60	70.95	55.07
1 September 1997	ND	ND	ND
2 September 1997	273.97	69.76	54.23
3 September 1997	269.39	69.85	54.49
4 September 1997	270.45	69.00	53.43
5 September 1997	268.08	68.84	52.83
8 September 1997	270.59	69.28	53.99
9 September 1997	270.20	69.03	53.42
10 September 1997	267.12	69.18	53.16
11 September 1997	266.88	68.89	52.93
12 September 1997	273.83	69.92	53.80
15 September 1997	273.59	69.33	53.51
16 September 1997	285.08	72.67	54.84
17 September 1997	283.61	70.38	54.42
18 September 1997	280.34	71.07	55.26
19 September 1997	280.34	70.94	54.78
22 September 1997	280.75	71.10	54.95
23 September 1997	277.63	70.55	54.56
24 September 1997	281.08	71.02	55.20
25 September 1997	273.78	70.44	54.17

Date	10-year high-yield	10-year BBB	10-year A
26 September 1997	276.82	70.43	54.30
29 September 1997	275.23	69.84	54.09
30 September 1997	274.94	69.96	53.69
1 October 1997	279.15	71.03	54.26
2 October 1997	280.81	71.20	54.05
3 October 1997	271.60	69.34	52.25
6 October 1997	280.31	70.61	53.89
7 October 1997	281.11	70.72	54.14
8 October 1997	270.39	71.84	54.15
9 October 1997	271.73	69.61	53.31
10 October 1997	265.09	69.12	52.46
13 October 1997	ND	ND	ND
14 October 1997	271.55	69.81	53.27
15 October 1997	269.17	69.72	53.13
16 October 1997	267.57	69.18	52.76
17 October 1997	263.57	68.61	52.70
20 October 1997	266.02	69.16	53.33
21 October 1997	266.64	69.39	53.49
22 October 1997	267.35	69.07	53.22
23 October 1997	274.58	69.82	54.08
24 October 1997	277.16	72.50	55.20
27 October 1997	290.16	67.75	52.03
28 October 1997	294.97	73.67	58.37
29 October 1997	298.67	72.87	56.75
30 October 1997	304.82	75.00	57.36
31 October 1997	312.15	79.16	62.62
3 November 1997	308.36	81.60	64.71
4 November 1997	301.90	81.26	64.39
5 November 1997	301.20	81.87	64.47
6 November 1997	303.70	82.96	65.42
7 November 1997	304.03	83.02	65.38
10 November 1997	303.36	83.41	65.96
11 November 1997	ND	ND	ND
12 November 1997	302.56	81.70	63.98
13 November 1997	305.84	82.77	64.94
14 November 1997	306.89	83.11	65.75
17 November 1997	306.42	84.03	67.49

Date	10-year high-yield	10-year BBB	10-year A
18 November 1997	307.54	84.40	67.90
19 November 1997	311.45	85.78	69.17
20 November 1997	309.14	86.55	69.51
21 November 1997	309.46	86.56	69.39
24 November 1997	307.51	86.30	69.30
25 November 1997	306.97	86.95	69.29
26 November 1997	307.26	89.09	69.42
27 November 1997	ND	ND	ND
28 November 1997	308.74	92.30	71.95
1 December 1997	307.25	88.76	68.50
2 December 1997	308.44	88.59	68.23
3 December 1997	309.32	88.90	68.56
4 December 1997	306.03	89.22	68.98
5 December 1997	300.88	90.47	70.01
8 December 1997	297.34	89.69	69.40
9 December 1997	297.69	88.88	69.02
10 December 1997	300.06	88.63	68.67
11 December 1997	304.81	88.32	68.20
12 December 1997	310.81	88.45	68.47
15 December 1997	307.59	88.76	69.00
16 December 1997	308.58	88.64	68.92
17 December 1997	304.83	89.42	69.61
18 December 1997	310.48	89.60	69.67
19 December 1997	310.86	86.17	66.17
22 December 1997	312.77	89.96	70.41
23 December 1997	311.56	88.79	69.03
24 December 1997	310.22	89.40	69.49
25 December 1997	ND	ND	ND
26 December 1997	310.79	90.16	70.11
29 December 1997	309.39	90.08	70.28
30 December 1997	306.48	89.25	70.23
31 December 1997	320.75	90.38	69.91
1 January 1998	ND	ND	ND
2 January 1998	328.27	92.72	71.33
5 January 1998	334.92	89.89	69.92
6 January 1998	334.57	88.43	68.31
7 January 1998	328.06	87.80	67.89

Date	10-year high-yield	10-year BBB	10-year A
8 January 1998	331.11	87.28	67.73
9 January 1998	335.13	85.95	67.07
12 January 1998	335.52	87.28	68.42
13 January 1998	333.46	88.26	69.13
14 January 1998	329.11	87.75	68.44
15 January 1998	327.37	88.23	69.39
16 January 1998	321.77	89.41	70.11
19 January 1998	ND	ND	ND
20 January 1998	319.74	92.97	71.97
21 January 1998	320.95	90.56	71.70
22 January 1998	318.80	89.06	70.37
23 January 1998	308.27	88.78	69.61
26 January 1998	312.83	90.74	71.07
27 January 1998	309.27	91.08	71.37
28 January 1998	309.30	92.66	71.97
29 January 1998	318.13	93.22	72.59
30 January 1998	318.89	97.68	74.51
2 February 1998	318.94	94.97	72.59
3 February 1998	318.47	93.91	71.74
4 February 1998	319.85	93.77	72.05
5 February 1998	312.10	92.34	70.47
6 February 1998	312.68	93.51	71.26
9 February 1998	311.24	93.69	71.24
10 February 1998	312.12	94.41	71.80
11 February 1998	316.79	95.74	73.74
12 February 1998	314.49	91.37	68.06
13 February 1998	316.04	93.15	68.84
16 February 1998	ND	ND	ND
17 February 1998	319.42	91.67	67.55
18 February 1998	314.75	91.39	67.81
19 February 1998	313.65	91.58	67.95
20 February 1998	313.36	91.35	68.00
23 February 1998	310.61	92.04	68.36
24 February 1998	302.76	89.73	65.88
25 February 1998	311.72	93.47	69.74
26 February 1998	310.29	93.93	69.91
27 February 1998	312.02	95.22	70.48

Date	10-year high-yield	10-year BBB	10-year A
2 March 1998	301.85	92.88	68.30
3 March 1998	301.15	92.87	68.30
4 March 1998	302.15	93.75	69.32
5 March 1998	298.98	92.06	67.36
6 March 1998	303.80	92.19	67.74
9 March 1998	307.97	92.14	67.63
10 March 1998	308.65	92.52	67.99
11 March 1998	310.63	93.08	68.64
12 March 1998	315.16	93.11	68.92
13 March 1998	313.63	92.72	68.80
16 March 1998	314.26	91.60	67.80
17 March 1998	312.90	91.62	67.63
18 March 1998	310.00	91.83	67.67
19 March 1998	310.21	92.22	68.17
20 March 1998	310.58	92.64	68.29
23 March 1998	309.89	92.75	68.44
24 March 1998	309.73	92.60	68.33
25 March 1998	305.36	93.74	69.12
26 March 1998	301.92	94.42	69.49
27 March 1998	301.02	94.66	69.52
30 March 1998	298.42	94.35	69.22
31 March 1998	305.68	93.63	68.20
1 April 1998	309.14	92.82	67.91
2 April 1998	312.18	92.51	67.52
3 April 1998	319.33	92.35	67.62
6 April 1998	314.23	93.04	68.20
7 April 1998	312.62	92.62	68.13
8 April 1998	309.06	92.44	67.38
9 April 1998	309.75	94.08	69.00
10 April 1998	ND	ND	ND
13 April 1998	305.31	93.75	68.50
14 April 1998	307.81	93.10	68.07
15 April 1998	307.76	91.63	66.99
16 April 1998	307.80	91.16	66.62
17 April 1998	304.70	91.10	66.91
20 April 1998	303.19	90.98	66.36
21 April 1998	301.65	91.30	66.27

Date	10-year high-yield	10-year BBB	10-year A
22 April 1998	300.53	90.87	65.88
23 April 1998	300.78	91.53	66.24
24 April 1998	302.43	91.59	66.27
27 April 1998	299.13	91.43	ND
28 April 1998	298.93	92.03	ND
29 April 1998	299.00	91.62	ND
30 April 1998	316.17	90.66	ND
1 May 1998	318.04	90.58	64.95
4 May 1998	316.56	90.82	65.04
5 May 1998	313.50	90.90	64.79
6 May 1998	315.47	89.68	64.44
7 May 1998	315.47	90.64	65.02
8 May 1998	313.62	90.76	65.40
11 May 1998	309.84	91.65	65.91
12 May 1998	317.41	91.91	66.53
13 May 1998	319.98	92.31	66.82
14 May 1998	317.62	90.94	64.07
15 May 1998	318.01	91.50	65.21
18 May 1998	322.45	92.18	65.67
19 May 1998	320.88	90.33	64.18
20 May 1998	324.97	91.17	65.03
21 May 1998	322.81	92.89	66.51
22 May 1998	324.56	93.05	66.79
25 May 1998	ND	ND	ND
26 May 1998	326.73	91.20	65.02
27 May 1998	328.00	91.04	65.03
28 May 1998	328.23	92.04	65.96
29 May 1998	327.61	93.36	65.84
1 June 1998	341.92	89.69	63.70
2 June 1998	338.17	90.81	65.02
3 June 1998	338.15	91.23	65.45
4 June 1998	338.30	90.92	65.13
5 June 1998	339.70	92.20	66.49
8 June 1998	339.68	92.16	66.56
9 June 1998	340.01	92.32	66.50
10 June 1998	347.10	92.75	67.20
11 June 1998	353.90	93.08	67.72

Date	10-year high-yield	10-year BBB	10-year A
12 June 1998	355.45	93.30	67.70
15 June 1998	360.98	94.56	68.00
16 June 1998	359.62	94.20	68.15
17 June 1998	350.63	94.32	67.48
18 June 1998	355.41	94.86	68.54
19 June 1998	357.60	94.96	68.71
22 June 1998	361.27	94.45	67.94
23 June 1998	364.29	96.19	69.68
24 June 1998	357.01	95.08	68.53
25 June 1998	355.92	94.29	68.86
26 June 1998	357.59	95.85	69.92
29 June 1998	355.20	94.50	68.90
30 June 1998	370.64	98.54	72.71
1 July 1998	370.77	97.36	71.89
2 July 1998	371.22	99.30	73.46
3 July 1998	ND	ND	ND
6 July 1998	373.02	98.97	72.95
7 July 1998	371.32	99.00	73.31
8 July 1998	369.33	99.19	73.11
9 July 1998	372.19	99.31	73.52
10 July 1998	370.78	98.82	73.54
13 July 1998	366.96	99.32	73.93
14 July 1998	364.20	99.29	73.84
15 July 1998	362.76	99.25	73.52
16 July 1998	360.91	99.56	73.37
17 July 1998	362.26	99.06	72.65
20 July 1998	362.38	100.59	73.70
21 July 1998	364.69	100.42	73.62
22 July 1998	362.78	99.97	73.60
23 July 1998	365.47	100.10	73.84
24 July 1998	364.48	100.57	73.90
27 July 1998	355.65	99.85	74.47
28 July 1998	348.98	97.15	71.40
29 July 1998	354.67	101.38	74.76
30 July 1998	357.05	104.46	77.12
31 July 1998	365.40	108.51	79.15
3 August 1998	372.96	109.65	80.48

Date	10-year high-yield	10-year BBB	10-year A
4 August 1998	378.72	108.85	79.62
5 August 1998	380.39	109.09	79.66
6 August 1998	379.47	110.41	80.38
7 August 1998	383.57	111.71	81.47
10 August 1998	384.93	111.28	80.92
11 August 1998	398.11	111.60	81.21
12 August 1998	398.82	112.34	81.48
13 August 1998	398.82	112.88	82.05
14 August 1998	402.51	113.20	82.87
17 August 1998	402.51	114.49	81.98
18 August 1998	407.46	115.61	83.55
19 August 1998	406.79	115.63	83.29
20 August 1998	412.12	116.50	84.02
21 August 1998	426.27	116.11	83.06
24 August 1998	432.04	118.78	83.10
25 August 1998	438.40	119.15	82.13
26 August 1998	443.09	113.38	76.52
27 August 1998	477.23	119.04	82.28
28 August 1998	487.75	128.05	82.86
31 August 1998	506.63	167.77	123.03
1 September 1998	514.12	165.86	121.69
2 September 1998	512.53	165.95	122.25
3 September 1998	518.07	163.96	121.21
4 September 1998	519.65	163.72	122.07
7 September 1998	ND	ND	ND
8 September 1998	512.46	159.66	119.39
9 September 1998	519.63	159.55	118.32
10 September 1998	537.63	158.57	115.27
11 September 1998	537.67	158.22	115.33
14 September 1998	535.45	160.93	117.33
15 September 1998	533.43	158.70	116.39
16 September 1998	532.68	160.47	117.72
17 September 1998	534.07	160.66	117.52
18 September 1998	541.21	156.52	113.76
21 September 1998	542.00	155.70	112.72
22 September 1998	536.62	157.36	114.67
23 September 1998	536.62	156.82	114.95

Date	10-year high-yield	10-year BBB	10-year A
24 September 1998	535.13	156.33	114.21
25 September 1998	537.00	155.40	113.54
28 September 1998	534.91	155.53	113.02
29 September 1998	538.03	159.77	118.23
30 September 1998	552.54	159.62	114.75
1 October 1998	563.16	159.26	113.90
2 October 1998	568.97	162.39	118.85
5 October 1998	583.57	162.11	119.81
6 October 1998	578.25	160.12	117.82
7 October 1998	574.31	161.83	118.40
8 October 1998	580.74	161.50	116.89
9 October 1998	573.04	166.26	122.59
12 October 1998	ND	ND	ND
13 October 1998	573.37	164.59	119.58
14 October 1998	596.35	163.06	120.45
15 October 1998	604.49	162.97	118.86
16 October 1998	612.85	164.44	121.34
19 October 1998	611.64	164.25	120.44
20 October 1998	598.42	163.96	119.65
21 October 1998	595.13	163.85	119.46
22 October 1998	591.30	164.24	119.88
23 October 1998	583.27	165.00	120.34
26 October 1998	585.57	170.78	124.69
27 October 1998	588.71	170.33	124.31
28 October 1998	592.77	170.36	123.92
29 October 1998	592.63	168.82	126.42
30 October 1998	580.44	183.96	132.48
2 November 1998	571.86	182.65	129.60
3 November 1998	566.62	182.50	131.51
4 November 1998	558.11	184.17	132.58
5 November 1998	554.14	178.53	124.50
6 November 1998	545.27	178.57	124.09
9 November 1998	544.29	179.60	125.67
10 November 1998	545.28	179.62	125.94
11 November 1998	ND	ND	ND
12 November 1998	539.15	176.70	125.93
13 November 1998	532.42	180.01	130.20

Date	10-year high-yield	10-year BBB	10-year A
16 November 1998	523.06	181.09	130.36
17 November 1998	511.90	181.61	129.98
18 November 1998	517.97	182.35	129.71
19 November 1998	512.39	178.70	128.39
20 November 1998	514.77	178.84	128.65
23 November 1998	507.94	176.85	126.86
24 November 1998	502.42	173.43	122.66
25 November 1998	500.56	170.82	117.05
26 November 1998	ND	ND	ND
27 November 1998	502.50	170.94	116.80
30 November 1998	501.54	167.65	107.05
1 December 1998	505.11	170.80	111.29
2 December 1998	513.72	166.20	106.31
3 December 1998	517.14	164.35	104.40
4 December 1998	509.12	163.88	104.04
7 December 1998	504.26	163.42	102.60
8 December 1998	512.82	162.80	101.90
9 December 1998	517.63	165.26	103.07
10 December 1998	521.91	165.00	101.98
11 December 1998	516.46	165.27	103.06
14 December 1998	524.06	165.38	101.02
15 December 1998	522.18	165.44	101.62
16 December 1998	526.90	166.84	103.06
17 December 1998	529.58	164.59	101.67
18 December 1998	526.40	163.59	101.16
21 December 1998	520.26	162.58	100.70
22 December 1998	515.39	162.13	100.09
23 December 1998	506.03	160.79	99.11
24 December 1998	500.16	158.95	97.82
25 December 1998	ND	ND	ND
28 December 1998	506.86	158.80	98.12
29 December 1998	512.58	160.36	99.47
30 December 1998	515.36	158.82	98.21
31 December 1998	514.32	160.72	96.79
1 January 1999	ND	ND	ND
4 January 1999	510.25	159.00	93.92
5 January 1999	506.77	161.78	95.34

Date	10-year high-yield	10-year BBB	10-year A
6 January 1999	509.33	163.83	96.96
7 January 1999	503.72	161.66	93.78
8 January 1999	493.92	157.18	92.13
11 January 1999	491.46	156.93	91.24
12 January 1999	495.53	155.15	89.64
13 January 1999	507.08	154.08	88.64
14 January 1999	513.12	152.68	87.71
15 January 1999	511.13	155.64	91.33
18 January 1999	ND	ND	ND
19 January 1999	506.27	154.23	90.26
20 January 1999	499.38	153.71	89.43
21 January 1999	503.49	155.35	90.91
22 January 1999	511.64	155.79	92.17
25 January 1999	507.65	155.46	92.14
26 January 1999	506.38	157.32	93.74
27 January 1999	504.91	156.49	93.71
28 January 1999	507.05	157.22	94.61
29 January 1999	506.50	151.96	92.28
1 February 1999	502.38	150.19	90.51
2 February 1999	497.42	148.51	88.79
3 February 1999	499.59	149.89	90.60
4 February 1999	487.03	147.83	88.81
5 February 1999	482.06	145.93	87.57
8 February 1999	482.55	144.96	87.55
9 February 1999	485.48	145.97	88.38
10 February 1999	484.89	145.49	87.82
11 February 1999	483.97	144.16	86.09
12 February 1999	470.42	142.48	84.98
15 February 1999	ND	ND	ND
16 February 1999	474.35	142.17	85.91
17 February 1999	469.79	142.72	86.37
18 February 1999	477.50	140.85	84.73
19 February 1999	476.23	142.21	86.52
22 February 1999	481.24	141.41	86.39
23 February 1999	477.25	140.40	85.39
24 February 1999	472.50	140.11	85.14
25 February 1999	469.25	142.22	87.62

Date	10-year high-yield	10-year BBB	10-year A
26 February 1999	475.65	140.40	87.53
1 March 1999	466.47	144.12	87.33
2 March 1999	472.05	143.85	86.65
3 March 1999	469.78	142.60	85.43
4 March 1999	468.43	142.69	85.85
5 March 1999	468.58	140.46	82.98
8 March 1999	470.66	140.83	82.63
9 March 1999	474.07	138.48	80.67
10 March 1999	471.19	138.36	81.16
11 March 1999	467.79	137.72	80.75
12 March 1999	470.57	137.13	80.24
15 March 1999	473.02	138.74	81.85
16 March 1999	475.88	137.64	81.62
17 March 1999	470.09	136.28	79.91
18 March 1999	470.31	136.43	80.16
19 March 1999	460.70	135.40	79.23
22 March 1999	458.91	133.90	79.06
23 March 1999	459.73	133.78	78.39
24 March 1999	461.86	134.97	79.86
25 March 1999	456.61	133.97	78.92
26 March 1999	456.63	133.37	78.71
29 March 1999	452.77	133.90	79.63
30 March 1999	456.82	135.29	80.39
31 March 1999	448.72	133.54	83.09
1 April 1999	446.42	134.14	83.78
2 April 1999	ND	ND	ND
5 April 1999	453.56	134.51	83.65
6 April 1999	457.48	135.30	84.25
7 April 1999	453.03	134.16	83.86
8 April 1999	458.42	134.62	84.61
9 April 1999	453.96	134.50	84.11
12 April 1999	453.91	135.34	84.91
13 April 1999	448.43	134.73	84.59
14 April 1999	446.47	135.22	84.31
15 April 1999	443.17	135.17	84.21
16 April 1999	440.00	135.34	84.99
19 April 1999	443.59	133.94	84.39

Date	10-year high-yield	10-year BBB	10-year A
20 April 1999	446.98	133.36	84.67
21 April 1999	447.01	133.39	84.70
22 April 1999	439.58	133.38	84.54
23 April 1999	439.92	133.42	85.06
26 April 1999	443.89	134.83	86.73
27 April 1999	444.58	135.54	87.48
28 April 1999	443.73	136.64	88.45
29 April 1999	449.65	136.08	89.16
30 April 1999	436.14	131.85	85.53
3 May 1999	432.81	133.44	87.13
4 May 1999	431.96	132.21	86.23
5 May 1999	437.72	133.21	87.16
6 May 1999	428.90	132.78	87.19
7 May 1999	427.73	132.50	87.18
10 May 1999	433.25	132.59	86.50
11 May 1999	431.05	133.50	87.25
12 May 1999	435.23	133.12	87.44
13 May 1999	442.19	130.22	85.55
14 May 1999	432.85	131.93	86.43
17 May 1999	435.16	132.43	87.27
18 May 1999	435.04	130.38	83.97
19 May 1999	441.05	133.68	87.44
20 May 1999	441.39	132.05	87.71
21 May 1999	445.06	131.01	87.25
24 May 1999	447.61	128.46	84.80
25 May 1999	448.90	131.43	87.62
26 May 1999	448.82	131.60	87.58
27 May 1999	445.06	132.80	88.39
28 May 1999	ND	ND	ND
31 May 1999	ND	ND	ND
1 June 1999	436.97	137.07	93.93
2 June 1999	438.32	138.55	95.75
3 June 1999	439.46	139.12	95.91
4 June 1999	440.78	139.06	95.85
7 June 1999	439.93	140.82	96.84
8 June 1999	437.89	140.36	96.57
9 June 1999	435.24	141.32	97.92

Date	10-year high-yield	10-year BBB	10-year A
10 June 1999	435.90	140.40	97.05
11 June 1999	429.06	140.51	97.17
14 June 1999	434.76	141.06	97.83
15 June 1999	435.89	142.56	98.90
16 June 1999	438.22	141.37	98.19
17 June 1999	450.02	139.71	97.17
18 June 1999	440.82	141.55	98.60
21 June 1999	440.26	140.96	97.92
22 June 1999	435.19	139.70	96.55
23 June 1999	432.14	140.25	96.74
24 June 1999	429.66	141.54	97.55
25 June 1999	432.13	140.96	97.20
28 June 1999	440.31	141.83	98.46
29 June 1999	442.45	141.63	97.82
30 June 1999	447.45	142.04	99.71
1 July 1999	442.29	141.93	99.12
2 July 1999	443.28	143.01	100.33
5 July 1999	ND	ND	ND
6 July 1999	440.01	142.06	99.35
7 July 1999	438.41	142.86	99.78
8 July 1999	444.26	143.61	100.82
9 July 1999	442.87	143.69	101.13
12 July 1999	ND	ND	ND
13 July 1999	450.43	142.43	99.84
14 July 1999	448.11	141.39	99.49
15 July 1999	446.39	141.39	99.57
16 July 1999	447.76	140.28	98.74
19 July 1999	450.28	139.47	99.28
20 July 1999	450.34	139.68	99.43
21 July 1999	ND	ND	ND
22 July 1999	443.74	140.35	98.86
23 July 1999	443.53	140.73	99.07
26 July 1999	444.98	144.22	104.50
27 July 1999	451.35	143.66	104.22
28 July 1999	452.07	143.51	103.91
29 July 1999	448.17	144.19	104.11
30 July 1999	447.33	148.39	107.55

Date	10-year high-yield	10-year BBB	10-year A
2 August 1999	430.98	146.79	107.12
3 August 1999	435.45	148.97	109.38
4 August 1999	443.96	148.11	108.66
5 August 1999	447.51	146.53	107.58
6 August 1999	439.94	148.21	107.53
9 August 1999	433.29	151.03	110.45
10 August 1999	435.37	151.11	110.67
11 August 1999	440.49	150.55	110.38
12 August 1999	435.35	147.53	107.28
13 August 1999	442.34	149.07	109.11
16 August 1999	439.15	147.28	106.23
17 August 1999	445.80	146.71	105.43
18 August 1999	447.71	146.49	105.53
19 August 1999	447.57	146.69	105.17
20 August 1999	448.68	146.81	105.35
23 August 1999	448.72	148.26	106.36
24 August 1999	451.86	146.95	104.99
25 August 1999	459.85	147.37	105.74
26 August 1999	459.07	148.86	106.42
27 August 1999	451.49	149.48	106.98
30 August 1999	445.22	149.53	106.78
31 August 1999	443.03	155.61	109.31
1 September 1999	443.60	154.73	108.87
2 September 1999	437.17	154.40	107.89
3 September 1999	449.14	154.22	108.04
6 September 1999	ND	ND	ND
7 September 1999	445.23	153.96	107.55
8 September 1999	448.91	153.64	107.36
9 September 1999	447.12	152.99	106.18
10 September 1999	454.87	153.57	106.42
13 September 1999	452.94	152.25	104.31
14 September 1999	450.58	151.08	102.73
15 September 1999	453.08	151.21	103.05
16 September 1999	457.95	153.44	105.47
17 September 1999	458.95	153.24	105.29
20 September 1999	458.21	153.07	103.77
21 September 1999	458.45	151.71	102.97

Date	10-year high-yield	10-year BBB	10-year A
22 September 1999	460.09	152.08	103.11
23 September 1999	466.22	152.15	103.49
24 September 1999	476.55	154.34	104.22
27 September 1999	470.81	154.83	104.34
28 September 1999	464.66	153.67	103.67
29 September 1999	457.69	152.66	103.32
30 September 1999	462.01	152.63	104.44
1 October 1999	456.01	150.11	103.08
4 October 1999	460.67	151.52	104.55
5 October 1999	451.28	150.70	103.02
6 October 1999	449.10	150.94	103.44
7 October 1999	444.78	151.16	104.33
8 October 1999	444.57	150.10	103.02
11 October 1999	ND	ND	ND
12 October 1999	447.74	148.83	103.08
13 October 1999	444.34	146.69	101.33
14 October 1999	440.76	146.13	100.42
15 October 1999	447.73	145.65	99.84
18 October 1999	446.29	146.38	99.65
19 October 1999	442.22	145.79	99.48
20 October 1999	443.17	145.97	99.85
21 October 1999	441.80	145.30	99.03
22 October 1999	442.43	145.91	100.13
25 October 1999	444.56	144.89	99.49
26 October 1999	444.44	145.70	100.23
27 October 1999	452.49	147.29	101.33
28 October 1999	459.92	148.92	102.66
29 October 1999	469.10	147.95	100.21
1 November 1999	462.20	147.83	99.20
2 November 1999	462.46	148.55	100.24
3 November 1999	456.15	147.39	99.33
4 November 1999	469.89	147.80	99.63
5 November 1999	464.04	148.83	99.96
8 November 1999	463.01	150.23	99.70
9 November 1999	460.90	149.79	100.05
10 November 1999	461.10	149.20	99.74
11 November 1999	ND	ND	ND

Date	10-year high-yield	10-year BBB	10-year A
12 November 1999	467.07	149.57	99.74
15 November 1999	467.98	151.46	100.68
16 November 1999	467.23	151.64	101.18
17 November 1999	456.59	150.77	100.50
18 November 1999	454.22	149.38	99.22
19 November 1999	451.53	149.75	99.82
22 November 1999	445.64	148.84	98.54
23 November 1999	446.29	148.03	97.57
24 November 1999	445.65	147.40	97.04
25 November 1999	ND	ND	ND
26 November 1999	442.99	146.94	96.91
29 November 1999	435.92	144.08	92.69
30 November 1999	436.16	146.32	94.22
1 December 1999	433.16	145.84	93.53
2 December 1999	430.92	146.03	93.65
3 December 1999	436.25	146.93	94.49
6 December 1999	435.94	145.92	93.89
7 December 1999	436.88	145.15	93.64
8 December 1999	428.49	144.51	92.55
9 December 1999	428.77	146.37	94.29
10 December 1999	432.77	148.06	95.74
13 December 1999	431.20	148.11	95.64
14 December 1999	422.97	146.91	94.82
15 December 1999	419.80	146.30	94.22
16 December 1999	413.35	144.07	92.22
17 December 1999	416.32	144.39	92.64
20 December 1999	403.50	141.71	90.27
21 December 1999	396.09	140.72	89.72
22 December 1999	407.92	142.40	91.41
23 December 1999	405.90	142.47	91.70
24 December 1999	ND	ND	ND
27 December 1999	404.75	144.36	91.15
28 December 1999	394.81	141.00	91.37
29 December 1999	404.67	138.13	91.23
30 December 1999	405.98	137.23	90.59
31 December 1999	410.49	136.84	91.60
3 January 2000	404.86	138.89	93.90

Date	10-year high-yield	10-year BBB	10-year A
4 January 2000	416.95	141.23	95.77
5 January 2000	414.93	140.46	95.26
6 January 2000	425.01	142.54	97.14
7 January 2000	422.86	144.55	98.83
10 January 2000	415.58	143.42	97.85
11 January 2000	410.10	142.22	98.02
12 January 2000	403.35	139.94	96.39
13 January 2000	418.31	144.68	100.29
14 January 2000	414.67	148.08	103.79
17 January 2000	ND	ND	ND
18 January 2000	422.92	148.80	104.62
19 January 2000	413.33	149.57	105.49
20 January 2000	419.58	149.57	105.80
21 January 2000	418.83	150.95	107.70
24 January 2000	423.16	149.15	105.14
25 January 2000	420.25	148.02	104.06
26 January 2000	424.91	149.80	106.43
27 January 2000	427.62	150.46	107.05
28 January 2000	429.99	150.26	106.95
31 January 2000	434.47	147.74	108.04
1 February 2000	433.04	147.04	107.43
2 February 2000	446.96	145.47	105.88
3 February 2000	447.54	142.26	102.44
4 February 2000	438.87	144.79	104.66
7 February 2000	437.69	145.37	106.37
8 February 2000	442.52	149.41	109.69
9 February 2000	434.93	150.52	111.42
10 February 2000	429.13	148.48	109.59
11 February 2000	435.01	149.56	110.54
14 February 2000	438.91	148.40	109.15
15 February 2000	438.91	147.34	108.35
16 February 2000	457.24	146.93	108.37
17 February 2000	421.02	148.28	110.05
18 February 2000	452.93	149.17	110.79
21 February 2000	ND	ND	ND
22 February 2000	461.65	147.26	108.85
23 February 2000	440.96	147.07	109.59

Date	10-year high-yield	10-year BBB	10-year A
24 February 2000	446.20	145.19	107.75
25 February 2000	469.17	144.85	107.70
28 February 2000	482.45	158.04	121.37
29 February 2000	473.52	160.22	122.07
1 March 2000	477.31	158.92	120.30
2 March 2000	479.51	162.55	124.89
3 March 2000	481.43	162.72	125.26
6 March 2000	477.74	161.85	124.32
7 March 2000	476.92	160.10	123.08
8 March 2000	475.46	ND	122.31
9 March 2000	477.71	157.51	120.36
10 March 2000	480.92	157.00	120.00
13 March 2000	486.04	158.77	123.76
14 March 2000	492.61	160.46	123.82
15 March 2000	501.36	162.69	126.65
16 March 2000	503.04	162.32	126.54
17 March 2000	509.21	162.12	126.16
20 March 2000	510.45	161.67	125.99
21 March 2000	513.75	162.85	126.93
22 March 2000	517.43	161.41	125.76
23 March 2000	523.09	160.52	124.92
24 March 2000	518.22	159.93	124.72
27 March 2000	519.75	162.71	127.41
28 March 2000	531.48	165.14	128.81
29 March 2000	536.94	163.18	128.05
30 March 2000	556.54	180.17	137.77
31 March 2000	559.69	181.64	138.94
3 April 2000	558.90	178.51	135.29
4 April 2000	574.31	177.03	132.94
5 April 2000	575.61	179.23	135.55
6 April 2000	571.82	180.45	136.67
7 April 2000	573.51	182.28	139.64
10 April 2000	563.39	180.51	137.40
11 April 2000	555.75	186.34	140.76
12 April 2000	547.45	187.92	140.96
13 April 2000	552.52	188.12	142.49
14 April 2000	560.32	192.94	147.58

Date	10-year high-yield	10-year BBB	10-year A
17 April 2000	540.45	186.77	139.46
18 April 2000	548.82	190.02	142.97
19 April 2000	552.92	191.98	144.57
20 April 2000	553.11	193.03	144.92
21 April 2000	ND	ND	ND
24 April 2000	557.47	190.44	142.30
25 April 2000	545.45	192.97	144.44
26 April 2000	547.09	192.93	144.30
27 April 2000	541.01	197.29	151.31
28 April 2000	538.87	204.65	153.50
1 May 2000	541.49	206.08	154.05
2 May 2000	534.48	206.07	154.23
3 May 2000	524.37	204.16	152.86
4 May 2000	521.85	202.34	151.17
5 May 2000	519.80	204.06	152.25
8 May 2000	514.66	203.27	153.10
9 May 2000	520.64	204.84	154.24
10 May 2000	529.77	205.05	154.31
11 May 2000	532.68	205.29	154.14
12 May 2000	527.80	204.59	153.23
15 May 2000	531.43	208.59	155.81
16 May 2000	536.38	210.47	158.57
17 May 2000	530.08	211.11	158.89
18 May 2000	524.69	209.19	157.11
19 May 2000	536.33	210.16	159.19
22 May 2000	541.55	208.92	158.32
23 May 2000	545.86	210.82	161.75
24 May 2000	546.36	209.86	160.42
25 May 2000	558.75	217.68	167.76
26 May 2000	565.25	219.44	168.71
29 May 2000	ND	ND	ND
30 May 2000	561.42	218.48	168.43
31 May 2000	571.14	220.55	172.50
1 June 2000	577.73	219.70	171.93
2 June 2000	575.08	219.40	172.02
5 June 2000	578.39	216.35	169.34
6 June 2000	574.23	216.93	170.26

Date	10-year high-yield	10-year BBB	10-year A
7 June 2000	573.17	215.92	167.98
8 June 2000	572.47	215.02	167.67
9 June 2000	567.15	213.43	167.55
12 June 2000	569.17	212.65	166.50
13 June 2000	571.53	216.74	170.01
14 June 2000	571.49	210.51	164.56
15 June 2000	568.06	210.05	163.30
16 June 2000	570.56	208.42	161.87
19 June 2000	570.34	207.42	161.34
20 June 2000	567.93	206.52	161.88
21 June 2000	563.71	205.79	161.67
22 June 2000	563.04	206.22	163.30
23 June 2000	557.17	204.96	162.82
26 June 2000	561.75	204.33	162.02
27 June 2000	563.07	205.25	164.13
28 June 2000	561.39	204.87	164.59
29 June 2000	569.76	205.07	165.54
30 June 2000	574.12	204.18	164.23
3 July 2000	578.02	203.45	165.44
4 July 2000	ND	ND	ND
5 July 2000	579.20	204.10	166.29
6 July 2000	575.63	203.48	164.82
7 July 2000	581.81	205.65	167.05
10 July 2000	ND	ND	ND
11 July 2000	579.90	205.99	167.90
12 July 2000	580.15	206.58	168.39
13 July 2000	585.06	206.67	168.97
14 July 2000	571.75	205.08	166.40
17 July 2000	563.79	203.03	163.99
18 July 2000	567.38	202.00	163.71
19 July 2000	565.49	199.94	162.93
20 July 2000	578.32	201.52	163.98
21 July 2000	579.52	202.36	164.90
24 July 2000	576.81	202.66	165.57
25 July 2000	577.96	202.99	166.10
26 July 2000	580.67	202.83	165.94
27 July 2000	584.25	203.87	167.83

Date	10-year high-yield	10-year BBB	10-year A
28 July 2000	583.98	202.49	165.81
31 July 2000	591.95	203.82	167.06
1 August 2000	598.55	204.25	167.17
2 August 2000	602.33	203.47	167.35
3 August 2000	599.31	204.11	167.84
4 August 2000	604.19	203.61	166.46
7 August 2000	600.07	202.34	166.54
8 August 2000	603.43	203.59	166.78
9 August 2000	601.56	204.43	167.27
10 August 2000	603.67	204.40	167.16
11 August 2000	598.84	203.44	166.59
14 August 2000	600.30	205.48	168.06
15 August 2000	600.71	202.49	165.56
16 August 2000	598.94	201.51	164.59
17 August 2000	599.60	202.20	166.20
18 August 2000	602.42	202.82	166.94
21 August 2000	600.75	202.32	165.45
22 August 2000	599.16	202.67	166.49
23 August 2000	603.98	204.14	168.17
24 August 2000	605.53	204.71	168.90
25 August 2000	603.31	204.39	168.72
28 August 2000	595.95	204.70	169.39
29 August 2000	590.38	203.31	169.12
30 August 2000	589.07	203.52	168.28
31 August 2000	584.00	203.72	171.01
1 September 2000	587.19	204.74	170.69
4 September 2000	ND	ND	ND
5 September 2000	578.06	203.64	170.75
6 September 2000	573.08	201.84	169.19
7 September 2000	568.04	202.43	169.29
8 September 2000	570.59	203.43	169.61
11 September 2000	568.37	203.31	168.76
12 September 2000	570.19	203.72	168.87
13 September 2000	573.12	203.02	168.30
14 September 2000	566.85	202.74	167.47
15 September 2000	567.03	204.11	166.46
18 September 2000	571.04	205.38	165.96

Date	10-year high-yield	10-year BBB	10-year A
19 September 2000	578.05	203.10	164.08
20 September 2000	578.93	203.23	163.48
21 September 2000	586.30	204.13	165.23
22 September 2000	591.18	201.82	164.25
25 September 2000	588.97	202.80	163.56
26 September 2000	594.09	204.73	165.13
27 September 2000	596.28	200.52	162.42
28 September 2000	601.56	200.96	160.22
29 September 2000	602.96	199.50	158.92
2 October 2000	613.37	199.39	158.39
3 October 2000	610.03	200.91	159.93
4 October 2000	607.44	201.61	161.04
5 October 2000	609.80	202.10	162.06
6 October 2000	615.89	204.47	164.88
9 October 2000	ND	ND	ND
10 October 2000	622.16	204.61	167.63
11 October 2000	630.17	205.27	169.81
12 October 2000	635.94	206.04	168.62
13 October 2000	647.76	207.11	171.64
16 October 2000	644.96	207.43	173.14
17 October 2000	660.54	207.20	173.58
18 October 2000	674.41	209.08	176.83
19 October 2000	676.49	209.10	178.19
20 October 2000	680.53	210.85	179.51
23 October 2000	683.23	212.30	179.56
24 October 2000	676.77	212.24	178.32
25 October 2000	671.31	212.25	178.15
26 October 2000	679.71	212.16	177.54
27 October 2000	681.41	213.95	179.24
30 October 2000	679.22	211.74	180.65
31 October 2000	675.92	210.23	177.17
1 November 2000	680.37	210.09	176.69
2 November 2000	679.37	210.57	176.30
3 November 2000	679.67	209.12	175.26
6 November 2000	676.84	208.56	175.44
7 November 2000	681.20	208.34	174.78
8 November 2000	676.83	208.87	175.75

Date	10-year high-yield	10-year BBB	10-year A
9 November 2000	684.30	208.61	174.56
10 November 2000	683.34	207.93	173.50
13 November 2000	687.39	208.34	174.02
14 November 2000	690.78	209.70	175.53
15 November 2000	695.20	209.80	175.49
16 November 2000	698.95	213.69	175.70
17 November 2000	709.70	213.95	178.36
20 November 2000	708.62	214.83	185.38
21 November 2000	724.13	213.51	188.15
22 November 2000	739.12	213.57	188.36
23 November 2000	ND	ND	ND
24 November 2000	738.50	216.89	191.81
27 November 2000	740.17	215.86	190.98
28 November 2000	747.76	217.18	193.71
29 November 2000	760.99	217.35	193.82
30 November 2000	794.46	220.72	195.14
1 December 2000	793.95	223.77	196.72
4 December 2000	796.77	224.98	196.17
5 December 2000	797.30	225.25	197.57
6 December 2000	796.57	224.92	197.16
7 December 2000	797.45	224.94	196.99
8 December 2000	794.73	224.43	196.09
11 December 2000	781.39	225.62	195.10
12 December 2000	773.03	225.50	194.14
13 December 2000	736.26	224.26	193.98
14 December 2000	739.35	223.08	190.79
15 December 2000	732.38	221.83	188.35
18 December 2000	738.02	222.37	187.93
19 December 2000	767.67	222.82	189.21
20 December 2000	761.68	221.10	186.29
21 December 2000	779.47	220.35	185.19
22 December 2000	782.20	220.50	185.28
25 December 2000	ND	ND	ND
26 December 2000	777.99	218.41	185.18
27 December 2000	767.27	217.49	185.71
28 December 2000	765.79	217.99	187.51
29 December 2000	771.00	219.64	187.48

Date	10-year high-yield	10-year BBB	10-year A
1 January 2001	ND	ND	ND
2 January 2001	772.07	222.13	186.69
3 January 2001	748.59	219.10	183.68
4 January 2001	749.39	218.33	180.65
5 January 2001	754.71	221.11	180.59
8 January 2001	732.83	217.76	177.61
9 January 2001	729.47	218.00	177.74
10 January 2001	723.66	217.76	176.09
11 January 2001	702.70	214.31	172.48
12 January 2001	683.62	220.81	173.71
15 January 2001	ND	ND	ND
16 January 2001	689.69	218.17	177.43
17 January 2001	675.17	217.79	178.75
18 January 2001	690.93	216.56	177.99
19 January 2001	678.16	215.15	176.27
22 January 2001	666.82	215.79	174.59
23 January 2001	660.36	212.64	169.02
24 January 2001	657.44	214.64	167.47
25 January 2001	658.08	214.93	165.38
26 January 2001	657.37	212.49	164.54
29 January 2001	655.38	212.41	164.69
30 January 2001	661.94	212.37	164.11
31 January 2001	640.94	208.00	156.84
1 February 2001	648.10	209.47	155.69
2 February 2001	639.06	209.54	157.22
5 February 2001	633.08	210.05	161.53
6 February 2001	630.57	212.48	164.71
7 February 2001	631.46	209.98	162.92
8 February 2001	627.56	210.42	163.08
9 February 2001	629.70	208.12	162.92
12 February 2001	624.18	206.62	160.28
13 February 2001	622.21	206.42	160.06
14 February 2001	618.10	206.03	159.03
15 February 2001	609.33	206.04	160.74
16 February 2001	610.45	204.76	160.52
19 February 2001	ND	ND	ND
20 February 2001	619.90	207.16	162.09

Date	10-year high-yield	10-year BBB	10-year A
21 February 2001	620.95	208.70	163.89
22 February 2001	621.75	210.83	164.74
23 February 2001	626.44	211.83	166.58
26 February 2001	628.70	213.02	167.03
27 February 2001	632.81	215.17	166.80
28 February 2001	625.06	212.94	159.78
1 March 2001	630.46	213.34	159.89
2 March 2001	623.94	210.84	158.35
5 March 2001	621.04	211.39	158.80
6 March 2001	618.00	211.58	158.26
7 March 2001	621.32	212.75	158.31
8 March 2001	619.29	211.84	156.10
9 March 2001	615.25	211.80	156.17
12 March 2001	623.53	213.45	158.86
13 March 2001	626.58	214.38	160.43
14 March 2001	645.46	215.20	163.24
15 March 2001	647.87	213.75	160.12
16 March 2001	651.40	212.39	159.82
19 March 2001	653.90	213.85	160.44
20 March 2001	662.95	214.90	161.07
21 March 2001	675.90	214.43	160.70
22 March 2001	690.23	213.43	162.57
23 March 2001	680.13	214.93	162.55
26 March 2001	667.74	213.85	159.77
27 March 2001	651.09	212.89	156.21
28 March 2001	658.29	214.07	157.81
29 March 2001	652.26	213.14	155.63
30 March 2001	664.17	211.98	153.98
2 April 2001	668.75	210.40	151.86
3 April 2001	692.83	211.21	153.86
4 April 2001	702.43	212.37	155.73
5 April 2001	697.27	212.53	156.49
6 April 2001	706.56	213.51	157.68
9 April 2001	706.06	214.36	159.43
10 April 2001	692.13	214.28	158.94
11 April 2001	684.37	215.22	157.47
12 April 2001	678.21	214.54	157.70

Date	10-year high-yield	10-year BBB	10-year A
13 April 2001	ND	ND	ND
16 April 2001	667.44	214.83	158.04
17 April 2001	666.72	214.22	156.73
18 April 2001	676.08	215.34	156.32
19 April 2001	667.53	213.82	153.89
20 April 2001	664.90	213.40	152.79
23 April 2001	672.84	214.24	154.18
24 April 2001	668.30	212.09	153.00
25 April 2001	664.52	210.26	148.79
26 April 2001	673.75	209.84	148.61
27 April 2001	659.01	207.34	145.00
30 April 2001	636.93	197.11	141.08
1 May 2001	637.07	197.77	140.52
2 May 2001	625.53	197.26	140.30
3 May 2001	629.34	197.43	141.14
4 May 2001	633.32	196.82	144.54
7 May 2001	629.97	197.59	145.17
8 May 2001	626.40	197.75	145.69
9 May 2001	631.57	197.03	144.76
10 May 2001	626.01	196.65	143.75
11 May 2001	613.86	199.04	144.96
14 May 2001	621.40	196.76	141.67
15 May 2001	615.29	198.38	142.76
16 May 2001	621.96	196.26	139.33
17 May 2001	630.36	195.25	136.46
18 May 2001	627.01	192.47	134.76
21 May 2001	626.80	192.07	136.08
22 May 2001	624.68	190.25	135.04
23 May 2001	626.43	191.11	135.29
24 May 2001	617.85	191.45	136.11
25 May 2001	617.09	191.90	136.63
28 May 2001	ND	ND	ND
29 May 2001	616.20	190.80	135.57
30 May 2001	623.79	190.38	135.98
31 May 2001	631.75	188.72	134.12
1 June 2001	608.76	190.37	133.47
4 June 2001	616.82	188.32	130.93

Date	10-year high-yield	10-year BBB	10-year A
5 June 2001	620.60	186.34	127.76
6 June 2001	616.86	185.34	127.79
7 June 2001	614.01	184.74	128.27
8 June 2001	618.77	187.09	131.26
11 June 2001	623.46	186.82	131.97
12 June 2001	627.74	186.92	131.64
13 June 2001	617.46	188.81	133.33
14 June 2001	627.16	187.52	132.37
15 June 2001	631.80	188.76	134.93
18 June 2001	640.60	190.70	137.58
19 June 2001	647.01	192.48	139.26
20 June 2001	652.03	193.32	140.23
21 June 2001	653.76	193.68	140.40
22 June 2001	660.07	193.76	139.12
25 June 2001	657.32	193.70	137.32
26 June 2001	653.92	193.35	137.41
27 June 2001	654.56	193.15	137.45
28 June 2001	644.13	192.89	136.47
29 June 2001	636.38	192.46	136.45
2 July 2001	638.70	195.33	136.34
3 July 2001	643.50	194.57	136.10
4 July 2001	ND	ND	ND
5 July 2001	630.17	195.35	136.88
6 July 2001	634.02	194.75	135.77
9 July 2001	636.68	197.07	137.38
10 July 2001	635.54	197.09	136.44
11 July 2001	635.08	197.21	136.23
12 July 2001	636.36	196.64	137.41
13 July 2001	638.19	196.90	136.61
16 July 2001	646.84	197.70	136.84
17 July 2001	638.09	198.76	137.30
18 July 2001	655.27	199.08	136.72
19 July 2001	650.98	199.50	137.47
20 July 2001	651.96	197.92	134.94
23 July 2001	652.48	197.84	134.24
24 July 2001	651.30	197.07	135.01
25 July 2001	646.61	197.15	135.69

Date	10-year high-yield	10-year BBB	10-year A
26 July 2001	649.98	197.20	135.24
27 July 2001	655.80	197.58	135.35
30 July 2001	652.83	194.90	134.80
31 July 2001	635.34	193.75	131.84
1 August 2001	635.88	191.31	131.32
2 August 2001	626.44	192.20	131.10
3 August 2001	615.68	191.81	131.58
6 August 2001	621.75	192.03	131.35
7 August 2001	615.49	191.97	131.78
8 August 2001	621.04	192.00	130.93
9 August 2001	616.99	193.53	131.45
10 August 2001	627.76	192.18	130.39
13 August 2001	631.99	192.71	131.46
14 August 2001	630.81	192.92	132.48
15 August 2001	629.70	193.59	133.03
16 August 2001	634.86	193.63	132.91
17 August 2001	646.33	193.48	133.06
20 August 2001	637.73	195.53	135.96
21 August 2001	639.85	197.70	137.17
22 August 2001	640.24	197.78	136.01
23 August 2001	639.59	196.78	135.97
24 August 2001	636.64	196.31	135.48
27 August 2001	635.51	195.95	135.01
28 August 2001	640.85	195.91	133.72
29 August 2001	645.38	195.08	133.78
30 August 2001	649.77	194.99	134.52
31 August 2001	619.98	196.70	135.89
3 September 2001	ND	ND	ND
4 September 2001	608.85	194.77	135.14
5 September 2001	612.71	195.22	135.80
6 September 2001	621.15	194.55	135.41
7 September 2001	630.89	196.51	137.82
10 September 2001	629.87	197.07	139.10
11 September 2001	ND	ND	ND
12 September 2001	ND	ND	ND
13 September 2001	ND	ND	ND
14 September 2001	ND	ND	167.35

Date	10-year high-yield	10-year BBB	10-year A
17 September 2001	719.05	217.61	160.01
18 September 2001	702.11	221.81	166.75
19 September 2001	705.15	219.72	162.96
20 September 2001	705.62	218.78	160.24
21 September 2001	714.80	220.53	164.32
24 September 2001	716.78	221.26	164.74
25 September 2001	727.77	221.38	164.12
26 September 2001	742.03	219.60	164.77
27 September 2001	753.58	221.68	163.91
28 September 2001	771.07	219.67	159.36
1 October 2001	788.80	219.20	161.44
2 October 2001	771.75	217.81	160.57
3 October 2001	763.54	217.10	158.25
4 October 2001	761.39	218.60	158.10
5 October 2001	740.19	216.80	157.76
8 October 2001	ND	ND	ND
9 October 2001	721.64	217.33	157.21
10 October 2001	717.57	219.33	160.58
11 October 2001	703.61	217.40	159.16
12 October 2001	692.27	216.00	157.96
15 October 2001	679.34	218.20	160.73
16 October 2001	689.45	217.31	160.76
17 October 2001	687.17	214.44	157.45
18 October 2001	691.10	215.49	159.49
19 October 2001	686.83	215.55	159.70
22 October 2001	684.80	215.16	159.26
23 October 2001	682.17	215.64	159.23
24 October 2001	690.18	217.49	160.63
25 October 2001	685.77	217.72	161.34
26 October 2001	684.25	219.19	161.97
29 October 2001	684.37	218.24	163.10
30 October 2001	690.07	222.57	165.93
31 October 2001	671.42	227.24	167.27
1 November 2001	673.54	226.78	167.14
2 November 2001	659.81	225.84	166.56
5 November 2001	667.97	229.42	167.70
6 November 2001	668.04	229.62	167.37

Date	10-year high-yield	10-year BBB	10-year A
7 November 2001	674.65	231.71	167.32
8 November 2001	658.66	229.54	166.31
9 November 2001	649.97	226.54	162.81
12 November 2001	ND	ND	ND
13 November 2001	643.48	227.11	162.45
14 November 2001	632.79	222.90	159.57
15 November 2001	602.80	218.55	156.25
16 November 2001	587.77	218.09	155.73
19 November 2001	594.36	214.69	153.68
20 November 2001	595.64	213.18	154.38
21 November 2001	579.81	210.57	150.62
22 November 2001	ND	ND	ND
23 November 2001	566.36	206.95	147.71
26 November 2001	565.39	203.59	144.67
27 November 2001	562.49	200.52	139.41
28 November 2001	560.97	203.84	142.04
29 November 2001	573.09	ND	139.99
30 November 2001	563.61	203.41	133.03
3 December 2001	568.19	209.71	142.26
4 December 2001	574.97	207.43	137.45
5 December 2001	560.28	207.73	137.54
6 December 2001	552.88	200.23	130.98
7 December 2001	538.66	197.78	127.46
10 December 2001	553.43	199.54	127.79
11 December 2001	563.91	201.04	126.67
12 December 2001	579.28	202.57	128.99
13 December 2001	573.93	205.79	133.26
14 December 2001	573.05	200.34	129.51
17 December 2001	571.53	204.13	132.25
18 December 2001	582.38	203.76	133.12
19 December 2001	590.70	203.68	133.31
20 December 2001	585.25	202.28	133.67
21 December 2001	584.33	201.86	132.08
24 December 2001	579.43	200.51	130.57
25 December 2001	ND	ND	ND
26 December 2001	574.11	200.49	130.99
27 December 2001	579.82	197.45	130.34

Date	10-year high-yield	10-year BBB	10-year A
28 December 2001	574.92	196.43	128.75
31 December 2001	563.86	193.77	127.24
1 January 2002	ND	ND	ND
2 January 2002	552.56	208.46	124.78
3 January 2002	547.65	208.71	126.02
4 January 2002	537.21	204.61	124.15
7 January 2002	546.40	207.70	126.81
8 January 2002	548.79	208.86	128.11
9 January 2002	549.02	208.71	128.84
10 January 2002	556.26	211.06	130.60
11 January 2002	561.46	211.28	128.25
14 January 2002	559.05	210.23	128.19
15 January 2002	568.20	212.58	130.18
16 January 2002	571.52	213.39	131.61
17 January 2002	567.83	213.25	132.15
18 January 2002	574.38	215.11	132.75
21 January 2002	ND	ND	ND
22 January 2002	572.12	211.38	128.89
23 January 2002	564.84	210.50	128.60
24 January 2002	564.21	210.65	126.45
25 January 2002	559.83	209.95	126.05
28 January 2002	564.53	208.51	125.22
29 January 2002	574.62	210.25	128.34
30 January 2002	583.73	214.31	134.90
31 January 2002	546.53	215.98	124.80
1 February 2002	550.39	216.56	123.94
4 February 2002	580.43	223.96	125.34
5 February 2002	566.94	232.95	128.77
6 February 2002	566.08	233.37	127.89
7 February 2002	566.00	234.59	127.80
8 February 2002	572.37	230.12	126.73
11 February 2002	572.25	232.35	126.89
12 February 2002	567.24	230.35	124.21
13 February 2002	564.30	227.50	122.04
14 February 2002	574.90	228.67	123.92
15 February 2002	580.75	229.04	125.00
18 February 2002	ND	ND	ND

Date	10-year high-yield	10-year BBB	10-year A
19 February 2002	583.17	233.10	124.27
20 February 2002	584.92	235.02	125.15
21 February 2002	590.14	234.94	125.58
22 February 2002	593.46	236.00	125.76
25 February 2002	600.02	233.31	125.57
26 February 2002	594.76	229.40	123.84
27 February 2002	596.29	227.82	123.38
28 February 2002	566.29	226.46	119.41
1 March 2002	554.62	225.68	119.29
4 March 2002	546.37	223.75	118.43
5 March 2002	541.24	223.87	118.25
6 March 2002	532.44	221.69	117.02
7 March 2002	513.27	217.94	115.68
8 March 2002	497.39	215.48	113.90
11 March 2002	495.28	215.24	113.00
12 March 2002	493.62	215.91	113.03
13 March 2002	495.09	217.54	111.19
14 March 2002	485.30	217.52	111.78
15 March 2002	490.91	219.14	113.21
18 March 2002	491.16	219.70	111.07
19 March 2002	489.52	219.74	111.97
20 March 2002	481.32	218.62	111.60
21 March 2002	485.72	217.93	110.59
22 March 2002	482.93	216.80	109.78
25 March 2002	482.31	217.42	111.83
26 March 2002	491.02	217.47	112.20
27 March 2002	493.20	217.98	112.56
28 March 2002	493.00	216.86	111.69
29 March 2002	ND	ND	ND
1 April 2002	493.35	215.55	113.47
2 April 2002	497.41	217.50	114.89
3 April 2002	510.46	217.53	112.91
4 April 2002	508.82	218.11	114.53
5 April 2002	513.40	218.43	114.78
8 April 2002	511.24	218.02	114.36
9 April 2002	515.51	218.51	115.61
10 April 2002	510.88	219.30	114.99

Date	10-year high-yield	10-year BBB	10-year A
11 April 2002	511.29	221.10	115.87
12 April 2002	522.07	221.17	116.66
15 April 2002	521.78	221.74	117.47
16 April 2002	519.74	220.66	117.38
17 April 2002	510.53	218.82	115.94
18 April 2002	504.72	218.72	116.47
19 April 2002	503.95	218.45	116.00
22 April 2002	506.89	218.88	114.28
23 April 2002	508.65	219.88	114.77
24 April 2002	515.67	221.62	116.10
25 April 2002	520.51	223.78	117.85
26 April 2002	527.75	223.82	120.93
29 April 2002	520.89	224.90	120.39
30 April 2002	493.26	225.76	123.05
1 May 2002	497.76	233.20	123.56
2 May 2002	498.44	232.82	123.79
3 May 2002	494.23	234.52	124.35
6 May 2002	497.13	234.40	123.23
7 May 2002	499.33	238.03	125.35
8 May 2002	492.37	235.48	123.35
9 May 2002	494.96	233.30	126.66
10 May 2002	503.08	236.53	126.71
13 May 2002	500.55	234.84	126.52
14 May 2002	497.96	234.33	125.04
15 May 2002	504.34	232.94	124.73
16 May 2002	515.22	236.95	123.43
17 May 2002	518.44	230.59	120.59
20 May 2002	523.90	236.42	122.21
21 May 2002	529.26	235.83	121.17
22 May 2002	535.29	234.15	121.72
23 May 2002	525.69	235.09	122.79
24 May 2002	525.68	234.24	121.04
27 May 2002	ND	ND	ND
28 May 2002	526.85	229.85	119.91
29 May 2002	532.51	228.33	118.84
30 May 2002	541.34	227.87	118.79
31 May 2002	545.70	212.41	115.44

Date	10-year high-yield	10-year BBB	10-year A
3 June 2002	549.65	211.87	115.49
4 June 2002	551.11	212.64	116.15
5 June 2002	536.24	210.72	114.76
6 June 2002	542.70	212.84	114.64
7 June 2002	544.38	211.65	113.34
10 June 2002	560.91	213.78	114.86
11 June 2002	563.53	216.57	115.27
12 June 2002	572.10	217.83	115.68
13 June 2002	575.91	218.82	116.51
14 June 2002	590.05	220.20	116.84
17 June 2002	578.57	220.62	116.58
18 June 2002	583.58	222.40	117.54
19 June 2002	593.40	224.26	118.21
20 June 2002	591.48	228.96	120.47
21 June 2002	627.48	230.94	119.87
24 June 2002	605.62	235.93	124.02
25 June 2002	615.11	232.70	122.49
26 June 2002	655.14	245.03	124.98
27 June 2002	669.88	244.75	124.83
28 June 2002	671.70	247.55	128.21
1 July 2002	600.77	244.43	127.39
2 July 2002	622.28	253.25	129.35
3 July 2002	623.49	251.90	129.27
4 July 2002	ND	ND	ND
5 July 2002	613.46	250.73	127.56
8 July 2002	618.25	247.29	130.01
9 July 2002	619.06	244.29	130.19
10 July 2002	631.85	246.73	130.84
11 July 2002	643.04	250.21	130.07
12 July 2002	643.07	249.30	132.07
15 July 2002	642.38	256.83	133.20
16 July 2002	635.10	255.70	132.67
17 July 2002	638.13	251.78	134.93
18 July 2002	643.32	254.76	133.51
19 July 2002	651.09	259.49	136.60
22 July 2002	667.01	262.73	137.65
23 July 2002	683.99	268.06	140.69

Date	10-year high-yield	10-year BBB	10-year A
24 July 2002	698.32	276.23	147.84
25 July 2002	700.63	279.74	148.50
26 July 2002	709.03	277.86	146.17
29 July 2002	694.99	281.50	145.01
30 July 2002	692.95	284.31	147.35
31 July 2002	694.85	276.37	148.97
1 August 2002	686.27	272.40	146.52
2 August 2002	711.68	275.01	148.87
5 August 2002	718.46	284.98	152.91
6 August 2002	715.36	285.50	153.69
7 August 2002	720.29	281.55	153.50
8 August 2002	721.40	283.37	155.57
9 August 2002	730.31	287.89	154.10
12 August 2002	739.41	288.96	152.12
13 August 2002	750.63	290.67	153.87
14 August 2002	754.18	291.93	152.18
15 August 2002	744.45	292.40	154.92
16 August 2002	730.33	288.61	153.09
19 August 2002	732.85	287.72	153.50
20 August 2002	727.72	277.75	148.73
21 August 2002	731.67	275.56	148.42
22 August 2002	710.60	272.29	150.04
23 August 2002	707.39	270.83	149.76
26 August 2002	699.31	270.97	149.82
27 August 2002	690.55	269.43	148.80
28 August 2002	691.71	268.96	148.48
29 August 2002	695.96	272.21	149.94
30 August 2002	698.52	272.19	150.73
2 September 2002	ND	ND	ND
3 September 2002	718.11	279.22	153.73
4 September 2002	714.87	277.15	153.27
5 September 2002	721.55	279.39	154.28
6 September 2002	712.85	278.22	153.16
9 September 2002	715.16	279.01	153.54
10 September 2002	714.81	275.80	151.82
11 September 2002	706.62	281.02	152.64
12 September 2002	698.67	278.36	151.62

Date	10-year high-yield	10-year BBB	10-year A
13 September 2002	ND	277.67	150.96
16 September 2002	717.08	277.38	163.06
17 September 2002	715.32	280.74	159.97
18 September 2002	725.29	277.82	165.69
19 September 2002	739.89	278.24	165.31
20 September 2002	743.06	279.73	165.60
23 September 2002	751.62	282.38	167.81
24 September 2002	762.24	287.03	169.31
25 September 2002	757.43	286.38	169.53
26 September 2002	753.00	287.54	169.30
27 September 2002	765.93	288.53	170.54
30 September 2002	780.68	286.32	168.75
1 October 2002	776.91	287.82	169.85
2 October 2002	777.42	287.20	170.87
3 October 2002	779.08	288.64	169.34
4 October 2002	792.20	289.18	172.55
7 October 2002	800.27	294.94	174.12
8 October 2002	814.65	304.42	177.13
9 October 2002	832.97	312.11	180.26
10 October 2002	835.26	317.67	184.04
11 October 2002	823.08	314.16	182.00
14 October 2002	ND	ND	ND
15 October 2002	793.94	305.24	176.71
16 October 2002	790.65	309.57	179.46
17 October 2002	777.83	310.99	177.98
18 October 2002	784.33	313.83	181.66
21 October 2002	775.00	319.33	164.07
22 October 2002	773.34	315.80	161.81
23 October 2002	771.27	314.70	162.36
24 October 2002	771.08	312.75	160.50
25 October 2002	774.34	310.69	160.63
28 October 2002	769.70	306.93	158.16
29 October 2002	779.20	305.50	155.01
30 October 2002	772.30	302.04	155.49
31 October 2002	765.03	300.11	151.97
1 November 2002	755.41	297.74	152.14
4 November 2002	747.24	293.72	152.64

Date	10-year high-yield	10-year BBB	10-year A
5 November 2002	737.98	288.80	150.07
6 November 2002	729.22	281.14	142.89
7 November 2002	740.99	281.54	143.90
8 November 2002	747.56	281.85	144.00
11 November 2002	ND	ND	ND
12 November 2002	739.97	287.98	145.98
13 November 2002	740.50	288.64	146.62
14 November 2002	716.25	281.59	147.70
15 November 2002	707.78	276.45	145.66
18 November 2002	707.05	266.31	143.75
19 November 2002	705.85	266.77	144.43
20 November 2002	686.98	262.39	142.77
21 November 2002	675.17	257.49	139.92
22 November 2002	673.60	254.34	139.09
25 November 2002	657.66	255.95	139.77
26 November 2002	668.82	258.57	139.01
27 November 2002	648.17	252.70	134.92
28 November 2002	ND	ND	ND
29 November 2002	657.47	253.98	136.38
2 December 2002	637.30	243.61	136.16
3 December 2002	632.86	247.45	135.97
4 December 2002	729.81	249.64	135.63
5 December 2002	734.55	249.10	135.71
6 December 2002	741.36	250.23	135.49
9 December 2002	658.92	253.11	135.37
10 December 2002	670.84	254.48	136.68
11 December 2002	678.19	252.87	136.11
12 December 2002	675.81	251.60	136.60
13 December 2002	669.91	251.46	136.57
16 December 2002	658.80	246.91	134.15
17 December 2002	660.24	241.79	133.51
18 December 2002	664.75	239.41	131.99
19 December 2002	675.04	239.96	132.25
20 December 2002	674.19	239.14	131.41
23 December 2002	671.22	238.89	130.95
24 December 2002	673.40	238.12	131.64
25 December 2002	ND	ND	ND

Date	10-year high-yield	10-year BBB	10-year A
26 December 2002	675.93	240.21	134.01
27 December 2002	684.56	240.09	133.08
30 December 2002	684.96	239.02	131.30
31 December 2002	668.32	240.88	132.41
1 January 2003	ND	ND	ND
2 January 2003	641.93	236.63	128.31
3 January 2003	643.32	236.05	130.21
6 January 2003	624.11	233.13	128.51
7 January 2003	620.77	230.18	127.27
8 January 2003	615.36	230.49	126.76
9 January 2003	595.40	227.63	125.36
10 January 2003	593.09	225.46	125.39
13 January 2003	591.38	221.38	122.98
14 January 2003	594.38	223.71	121.79
15 January 2003	597.98	226.55	122.05
16 January 2003	600.23	230.10	122.77
17 January 2003	606.91	232.82	123.08
20 January 2003	ND	ND	ND
21 January 2003	607.70	236.79	124.86
22 January 2003	616.19	238.42	125.15
23 January 2003	612.55	236.90	124.63
24 January 2003	616.64	238.17	124.57
27 January 2003	623.02	240.88	125.47
28 January 2003	622.08	239.41	125.80
29 January 2003	619.09	238.55	125.17
30 January 2003	621.28	237.18	124.37
31 January 2003	616.54	236.48	124.33
3 February 2003	619.36	233.34	122.84
4 February 2003	621.66	234.39	121.78
5 February 2003	613.62	232.76	121.55
6 February 2003	621.81	232.93	120.61
7 February 2003	624.95	232.16	119.85
10 February 2003	622.21	233.27	121.00
11 February 2003	621.75	231.99	120.28
12 February 2003	632.85	232.76	120.83
13 February 2003	647.49	235.24	121.01
14 February 2003	641.58	236.06	121.65

Date	10-year high-yield	10-year BBB	10-year A
17 February 2003	ND	ND	ND
18 February 2003	642.11	237.63	122.49
19 February 2003	641.04	234.83	122.00
20 February 2003	638.09	233.74	122.75
21 February 2003	630.87	232.96	123.14
24 February 2003	632.91	231.40	122.33
25 February 2003	637.26	234.73	124.22
26 February 2003	639.25	234.13	124.34
27 February 2003	637.37	233.37	122.60
28 February 2003	630.14	229.47	121.55
3 March 2003	635.51	224.95	120.43
4 March 2003	635.01	225.55	120.63
5 March 2003	637.83	228.46	120.42
6 March 2003	634.98	227.06	119.09
7 March 2003	638.06	231.95	122.12
10 March 2003	639.06	232.57	122.46
11 March 2003	636.46	235.16	123.03
12 March 2003	638.46	237.45	122.71
13 March 2003	623.18	232.46	120.55
14 March 2003	622.81	231.47	120.75
17 March 2003	612.27	232.52	120.60
18 March 2003	603.50	228.43	119.76
19 March 2003	594.01	226.83	118.89
20 March 2003	588.02	226.61	118.51
21 March 2003	576.95	222.00	117.96
24 March 2003	586.73	222.65	117.36
25 March 2003	585.86	222.61	116.06
26 March 2003	582.14	217.09	114.93
27 March 2003	581.64	215.41	115.47
28 March 2003	580.49	212.55	115.72
31 March 2003	576.84	212.01	115.11
1 April 2003	572.81	208.99	115.32
2 April 2003	555.88	204.20	113.54
3 April 2003	549.17	202.75	111.45
4 April 2003	545.49	205.55	111.85
7 April 2003	537.25	201.93	110.90
8 April 2003	545.58	205.56	111.76

Date	10-year high-yield	10-year BBB	10-year A
9 April 2003	552.17	206.23	110.32
10 April 2003	551.35	207.55	111.49
11 April 2003	546.41	205.36	110.45
14 April 2003	539.71	206.35	108.30
15 April 2003	543.25	203.75	109.14
16 April 2003	541.73	199.82	107.10
17 April 2003	538.03	199.37	105.82
18 April 2003	ND	ND	ND
21 April 2003	530.37	196.68	106.09
22 April 2003	525.09	193.11	104.76
23 April 2003	513.72	188.47	104.25
24 April 2003	515.21	186.64	103.78
25 April 2003	513.49	185.36	102.72
28 April 2003	511.66	185.87	102.72
29 April 2003	504.68	185.19	102.23
30 April 2003	497.97	184.28	100.74
1 May 2003	494.96	183.78	101.61
2 May 2003	486.55	180.82	99.78
5 May 2003	484.71	179.92	99.09
6 May 2003	491.45	163.70	99.10
7 May 2003	505.44	173.54	98.07
8 May 2003	511.47	173.43	97.28
9 May 2003	514.56	176.44	99.93
12 May 2003	516.36	176.75	100.21
13 May 2003	516.25	177.65	99.60
14 May 2003	527.68	182.75	103.28
15 May 2003	528.04	184.27	105.40
16 May 2003	533.22	181.48	103.91
19 May 2003	536.69	184.68	104.14
20 May 2003	544.55	185.93	104.10
21 May 2003	551.28	190.02	106.88
22 May 2003	557.83	186.92	105.66
23 May 2003	559.73	185.00	104.02
26 May 2003	ND	ND	ND
27 May 2003	553.94	183.40	103.67
28 May 2003	554.44	182.61	104.79
29 May 2003	558.12	183.65	105.60

Date	10-year high-yield	10-year BBB	10-year A
30 May 2003	554.31	182.05	103.93
2 June 2003	538.73	183.07	103.92
3 June 2003	546.58	181.49	105.42
4 June 2003	547.26	183.60	105.51
5 June 2003	534.35	179.94	103.79
6 June 2003	525.75	178.36	102.29
9 June 2003	531.82	179.16	102.23
10 June 2003	539.89	179.17	101.89
11 June 2003	534.77	176.87	100.23
12 June 2003	535.09	177.71	101.65
13 June 2003	536.03	177.09	100.43
16 June 2003	525.11	173.44	98.64
17 June 2003	510.50	169.84	97.13
18 June 2003	500.69	170.06	96.96
19 June 2003	503.47	170.40	96.84
20 June 2003	500.82	171.16	97.65
23 June 2003	511.36	172.52	97.24
24 June 2003	517.34	172.05	96.63
25 June 2003	507.29	170.63	95.56
26 June 2003	496.75	173.59	98.19
27 June 2003	493.68	171.95	95.98
30 June 2003	498.46	171.25	96.54
1 July 2003	499.03	173.33	97.54
2 July 2003	499.90	171.59	95.96
3 July 2003	488.88	171.47	96.55
4 July 2003	ND	ND	ND
7 July 2003	481.96	169.22	95.13
8 July 2003	478.52	167.40	94.89
9 July 2003	480.15	167.09	95.31
10 July 2003	482.64	166.86	95.13
11 July 2003	484.30	167.00	94.89
14 July 2003	476.26	166.09	95.29
15 July 2003	459.02	164.00	94.58
16 July 2003	460.12	163.66	94.37
17 July 2003	459.90	161.42	93.62
18 July 2003	458.69	161.91	92.99
21 July 2003	451.22	171.69	103.25

Date	10-year high-yield	10-year BBB	10-year A
22 July 2003	445.95	162.47	93.32
23 July 2003	451.84	161.33	94.00
24 July 2003	444.85	159.57	92.44
25 July 2003	444.68	158.99	91.22
28 July 2003	439.61	162.73	94.05
29 July 2003	437.12	163.40	93.95
30 July 2003	450.92	163.93	93.33
31 July 2003	443.04	166.22	93.93
1 August 2003	453.64	162.84	91.71
4 August 2003	459.06	163.47	93.69
5 August 2003	455.84	163.21	94.75
6 August 2003	481.09	166.71	96.33
7 August 2003	489.95	167.55	97.54
8 August 2003	487.03	166.17	95.57
11 August 2003	478.14	165.34	93.92
12 August 2003	479.60	165.26	94.20
13 August 2003	466.42	165.59	94.34
14 August 2003	475.51	170.58	99.48
15 August 2003	475.02	165.84	93.84
18 August 2003	476.83	168.41	95.90
19 August 2003	475.48	168.24	96.45
20 August 2003	459.37	164.57	93.80
21 August 2003	445.90	160.99	91.61
22 August 2003	448.16	160.54	91.27
25 August 2003	441.28	162.18	93.28
26 August 2003	442.75	161.19	92.24
27 August 2003	435.50	161.38	93.69
28 August 2003	441.67	161.61	95.41
29 August 2003	434.47	160.17	94.63
1 September 2003	ND	ND	ND
2 September 2003	409.38	154.19	91.59
3 September 2003	408.09	153.76	91.84
4 September 2003	414.58	155.96	93.22
5 September 2003	430.44	160.23	96.21
8 September 2003	423.70	158.49	94.17
9 September 2003	424.00	159.54	95.91
10 September 2003	431.14	159.35	96.40

Date	10-year high-yield	10-year BBB	10-year A
11 September 2003	426.15	157.82	95.58
12 September 2003	430.83	156.96	95.46
15 September 2003	428.41	154.28	92.88
16 September 2003	426.10	156.93	96.27
17 September 2003	432.42	154.34	96.27
18 September 2003	427.99	152.46	93.70
19 September 2003	426.70	149.80	91.87
22 September 2003	421.17	151.47	91.85
23 September 2003	426.45	152.98	92.99
24 September 2003	430.72	152.74	93.00
25 September 2003	432.92	151.51	92.49
26 September 2003	441.33	152.95	92.89
29 September 2003	435.02	153.34	93.10
30 September 2003	444.60	153.87	92.84
1 October 2003	443.01	153.85	92.54
2 October 2003	433.95	154.23	92.38
3 October 2003	416.44	152.01	92.37
6 October 2003	421.28	152.37	92.14
7 October 2003	409.90	151.62	91.68
8 October 2003	407.35	150.65	91.10
9 October 2003	401.24	150.13	91.40
10 October 2003	403.26	148.51	90.62
13 October 2003	ND	ND	ND
14 October 2003	391.51	148.49	90.90
15 October 2003	383.80	145.26	89.86
16 October 2003	375.91	141.38	88.51
17 October 2003	380.66	141.34	88.24
20 October 2003	380.91	141.16	87.63
21 October 2003	381.98	143.45	88.35
22 October 2003	393.15	147.12	89.92
23 October 2003	391.64	146.01	88.12
24 October 2003	402.17	145.98	88.73
27 October 2003	396.12	142.39	87.92
28 October 2003	402.06	145.16	87.64
29 October 2003	393.37	145.21	88.15
30 October 2003	387.05	142.55	88.00
31 October 2003	388.33	143.29	87.08

Date	10-year high-yield	10-year BBB	10-year A
3 November 2003	381.39	142.12	86.24
4 November 2003	384.33	142.44	86.75
5 November 2003	379.53	142.32	86.23
6 November 2003	372.30	141.66	84.56
7 November 2003	371.01	141.23	84.86
10 November 2003	369.91	141.18	85.27
11 November 2003	ND	ND	ND
12 November 2003	375.32	138.82	84.43
13 November 2003	385.34	137.35	84.21
14 November 2003	391.48	138.55	86.23
17 November 2003	391.92	139.22	84.98
18 November 2003	394.88	138.92	85.11
19 November 2003	387.12	139.48	84.77
20 November 2003	393.02	139.20	83.79
21 November 2003	393.13	139.61	83.92
24 November 2003	385.39	139.75	84.58
25 November 2003	387.47	138.94	84.18
26 November 2003	380.28	137.78	83.39
27 November 2003	ND	ND	ND
28 November 2003	371.60	136.91	82.76
1 December 2003	360.65	135.50	82.05
2 December 2003	359.30	134.79	82.49
3 December 2003	352.70	133.26	82.30
4 December 2003	351.52	131.36	81.46
5 December 2003	362.40	132.55	82.29
8 December 2003	354.53	134.14	82.62
9 December 2003	350.37	136.99	86.31
10 December 2003	351.60	135.99	85.35
11 December 2003	357.51	134.61	82.94
12 December 2003	358.26	135.29	83.71
15 December 2003	355.18	134.50	83.62
16 December 2003	358.22	136.18	84.22
17 December 2003	361.69	135.60	83.85
18 December 2003	364.50	133.39	83.69
19 December 2003	363.14	131.35	82.02
22 December 2003	358.93	132.66	82.71
23 December 2003	350.34	132.83	83.76

Date	10-year high-yield	10-year BBB	10-year A
24 December 2003	357.87	133.24	84.76
25 December 2003	ND	ND	ND
26 December 2003	360.96	132.06	83.97
29 December 2003	352.06	131.40	83.51
30 December 2003	347.82	132.02	84.86
31 December 2003	349.55	131.14	84.70
1 January 2004	ND	ND	ND
2 January 2004	338.06	129.70	84.17
5 January 2004	329.94	125.49	82.01
6 January 2004	334.36	126.22	83.59
7 January 2004	332.30	125.81	83.40
8 January 2004	328.29	124.72	82.62
9 January 2004	340.67	126.90	83.46
12 January 2004	340.33	126.24	82.39
13 January 2004	344.84	127.02	82.66
14 January 2004	347.43	126.45	82.43
15 January 2004	347.50	126.85	82.82
16 January 2004	341.33	125.71	82.47
19 January 2004	ND	ND	ND
20 January 2004	337.41	126.41	82.92
21 January 2004	337.84	126.28	82.92
22 January 2004	341.29	125.14	83.16
23 January 2004	331.27	125.39	83.05
26 January 2004	328.26	126.79	83.08
27 January 2004	335.05	125.80	83.58
28 January 2004	329.62	126.70	81.75
29 January 2004	335.52	127.67	82.49
30 January 2004	345.13	127.98	82.78
2 February 2004	346.81	129.53	82.64
3 February 2004	356.18	128.16	83.61
4 February 2004	357.91	129.86	84.10
5 February 2004	359.38	131.73	85.74
6 February 2004	368.35	129.61	84.80
9 February 2004	362.88	129.01	84.21
10 February 2004	360.88	129.38	83.03
11 February 2004	366.22	128.00	83.39
12 February 2004	359.56	128.00	83.43

Date	10-year high-yield	10-year BBB	10-year A
13 February 2004	363.51	129.36	84.89
16 February 2004	ND	ND	ND
17 February 2004	361.99	130.69	85.59
18 February 2004	364.59	129.56	85.24
19 February 2004	365.34	131.31	86.61
20 February 2004	361.50	130.80	86.57
23 February 2004	368.36	131.89	86.70
24 February 2004	373.30	132.82	87.13
25 February 2004	373.30	134.03	87.82
26 February 2004	369.99	133.55	87.57
27 February 2004	373.36	132.73	86.64
1 March 2004	370.90	131.62	85.51
2 March 2004	365.55	132.49	85.27
3 March 2004	365.15	131.85	85.22
4 March 2004	366.92	132.04	85.33
5 March 2004	380.55	132.57	85.84
8 March 2004	383.95	132.77	85.98
9 March 2004	388.64	133.07	85.90
10 March 2004	388.42	134.68	87.03
11 March 2004	389.11	134.53	86.62
12 March 2004	388.77	135.09	87.00
15 March 2004	391.35	135.37	87.88
16 March 2004	400.55	137.08	88.16
17 March 2004	401.55	135.79	87.90
18 March 2004	395.52	136.18	88.43
19 March 2004	392.16	136.59	88.89
22 March 2004	398.88	137.48	88.97
23 March 2004	401.98	137.61	88.43
24 March 2004	403.37	138.99	89.86
25 March 2004	400.59	138.61	89.32
26 March 2004	390.31	137.60	89.03
29 March 2004	384.31	135.78	88.13
30 March 2004	383.81	135.30	88.12
31 March 2004	388.94	134.93	87.67
1 April 2004	383.94	135.45	88.27
2 April 2004	363.60	133.33	86.62
5 April 2004	357.58	131.97	86.07

Date	10-year high-yield	10-year BBB	10-year A
6 April 2004	361.73	131.33	86.26
7 April 2004	359.13	129.79	85.32
8 April 2004	355.57	130.30	86.07
9 April 2004	ND	ND	ND
12 April 2004	351.99	128.41	84.70
13 April 2004	345.46	127.77	84.18
14 April 2004	344.97	126.22	82.34
15 April 2004	344.05	128.09	84.12
16 April 2004	347.41	128.76	83.45
19 April 2004	345.08	127.67	82.73
20 April 2004	342.67	128.58	83.77
21 April 2004	343.15	127.66	82.56
22 April 2004	346.36	127.84	83.15
23 April 2004	337.83	127.47	82.16
26 April 2004	339.37	126.31	81.38
27 April 2004	341.63	127.08	81.89
28 April 2004	337.50	128.01	82.32
29 April 2004	337.13	129.63	83.78
30 April 2004	340.24	128.28	82.62
3 May 2004	343.87	128.34	82.89
4 May 2004	344.92	130.06	84.27
5 May 2004	343.34	130.43	84.61
6 May 2004	348.38	133.91	87.26
7 May 2004	342.84	133.31	87.66
10 May 2004	356.67	135.13	88.50
11 May 2004	360.59	135.75	89.28
12 May 2004	362.69	135.81	89.61
13 May 2004	367.75	137.50	90.93
14 May 2004	376.78	137.49	91.44
17 May 2004	385.25	139.19	91.42
18 May 2004	376.97	138.36	91.89
19 May 2004	366.68	138.26	92.19
20 May 2004	374.98	137.78	90.98
21 May 2004	369.58	138.15	91.74
24 May 2004	369.01	137.03	90.90
25 May 2004	368.25	137.69	91.21
26 May 2004	369.38	137.62	92.49

Date	10-year high-yield	10-year BBB	10-year A
27 May 2004	373.83	135.93	91.36
28 May 2004	368.05	136.76	90.99
31 May 2004	ND	ND	ND
1 June 2004	362.79	135.55	89.84
2 June 2004	361.43	135.49	90.49
3 June 2004	364.63	137.03	91.65
4 June 2004	358.14	136.78	91.99
7 June 2004	360.74	135.77	92.04
8 June 2004	358.28	134.96	90.86
9 June 2004	353.96	134.83	90.74
10 June 2004	355.62	134.70	90.49
11 June 2004	ND	ND	ND
14 June 2004	349.31	134.87	90.73
15 June 2004	366.97	135.24	91.42
16 June 2004	359.70	135.67	91.34
17 June 2004	362.43	135.39	90.65
18 June 2004	359.21	135.37	91.15
21 June 2004	359.72	135.70	91.16
22 June 2004	356.82	135.48	91.37
23 June 2004	357.60	136.10	91.85
24 June 2004	360.29	135.49	91.16
25 June 2004	359.21	135.37	91.18
28 June 2004	351.44	134.99	91.35
29 June 2004	356.68	135.73	91.64
30 June 2004	364.11	136.86	92.92
1 July 2004	364.82	136.65	93.40
2 July 2004	372.43	136.46	93.88
5 July 2004	ND	ND	ND
6 July 2004	366.64	137.17	92.71
7 July 2004	365.93	136.75	93.14
8 July 2004	364.72	137.56	94.19
9 July 2004	363.32	137.67	94.10
12 July 2004	362.83	137.04	93.66
13 July 2004	359.60	137.12	93.15
14 July 2004	357.43	136.65	92.41
15 July 2004	355.97	136.13	92.91
16 July 2004	363.54	134.14	92.71

Date	10-year high-yield	10-year BBB	10-year A
19 July 2004	360.52	133.30	91.18
20 July 2004	349.71	133.47	91.21
21 July 2004	348.09	134.20	92.35
22 July 2004	352.48	131.72	91.45
23 July 2004	356.51	133.05	91.47
26 July 2004	354.94	133.43	91.63
27 July 2004	349.33	133.23	91.30
28 July 2004	351.30	133.16	91.25
29 July 2004	350.42	132.74	91.18
30 July 2004	357.11	132.16	91.04
2 August 2004	359.95	136.59	93.36
3 August 2004	365.08	136.24	92.95
4 August 2004	363.06	136.89	92.91
5 August 2004	364.33	136.97	92.49
6 August 2004	376.79	137.33	94.12
9 August 2004	372.81	135.67	92.36
10 August 2004	369.13	136.11	92.38
11 August 2004	370.12	135.89	92.49
12 August 2004	372.40	135.61	91.81
13 August 2004	375.57	134.92	91.74
16 August 2004	373.13	135.76	92.76
17 August 2004	376.45	135.44	92.50
18 August 2004	371.35	135.35	92.39
19 August 2004	369.14	134.01	92.71
20 August 2004	366.46	134.92	91.92
23 August 2004	361.29	134.67	91.57
24 August 2004	359.67	133.88	91.24
25 August 2004	359.26	133.27	90.86
26 August 2004	361.53	132.64	90.32
27 August 2004	360.42	131.94	90.16
30 August 2004	363.03	130.60	89.32
31 August 2004	368.32	130.99	89.44
1 September 2004	367.87	131.23	90.55
2 September 2004	362.86	131.33	90.02
3 September 2004	352.99	131.10	88.99
6 September 2004	ND	ND	ND
7 September 2004	356.89	129.97	89.02

Date	10-year high-yield	10-year BBB	10-year A
8 September 2004	360.43	128.13	88.89
9 September 2004	355.28	128.83	88.45
10 September 2004	355.48	128.19	87.87
13 September 2004	355.76	128.55	88.63
14 September 2004	354.10	127.26	87.46
15 September 2004	352.06	127.70	88.04
16 September 2004	359.83	125.33	87.16
17 September 2004	354.24	127.55	87.94
20 September 2004	358.36	125.36	86.36
21 September 2004	360.10	126.36	87.27
22 September 2004	363.32	126.50	87.44
23 September 2004	359.62	127.40	88.37
24 September 2004	358.99	126.33	87.03
27 September 2004	362.80	126.59	87.28
28 September 2004	361.56	126.20	87.09
29 September 2004	355.90	125.44	86.85
30 September 2004	354.52	124.05	86.05
1 October 2004	348.78	123.92	86.05
4 October 2004	349.17	123.75	87.11
5 October 2004	347.51	123.02	85.74
6 October 2004	341.87	123.31	85.55
7 October 2004	337.67	121.81	84.90
8 October 2004	344.11	120.79	85.34
11 October 2004	ND	ND	ND
12 October 2004	345.16	121.65	85.29
13 October 2004	346.25	120.55	85.86
14 October 2004	351.49	119.80	85.44
15 October 2004	348.37	121.10	85.74
18 October 2004	350.98	120.98	84.92
19 October 2004	351.52	120.09	83.17
20 October 2004	358.95	122.57	85.95
21 October 2004	356.18	122.31	85.83
22 October 2004	354.75	122.26	86.19
25 October 2004	354.71	123.34	85.57
26 October 2004	350.97	121.16	85.51
27 October 2004	339.02	120.74	84.53
28 October 2004	337.70	120.59	85.50

Date	10-year high-yield	10-year BBB	10-year A
29 October 2004	337.00	118.15	84.20
1 November 2004	329.70	118.55	83.22
2 November 2004	327.85	118.60	83.75
3 November 2004	324.23	116.67	83.11
4 November 2004	320.59	115.64	82.07
5 November 2004	310.71	114.48	80.71
8 November 2004	310.28	115.00	81.62
9 November 2004	310.83	115.36	81.42
10 November 2004	310.43	114.92	80.83
11 November 2004	ND	ND	ND
12 November 2004	314.22	113.92	79.35
15 November 2004	313.32	112.63	78.72
16 November 2004	315.38	112.17	78.34
17 November 2004	319.19	112.83	79.82
18 November 2004	318.61	112.23	78.83
19 November 2004	310.36	110.65	77.75
22 November 2004	313.71	110.52	77.71
23 November 2004	312.23	110.68	78.43
24 November 2004	ND	110.73	78.45
25 November 2004	ND	ND	ND
26 November 2004	306.78	110.12	78.21
29 November 2004	300.53	109.83	78.17
30 November 2004	300.57	109.65	77.50
1 December 2004	299.87	110.15	78.47
2 December 2004	298.62	109.31	78.36
3 December 2004	307.18	108.56	77.31
6 December 2004	308.96	108.46	76.72
7 December 2004	307.97	107.80	76.26
8 December 2004	315.53	107.00	75.94
9 December 2004	311.47	106.73	75.64
10 December 2004	312.96	107.45	76.09
13 December 2004	312.61	107.09	75.71
14 December 2004	314.84	106.60	75.26
15 December 2004	318.22	107.05	75.99
16 December 2004	307.70	107.20	75.98
17 December 2004	308.33	105.87	76.28
20 December 2004	308.43	105.24	75.42

Date	10-year high-yield	10-year BBB	10-year A
21 December 2004	309.72	104.68	75.15
22 December 2004	306.94	105.20	75.94
23 December 2004	306.34	105.45	76.39
24 December 2004	ND	ND	ND
27 December 2004	299.24	104.68	75.44
28 December 2004	300.09	104.58	75.48
29 December 2004	297.05	104.66	75.28
30 December 2004	302.09	104.52	75.58
31 December 2004	305.90	105.42	77.74
3 January 2005	304.76	105.13	77.66
4 January 2005	297.09	104.11	76.93
5 January 2005	300.67	104.54	77.12
6 January 2005	301.93	105.81	77.97
7 January 2005	302.15	106.07	77.84
10 January 2005	304.73	106.02	78.17
11 January 2005	310.92	106.61	78.21
12 January 2005	312.86	107.00	78.74
13 January 2005	317.22	107.15	78.75
14 January 2005	316.65	107.75	78.81
17 January 2005	ND	ND	ND
18 January 2005	321.24	107.34	78.73
19 January 2005	320.44	107.58	79.05
20 January 2005	324.59	107.99	79.20
21 January 2005	326.64	107.89	78.45
24 January 2005	328.82	108.49	78.79
25 January 2005	321.08	107.67	77.95
26 January 2005	321.55	106.74	77.04
27 January 2005	318.42	106.46	77.21
28 January 2005	322.92	106.21	77.17
31 January 2005	322.80	105.85	76.76
1 February 2005	320.20	105.27	76.53
2 February 2005	317.43	103.96	76.59
3 February 2005	312.18	104.53	76.45
4 February 2005	318.59	102.61	75.58
7 February 2005	318.51	102.70	75.48
8 February 2005	317.88	103.24	76.24
9 February 2005	321.96	102.60	75.59

Date	10-year high-yield	10-year BBB	10-year A
10 February 2005	315.13	103.27	76.14
11 February 2005	311.09	103.05	76.19
14 February 2005	311.52	101.90	75.21
15 February 2005	306.60	102.72	76.17
16 February 2005	300.41	102.74	76.83
17 February 2005	298.61	101.37	75.75
18 February 2005	293.01	100.46	75.65
21 February 2005	ND	ND	ND
22 February 2005	292.16	101.63	76.16
23 February 2005	293.09	100.98	75.65
24 February 2005	291.06	99.88	75.25
25 February 2005	290.42	100.10	75.35
28 February 2005	281.73	99.94	75.14
1 March 2005	281.17	98.96	74.19
2 March 2005	281.46	99.59	73.59
3 March 2005	281.34	98.61	73.78
4 March 2005	286.08	97.47	72.83
7 March 2005	285.46	98.10	73.46
8 March 2005	278.78	98.18	74.29
9 March 2005	268.52	97.46	73.74
10 March 2005	276.23	97.45	73.93
11 March 2005	270.14	97.67	74.07
14 March 2005	275.97	98.57	74.71
15 March 2005	274.37	98.79	74.95
16 March 2005	283.89	101.64	76.54
17 March 2005	295.76	104.07	77.04
18 March 2005	289.70	102.92	76.57
21 March 2005	295.17	104.25	76.96
22 March 2005	294.66	105.13	77.95
23 March 2005	304.14	108.58	79.99
24 March 2005	304.03	107.71	78.92
25 March 2005	ND	ND	ND
28 March 2005	304.38	109.30	80.17
29 March 2005	312.90	111.24	81.48
30 March 2005	321.77	113.51	83.24
31 March 2005	330.94	114.30	83.51
1 April 2005	334.25	115.30	83.65

Date	10-year high-yield	10-year BBB	10-year A
4 April 2005	335.37	116.45	84.24
5 April 2005	329.88	116.20	83.76
6 April 2005	327.21	115.03	83.19
7 April 2005	319.42	113.50	82.94
8 April 2005	320.14	114.29	84.17
11 April 2005	325.88	115.53	84.33
12 April 2005	334.96	114.26	82.70
13 April 2005	336.18	115.83	84.25
14 April 2005	345.22	118.91	85.12
15 April 2005	359.74	120.75	85.84
18 April 2005	364.88	122.56	87.24
19 April 2005	367.22	121.89	85.93
20 April 2005	362.58	121.60	85.82
21 April 2005	352.26	119.91	85.95
22 April 2005	355.93	119.87	85.48
25 April 2005	358.56	120.09	85.84
26 April 2005	360.98	119.42	85.22
27 April 2005	370.38	120.55	85.65
28 April 2005	378.58	121.18	84.99
29 April 2005	382.31	123.85	86.11
2 May 2005	385.30	124.45	85.69
3 May 2005	387.29	125.93	86.63
4 May 2005	380.72	124.64	85.26
5 May 2005	392.56	120.06	84.91
6 May 2005	388.81	122.43	87.77
9 May 2005	387.59	122.00	86.69
10 May 2005	394.41	122.62	86.15
11 May 2005	405.66	123.78	87.14
12 May 2005	406.65	124.63	87.17
13 May 2005	415.43	127.44	89.40
16 May 2005	427.25	127.10	90.03
17 May 2005	434.45	129.47	91.23
18 May 2005	433.31	129.87	90.48
19 May 2005	421.91	128.69	90.21
20 May 2005	416.95	127.70	89.95
23 May 2005	414.79	126.97	89.16
24 May 2005	415.79	127.65	89.24

Date	10-year high-yield	10-year BBB	10-year A
25 May 2005	404.35	125.68	88.38
26 May 2005	397.31	123.95	88.07
27 May 2005	391.94	122.57	87.47
30 May 2005	ND	ND	ND
31 May 2005	398.07	123.67	88.32
1 June 2005	399.30	123.57	87.80
2 June 2005	390.46	120.95	86.31
3 June 2005	380.01	120.38	86.92
6 June 2005	388.31	120.06	86.92
7 June 2005	390.58	120.00	86.49
8 June 2005	389.09	120.62	86.84
9 June 2005	392.44	122.72	88.75
10 June 2005	383.65	122.93	88.98
13 June 2005	380.07	122.49	88.22
14 June 2005	374.46	123.12	89.26
15 June 2005	372.59	122.34	88.01
16 June 2005	377.82	122.39	87.86
17 June 2005	377.54	122.59	87.84
20 June 2005	377.27	122.60	87.87
21 June 2005	379.44	123.13	88.54
22 June 2005	387.74	124.29	89.35
23 June 2005	387.43	124.48	89.31
24 June 2005	392.92	125.00	90.12
27 June 2005	395.67	125.21	89.28
28 June 2005	385.65	124.80	88.97
29 June 2005	382.17	124.87	88.91
30 June 2005	383.37	125.43	90.26
1 July 2005	372.61	123.44	87.73
4 July 2005	ND	ND	ND
5 July 2005	368.95	123.34	88.06
6 July 2005	373.40	124.58	88.83
7 July 2005	375.22	123.55	88.63
8 July 2005	366.89	124.16	88.77
11 July 2005	362.61	122.12	86.90
12 July 2005	355.56	121.39	86.66
13 July 2005	352.07	121.48	87.22
14 July 2005	346.93	119.86	85.55

Date	10-year high-yield	10-year BBB	10-year A
15 July 2005	346.69	119.95	85.63
18 July 2005	343.72	119.79	85.94
19 July 2005	346.16	118.89	84.89
20 July 2005	350.57	118.87	84.59
21 July 2005	339.67	118.51	84.33
22 July 2005	339.74	118.18	84.20
25 July 2005	341.99	118.49	84.67
26 July 2005	341.81	117.84	84.03
27 July 2005	337.76	117.02	83.85
28 July 2005	342.48	116.71	83.62
29 July 2005	334.29	115.90	84.24
1 August 2005	331.55	114.85	83.20
2 August 2005	330.34	115.10	83.00
3 August 2005	336.45	115.88	83.26
4 August 2005	333.47	115.71	83.10
5 August 2005	331.83	116.25	84.31
8 August 2005	332.96	116.68	84.60
9 August 2005	333.51	116.24	83.89
10 August 2005	332.69	117.48	85.00
11 August 2005	337.99	118.21	84.81
12 August 2005	343.49	118.76	85.44
15 August 2005	341.29	116.98	83.45
16 August 2005	348.64	118.47	82.86
17 August 2005	344.30	118.73	83.29
18 August 2005	349.13	118.97	83.03
19 August 2005	347.72	118.23	82.46
22 August 2005	346.84	117.66	82.24
23 August 2005	347.42	117.25	81.95
24 August 2005	347.11	114.69	81.69
25 August 2005	347.65	113.63	80.52
26 August 2005	346.13	115.12	81.93
29 August 2005	347.59	114.01	80.72
30 August 2005	352.00	110.71	78.15
31 August 2005	367.29	119.15	85.72
1 September 2005	368.67	120.20	86.52
2 September 2005	369.66	120.41	86.06
5 September 2005	ND	ND	ND

Date	10-year high-yield	10-year BBB	10-year A
6 September 2005	363.38	120.75	86.01
7 September 2005	359.68	120.02	84.90
8 September 2005	359.44	121.14	85.67
9 September 2005	361.57	121.60	86.36
12 September 2005	356.48	120.84	85.53
13 September 2005	358.69	121.56	86.64
14 September 2005	356.39	121.35	86.20
15 September 2005	351.41	121.97	86.71
16 September 2005	349.13	121.34	85.45
19 September 2005	355.58	122.24	87.03
20 September 2005	359.09	121.31	85.51
21 September 2005	367.84	122.83	86.60
22 September 2005	371.57	123.28	86.80
23 September 2005	363.45	123.29	86.68
26 September 2005	357.15	122.27	85.87
27 September 2005	358.53	122.58	86.14
28 September 2005	363.24	122.38	85.95
29 September 2005	360.54	121.98	85.57
30 September 2005	359.88	121.02	84.77
3 October 2005	352.83	122.45	86.07
4 October 2005	360.09	121.76	86.42
5 October 2005	362.77	122.28	86.06
6 October 2005	364.74	122.57	86.13
7 October 2005	368.53	123.45	86.73
10 October 2005	ND	ND	ND
11 October 2005	371.68	123.02	85.88
12 October 2005	373.60	125.47	87.58
13 October 2005	377.33	127.35	87.85
14 October 2005	373.40	128.25	88.97
17 October 2005	364.87	126.64	87.02
18 October 2005	359.74	125.93	87.21
19 October 2005	363.09	127.02	88.04
20 October 2005	362.08	126.89	87.69
21 October 2005	366.56	127.63	88.64
24 October 2005	360.67	127.15	88.00
25 October 2005	354.06	125.22	85.73
26 October 2005	355.66	127.68	88.06

Date	10-year high-yield	10-year BBB	10-year A
27 October 2005	362.75	128.22	88.36
28 October 2005	364.23	128.10	88.38
31 October 2005	365.94	128.38	88.68
1 November 2005	363.58	128.73	88.87
2 November 2005	359.10	128.66	88.97
3 November 2005	352.21	126.80	88.22
4 November 2005	351.26	126.20	87.84
7 November 2005	354.60	125.72	87.17
8 November 2005	358.74	126.12	87.32
9 November 2005	354.56	126.19	87.60
10 November 2005	362.05	126.75	88.19
11 November 2005	ND	ND	ND
14 November 2005	362.70	126.21	87.25
15 November 2005	369.44	126.26	86.98
16 November 2005	377.56	127.99	88.55
17 November 2005	381.80	128.69	89.59
18 November 2005	382.23	130.05	91.17
21 November 2005	382.43	129.45	89.70
22 November 2005	384.33	129.94	90.86
23 November 2005	379.98	129.70	89.73
24 November 2005	ND	ND	ND
25 November 2005	383.27	129.56	89.43
28 November 2005	383.16	129.30	89.17
29 November 2005	372.67	129.05	88.02
30 November 2005	371.33	128.42	88.56
1 December 2005	369.98	128.89	89.14
2 December 2005	368.98	129.42	89.14
5 December 2005	368.84	130.10	89.84
6 December 2005	376.58	131.78	91.45
7 December 2005	373.71	131.22	90.65
8 December 2005	378.33	132.38	91.97
9 December 2005	369.64	132.39	91.51
12 December 2005	366.37	131.58	91.10
13 December 2005	367.35	131.17	91.54
14 December 2005	375.32	131.78	92.34
15 December 2005	373.06	131.55	92.21
16 December 2005	375.46	131.87	92.66

Date	10-year high-yield	10-year BBB	10-year A
19 December 2005	375.94	131.88	92.13
20 December 2005	376.77	132.53	92.76
21 December 2005	369.16	132.48	92.48
22 December 2005	373.70	133.32	94.25
23 December 2005	379.44	133.34	94.10
26 December 2005	ND	ND	ND
27 December 2005	383.52	133.47	94.61
28 December 2005	380.73	133.35	94.34
29 December 2005	383.57	134.59	95.32
30 December 2005	382.52	134.41	95.42
2 January 2006	ND	ND	ND
3 January 2006	381.15	133.22	95.35
4 January 2006	379.91	133.92	96.74
5 January 2006	376.48	133.24	96.13
6 January 2006	370.91	133.26	95.51
9 January 2006	367.87	132.88	95.58
10 January 2006	365.15	133.38	95.94
11 January 2006	363.41	133.24	96.19
12 January 2006	367.80	132.46	96.34
13 January 2006	377.77	133.52	97.47
16 January 2006	ND	ND	ND
17 January 2006	382.24	133.50	98.11
18 January 2006	380.67	133.73	97.91
19 January 2006	375.55	133.75	98.20
20 January 2006	377.52	132.82	97.93
23 January 2006	376.43	133.04	98.01
24 January 2006	371.09	132.54	97.78
25 January 2006	360.42	131.42	96.76
26 January 2006	359.22	131.58	97.22
27 January 2006	357.55	129.16	94.93
30 January 2006	354.60	130.56	96.74
31 January 2006	354.40	130.23	96.69
1 February 2006	349.86	130.26	96.03
2 February 2006	349.90	129.92	96.08
3 February 2006	353.42	130.57	96.69
6 February 2006	356.25	131.09	97.73
7 February 2006	355.07	130.77	97.82

Date	10-year high-yield	10-year BBB	10-year A
8 February 2006	353.74	131.11	98.00
9 February 2006	356.84	130.39	97.57
10 February 2006	353.13	129.75	96.62
13 February 2006	354.18	129.51	96.30
14 February 2006	351.96	129.22	96.01
15 February 2006	350.33	129.18	95.30
16 February 2006	349.89	128.98	95.55
17 February 2006	352.86	128.77	95.42
20 February 2006	ND	ND	ND
21 February 2006	350.26	128.29	94.31
22 February 2006	351.87	128.60	95.41
23 February 2006	348.33	127.75	94.68
24 February 2006	346.04	126.11	92.77
27 February 2006	344.70	126.02	92.86
28 February 2006	345.66	126.25	93.15
1 March 2006	344.46	127.17	94.04
2 March 2006	340.92	126.66	93.40
3 March 2006	339.80	127.11	93.51
6 March 2006	333.37	126.62	93.57
7 March 2006	335.81	127.08	93.83
8 March 2006	339.54	127.95	94.45
9 March 2006	338.73	127.54	93.85
10 March 2006	337.30	127.75	94.37
13 March 2006	335.55	128.73	95.45
14 March 2006	340.33	128.12	95.42
15 March 2006	337.54	129.07	96.04
16 March 2006	341.59	128.66	96.79
17 March 2006	341.87	127.38	95.69
20 March 2006	338.64	127.83	95.89
21 March 2006	331.56	128.11	96.01
22 March 2006	332.56	128.14	96.24
23 March 2006	329.38	128.35	95.98
24 March 2006	334.10	129.69	97.81
27 March 2006	330.25	128.95	96.05
28 March 2006	324.18	128.82	95.70
29 March 2006	324.33	129.06	96.45
30 March 2006	321.44	129.30	96.81

Date	10-year high-yield	10-year BBB	10-year A
31 March 2006	322.61	129.17	96.48
3 April 2006	319.76	129.62	97.17
4 April 2006	322.02	129.68	97.54
5 April 2006	322.26	129.54	97.14
6 April 2006	320.05	130.34	97.54
7 April 2006	316.44	130.32	97.28
10 April 2006	318.61	130.31	97.51
11 April 2006	320.44	130.65	97.91
12 April 2006	317.29	130.91	98.05
13 April 2006	313.75	129.86	97.52
14 April 2006	ND	ND	ND
17 April 2006	317.43	130.66	98.65
18 April 2006	318.62	130.31	98.57
19 April 2006	314.14	130.12	98.36
20 April 2006	312.93	129.97	98.58
21 April 2006	315.07	129.98	98.77
24 April 2006	316.14	129.32	97.94
25 April 2006	309.24	128.73	97.48
26 April 2006	308.36	128.12	96.88
27 April 2006	310.33	128.44	98.61
28 April 2006	309.78	128.03	97.45
1 May 2006	304.45	126.63	96.09
2 May 2006	305.34	126.15	96.42
3 May 2006	303.16	125.75	96.42
4 May 2006	301.77	125.94	96.08
5 May 2006	304.29	125.39	95.77
8 May 2006	303.89	125.64	96.08
9 May 2006	303.37	125.95	96.27
10 May 2006	303.03	126.49	96.35
11 May 2006	300.40	126.06	96.12
12 May 2006	299.29	127.13	97.00
15 May 2006	304.82	126.45	95.18
16 May 2006	311.18	128.08	97.24
17 May 2006	311.98	127.96	97.47
18 May 2006	320.76	130.57	99.50
19 May 2006	321.65	130.63	99.48
22 May 2006	326.69	130.90	99.52

Date	10-year high-yield	10-year BBB	10-year A
23 May 2006	324.60	131.30	99.68
24 May 2006	330.47	132.79	100.11
25 May 2006	326.09	132.15	100.14
26 May 2006	325.22	131.31	99.36
29 May 2006	ND	ND	ND
30 May 2006	323.91	132.88	100.32
31 May 2006	322.03	134.27	99.87
1 June 2006	323.68	134.52	100.08
2 June 2006	331.35	135.14	100.94
5 June 2006	331.11	135.34	100.59
6 June 2006	335.60	136.97	101.30
7 June 2006	334.16	137.10	101.21
8 June 2006	338.62	137.76	101.49
9 June 2006	340.37	138.67	102.45
12 June 2006	339.07	139.01	102.46
13 June 2006	345.01	139.28	102.50
14 June 2006	344.51	141.18	104.15
15 June 2006	342.86	141.83	105.46
16 June 2006	339.55	141.78	105.60
19 June 2006	339.20	142.52	106.17
20 June 2006	341.57	143.52	106.91
21 June 2006	347.87	143.95	106.48
22 June 2006	345.61	144.37	107.58
23 June 2006	344.09	144.79	107.64
26 June 2006	345.60	144.86	107.26
27 June 2006	348.72	146.06	108.38
28 June 2006	346.36	145.94	107.48
29 June 2006	345.42	145.21	107.27
30 June 2006	344.30	143.90	106.45
3 July 2006	346.12	146.51	108.70
4 July 2006	ND	ND	ND
5 July 2006	340.94	146.29	109.02
6 July 2006	344.78	145.71	108.88
7 July 2006	346.88	145.60	108.72
10 July 2006	346.22	145.80	109.27
11 July 2006	348.28	145.66	108.85
12 July 2006	349.15	145.96	108.82

Date	10-year high-yield	10-year BBB	10-year A
13 July 2006	354.70	146.30	109.03
14 July 2006	357.53	147.40	109.48
17 July 2006	359.19	147.92	110.24
18 July 2006	354.24	147.54	109.76
19 July 2006	357.64	147.92	110.61
20 July 2006	360.15	147.86	110.65
21 July 2006	357.76	147.45	110.25
24 July 2006	360.57	147.23	109.42
25 July 2006	359.13	147.95	110.05
26 July 2006	359.71	147.66	109.95
27 July 2006	357.24	146.24	108.64
28 July 2006	361.24	146.51	109.64
31 July 2006	363.87	146.70	109.08
1 August 2006	363.93	146.65	109.09
2 August 2006	363.78	147.33	109.32
3 August 2006	364.42	146.36	108.60
4 August 2006	367.47	147.21	109.13
7 August 2006	365.10	147.72	109.22
8 August 2006	365.03	147.62	108.57
9 August 2006	363.52	147.40	108.37
10 August 2006	365.13	147.82	108.62
11 August 2006	361.43	147.25	108.29
14 August 2006	359.26	146.31	107.58
15 August 2006	363.58	145.89	107.28
16 August 2006	366.75	146.99	107.84
17 August 2006	364.45	146.70	107.44
18 August 2006	368.40	146.82	107.50
21 August 2006	368.65	146.74	106.85
22 August 2006	368.82	146.49	106.25
23 August 2006	367.93	146.91	106.84
24 August 2006	369.00	146.76	106.09
25 August 2006	370.18	146.91	105.92
28 August 2006	369.52	147.34	106.58
29 August 2006	370.06	147.03	105.83
30 August 2006	371.09	146.83	105.22
31 August 2006	376.35	146.46	104.61
1 September 2006	376.10	146.56	104.96

Date	10-year high-yield	10-year BBB	10-year A
4 September 2006	ND	ND	ND
5 September 2006	369.92	146.14	104.58
6 September 2006	367.02	145.92	104.54
7 September 2006	368.88	146.48	105.24
8 September 2006	368.98	145.64	104.13
11 September 2006	366.43	146.27	104.78
12 September 2006	367.82	146.35	104.82
13 September 2006	365.16	147.09	105.32
14 September 2006	361.85	146.50	105.12
15 September 2006	360.34	145.94	104.66
18 September 2006	359.52	145.77	104.74
19 September 2006	367.46	147.01	105.70
20 September 2006	366.95	146.30	104.47
21 September 2006	375.49	147.50	105.14
22 September 2006	380.45	147.73	104.83
25 September 2006	384.27	148.50	105.24
26 September 2006	381.03	148.18	105.19
27 September 2006	377.44	147.90	104.43
28 September 2006	375.79	149.21	105.88
29 September 2006	373.50	148.30	104.35
2 October 2006	374.73	148.36	105.20
3 October 2006	368.72	148.11	105.17
4 October 2006	378.02	148.25	105.08
5 October 2006	372.56	148.00	104.74
6 October 2006	364.75	147.88	104.35
9 October 2006	ND	ND	ND
10 October 2006	360.22	147.42	104.46
11 October 2006	356.55	148.19	105.36
12 October 2006	355.01	147.49	104.42
13 October 2006	351.49	147.33	104.60
16 October 2006	353.05	146.83	104.11
17 October 2006	354.13	147.14	104.82
18 October 2006	353.84	145.80	103.85
19 October 2006	352.00	145.25	103.75
20 October 2006	351.99	144.72	103.18
23 October 2006	349.06	144.68	103.62
24 October 2006	349.22	144.07	102.72

Date	10-year high-yield	10-year BBB	10-year A
25 October 2006	354.80	144.88	103.61
26 October 2006	357.22	143.28	102.59
27 October 2006	359.44	143.50	102.87
30 October 2006	358.84	143.31	102.25
31 October 2006	368.52	143.40	102.11
1 November 2006	370.96	143.06	101.68
2 November 2006	365.64	142.12	101.62
3 November 2006	353.29	140.76	100.59
6 November 2006	355.65	140.67	101.03
7 November 2006	357.64	140.17	100.77
8 November 2006	358.97	139.70	99.87
9 November 2006	356.48	139.43	100.05
10 November 2006	359.34	139.43	99.99
13 November 2006	356.53	138.64	99.00
14 November 2006	359.53	139.77	99.99
15 November 2006	354.85	140.64	100.42
16 November 2006	348.44	139.71	99.82
17 November 2006	356.55	139.64	99.88
20 November 2006	357.83	140.12	100.25
21 November 2006	361.16	140.24	99.76
22 November 2006	363.58	140.85	100.16
23 November 2006	ND	ND	ND
24 November 2006	364.65	140.19	99.57
27 November 2006	366.40	141.05	100.26
28 November 2006	371.48	140.75	100.16
29 November 2006	366.79	140.23	99.64
30 November 2006	375.05	141.18	99.64
1 December 2006	376.76	141.52	100.22
4 December 2006	375.87	141.40	99.87
5 December 2006	370.89	140.92	99.27
6 December 2006	364.83	140.22	98.68
7 December 2006	363.41	139.59	98.30
8 December 2006	356.95	139.00	97.90
11 December 2006	360.41	139.65	98.60
12 December 2006	364.64	140.94	99.67
13 December 2006	356.79	139.95	98.76
14 December 2006	356.88	140.28	99.05

Date	10-year high-yield	10-year BBB	10-year A
15 December 2006	354.81	140.38	99.43
18 December 2006	355.66	139.96	98.50
19 December 2006	354.51	140.31	99.25
20 December 2006	353.86	139.82	98.74
21 December 2006	357.75	139.86	98.36
22 December 2006	350.98	139.57	98.17
25 December 2006	ND	ND	ND
26 December 2006	352.40	139.37	97.97
27 December 2006	347.97	139.65	98.24
28 December 2006	343.69	138.91	97.19
29 December 2006	341.91	138.97	97.32
1 January 2007	ND	ND	ND
2 January 2007	350.90	140.24	97.81
3 January 2007	350.34	138.84	96.81
4 January 2007	355.17	138.69	96.73
5 January 2007	354.21	138.04	95.65
8 January 2007	352.96	138.15	96.35
9 January 2007	351.92	138.32	96.64
10 January 2007	349.34	137.65	95.56
11 January 2007	343.89	137.97	96.14
12 January 2007	340.30	137.64	96.22
15 January 2007	ND	ND	ND
16 January 2007	340.60	137.30	96.09
17 January 2007	335.47	137.00	95.85
18 January 2007	337.83	136.17	95.27
19 January 2007	333.42	135.12	94.45
22 January 2007	334.08	136.30	95.53
23 January 2007	328.80	134.71	94.63
24 January 2007	326.57	134.83	95.22
25 January 2007	320.44	134.49	95.61
26 January 2007	320.69	134.01	94.52
29 January 2007	319.53	134.05	94.77
30 January 2007	324.30	134.77	95.57
31 January 2007	331.22	134.80	95.57
1 February 2007	326.55	134.53	95.70
2 February 2007	326.79	133.64	95.36
5 February 2007	327.30	133.04	95.04

Date	10-year high-yield	10-year BBB	10-year A
6 February 2007	328.90	133.66	95.37
7 February 2007	326.62	132.62	94.77
8 February 2007	327.92	132.47	94.45
9 February 2007	321.43	131.84	94.34
12 February 2007	321.46	131.38	93.53
13 February 2007	319.57	131.13	93.34
14 February 2007	324.43	131.53	93.92
15 February 2007	323.64	131.11	93.98
16 February 2007	322.19	130.18	93.32
19 February 2007	ND	ND	ND
20 February 2007	322.68	129.79	93.40
21 February 2007	320.14	129.45	93.20
22 February 2007	314.46	128.88	93.01
23 February 2007	319.14	128.21	92.82
26 February 2007	323.79	128.81	93.25
27 February 2007	341.92	132.72	96.54
28 February 2007	339.30	130.72	95.14
1 March 2007	343.08	131.40	95.99
2 March 2007	350.75	132.83	96.38
5 March 2007	356.70	135.59	99.22
6 March 2007	351.96	134.96	98.12
7 March 2007	350.26	135.41	97.91
8 March 2007	344.97	134.62	97.38
9 March 2007	337.31	134.40	97.44
12 March 2007	341.63	134.37	97.67
13 March 2007	350.80	135.74	98.49
14 March 2007	351.39	136.11	98.38
15 March 2007	348.21	136.75	98.99
16 March 2007	348.41	137.01	99.63
19 March 2007	345.54	136.83	99.40
20 March 2007	347.63	137.86	100.71
21 March 2007	347.93	137.77	100.43
22 March 2007	339.86	137.47	99.92
23 March 2007	337.23	137.56	99.99
26 March 2007	339.66	137.28	99.92
27 March 2007	338.53	138.17	100.59
28 March 2007	340.41	139.01	101.20

Date	10-year high-yield	10-year BBB	10-year A
29 March 2007	338.03	138.69	100.76
30 March 2007	336.33	138.93	101.04
2 April 2007	336.27	139.19	100.85
3 April 2007	333.93	139.28	100.54
4 April 2007	338.09	140.16	101.49
5 April 2007	332.92	139.58	101.15
6 April 2007	ND	ND	ND
9 April 2007	326.72	139.09	100.72
10 April 2007	327.47	138.60	100.06
11 April 2007	325.79	138.67	100.52
12 April 2007	325.77	138.44	100.12
13 April 2007	322.72	138.19	100.78
16 April 2007	322.93	137.95	101.20
17 April 2007	325.29	138.04	101.40
18 April 2007	328.04	137.74	101.07
19 April 2007	324.60	137.64	101.24
20 April 2007	321.47	137.31	100.61
23 April 2007	323.41	137.59	101.25
24 April 2007	324.66	137.97	101.73
25 April 2007	321.00	137.64	101.11
26 April 2007	316.81	137.32	101.05
27 April 2007	317.01	137.70	101.59
30 April 2007	325.83	137.84	102.40
1 May 2007	325.87	138.16	102.54
2 May 2007	324.16	137.65	102.21
3 May 2007	321.34	137.42	102.01
4 May 2007	324.55	138.06	102.13
7 May 2007	324.04	137.56	102.78
8 May 2007	324.34	137.02	102.10
9 May 2007	319.88	137.27	102.62
10 May 2007	320.78	136.96	102.61
11 May 2007	318.60	136.48	102.19
14 May 2007	316.25	135.96	101.83
15 May 2007	313.67	135.70	101.98
16 May 2007	313.92	136.12	102.35
17 May 2007	309.22	135.30	102.24
18 May 2007	305.84	135.53	102.21

Date	10-year high-yield	10-year BBB	10-year A
21 May 2007	305.59	135.60	102.46
22 May 2007	300.87	134.73	101.42
23 May 2007	297.89	134.46	101.76
24 May 2007	299.00	134.90	102.17
25 May 2007	299.18	134.79	101.87
28 May 2007	ND	ND	ND
29 May 2007	298.31	135.49	102.93
30 May 2007	299.51	135.30	102.40
31 May 2007	296.45	136.18	103.37
1 June 2007	291.65	136.03	103.59
4 June 2007	296.76	135.74	103.74
5 June 2007	291.14	136.07	103.02
6 June 2007	296.78	136.72	104.09
7 June 2007	292.89	137.71	105.10
8 June 2007	295.65	138.75	106.23
11 June 2007	293.76	138.68	106.18
12 June 2007	289.89	137.62	105.40
13 June 2007	296.60	139.22	106.69
14 June 2007	293.19	137.38	105.36
15 June 2007	296.90	138.06	106.22
18 June 2007	296.47	137.24	105.35
19 June 2007	305.39	138.03	106.23
20 June 2007	301.83	136.89	105.66
21 June 2007	306.39	138.70	107.66
22 June 2007	309.81	139.38	108.58
25 June 2007	321.14	139.62	108.12
26 June 2007	319.52	140.54	108.78
27 June 2007	328.00	140.50	108.53
28 June 2007	324.22	141.52	109.72
29 June 2007	332.44	142.38	110.14
2 July 2007	340.20	142.20	110.86
3 July 2007	334.24	141.33	110.76
4 July 2007	ND	ND	ND
5 July 2007	326.70	142.14	111.77
6 July 2007	322.96	142.25	112.04
9 July 2007	327.15	142.09	111.83
10 July 2007	345.51	143.43	112.67

Date	10-year high-yield	10-year BBB	10-year A
11 July 2007	345.98	143.17	112.54
12 July 2007	339.45	143.26	113.05
13 July 2007	337.73	143.97	113.62
16 July 2007	340.47	143.65	113.26
17 July 2007	339.62	144.16	114.75
18 July 2007	353.99	145.08	114.83
19 July 2007	350.94	145.75	115.11
20 July 2007	366.33	148.84	118.18
23 July 2007	374.37	149.91	118.71
24 July 2007	391.03	152.29	120.06
25 July 2007	396.53	153.14	120.32
26 July 2007	434.41	166.92	131.50
27 July 2007	441.62	171.51	134.62
30 July 2007	438.68	172.99	136.25
31 July 2007	433.08	172.70	135.57
1 August 2007	439.62	172.43	135.98
2 August 2007	431.68	170.59	134.94
3 August 2007	434.56	170.97	135.75
6 August 2007	438.31	174.37	138.60
7 August 2007	427.86	170.68	135.31
8 August 2007	404.42	169.62	136.10
9 August 2007	410.23	169.21	136.33
10 August 2007	414.16	168.41	136.13
13 August 2007	412.55	169.55	137.43
14 August 2007	417.37	171.26	139.27
15 August 2007	425.00	175.04	142.44
16 August 2007	444.84	177.83	144.56
17 August 2007	434.54	178.76	145.60
20 August 2007	434.93	179.38	147.04
21 August 2007	436.18	181.29	147.89
22 August 2007	429.42	181.31	148.49
23 August 2007	427.17	179.96	148.50
24 August 2007	426.50	180.50	148.11
27 August 2007	427.45	179.54	147.00
28 August 2007	433.95	180.65	147.56
29 August 2007	432.56	180.37	147.28
30 August 2007	437.91	182.44	149.46

Date	10-year high-yield	10-year BBB	10-year A
31 August 2007	436.07	180.24	148.98
3 September 2007	ND	ND	ND
4 September 2007	433.34	179.45	148.99
5 September 2007	439.08	179.40	148.48
6 September 2007	433.91	180.65	149.77
7 September 2007	448.46	183.51	152.41
10 September 2007	453.75	186.00	155.29
11 September 2007	449.83	186.69	156.48
12 September 2007	446.25	187.52	157.97
13 September 2007	439.02	187.21	158.02
14 September 2007	439.71	187.66	157.86
17 September 2007	436.87	188.02	158.06
18 September 2007	429.08	186.46	155.72
19 September 2007	416.00	185.45	155.72
20 September 2007	403.90	182.41	152.70
21 September 2007	401.23	181.44	150.78
24 September 2007	397.31	179.96	148.90
25 September 2007	400.56	180.25	148.28
26 September 2007	397.52	179.61	148.19
27 September 2007	401.56	179.25	148.18
28 September 2007	402.35	178.97	148.14
1 October 2007	404.79	178.59	148.08
2 October 2007	404.79	178.76	147.22
3 October 2007	398.72	176.97	146.18
4 October 2007	402.91	176.33	144.49
5 October 2007	389.36	174.28	142.11
8 October 2007	ND	ND	ND
9 October 2007	383.55	172.47	141.24
10 October 2007	381.50	171.36	139.48
11 October 2007	377.31	169.84	139.03
12 October 2007	373.35	167.92	137.55
15 October 2007	373.58	167.18	136.71
16 October 2007	380.85	168.72	138.48
17 October 2007	391.86	168.54	139.04
18 October 2007	400.00	169.78	140.31
19 October 2007	416.61	172.30	142.49
22 October 2007	418.57	172.91	143.85

Date	10-year high-yield	10-year BBB	10-year A
23 October 2007	414.97	173.24	143.59
24 October 2007	421.08	172.63	143.54
25 October 2007	420.03	174.93	146.01
26 October 2007	417.20	174.15	144.97
29 October 2007	418.52	174.90	145.48
30 October 2007	416.65	174.91	145.13
31 October 2007	417.05	178.51	147.70
1 November 2007	431.71	180.32	150.77
2 November 2007	439.49	181.36	151.58
5 November 2007	438.93	182.22	154.87
6 November 2007	434.52	183.09	156.13
7 November 2007	440.04	185.61	159.39
8 November 2007	449.27	188.37	161.51
9 November 2007	459.15	190.52	164.06
12 November 2007	ND	ND	ND
13 November 2007	460.56	193.37	167.49
14 November 2007	458.07	193.64	166.97
15 November 2007	473.78	197.14	169.50
16 November 2007	480.17	198.64	170.87
19 November 2007	497.19	202.12	173.70
20 November 2007	502.15	203.98	175.74
21 November 2007	513.80	204.57	176.81
22 November 2007	ND	ND	ND
23 November 2007	514.44	205.42	177.19
26 November 2007	529.17	208.40	179.16
27 November 2007	523.41	208.64	178.37
28 November 2007	510.03	210.36	179.40
29 November 2007	513.33	213.08	182.26
30 November 2007	511.95	212.09	182.49
3 December 2007	518.85	213.86	184.46
4 December 2007	522.21	215.52	186.14
5 December 2007	516.32	218.93	186.98
6 December 2007	507.40	221.19	188.15
7 December 2007	495.42	221.62	189.37
10 December 2007	489.59	221.73	188.94
11 December 2007	499.74	222.91	188.35
12 December 2007	497.78	224.31	189.87

Date	10-year high-yield	10-year BBB	10-year A
13 December 2007	490.87	221.92	187.95
14 December 2007	485.65	221.80	188.62
17 December 2007	490.60	222.05	188.27
18 December 2007	494.72	219.77	186.97
19 December 2007	504.88	222.03	189.38
20 December 2007	507.31	219.06	186.89
21 December 2007	495.69	220.20	188.06
24 December 2007	491.55	218.65	187.57
25 December 2007	ND	ND	ND
26 December 2007	484.54	218.83	187.59
27 December 2007	491.59	219.12	187.74
28 December 2007	500.08	219.30	186.78
31 December 2007	520.89	220.10	187.07
1 January 2008	ND	ND	ND
2 January 2008	533.33	219.78	186.34
3 January 2008	541.09	224.44	191.17
4 January 2008	552.59	227.69	192.97
7 January 2008	558.83	229.45	193.86
8 January 2008	561.66	231.16	195.09
9 January 2008	578.43	235.34	198.77
10 January 2008	568.36	235.94	201.22
11 January 2008	576.18	239.11	204.04
14 January 2008	576.44	239.52	203.74
15 January 2008	586.60	241.87	205.49
16 January 2008	592.10	240.43	204.85
17 January 2008	607.63	245.32	210.28
18 January 2008	613.34	247.88	210.61
21 January 2008	ND	ND	ND
22 January 2008	633.65	251.67	213.35
23 January 2008	635.57	248.87	207.59
24 January 2008	611.23	244.40	210.49
25 January 2008	610.10	252.44	209.87
28 January 2008	609.10	252.35	209.75

Note: Measured relative to comparable-maturity Treasury.

Bottom-left panel
House Price Appreciation

Quarterly percent change, annual rate

Period	National	CA,AZ,NV,FL
2000:Q1	7.27	9.71
2000:Q2	7.25	9.13
2000:Q3	6.92	10.40
2000:Q4	7.38	12.81
2001:Q1	7.79	12.19
2001:Q2	7.35	10.30
2001:Q3	6.93	9.53
2001:Q4	6.69	9.99
2002:Q1	7.40	11.80
2002:Q2	8.30	13.94
2002:Q3	8.90	15.02
2002:Q4	8.51	14.39
2003:Q1	7.71	14.21
2003:Q2	7.56	12.77
2003:Q3	8.72	15.65
2003:Q4	9.29	19.99
2004:Q1	9.77	19.80
2004:Q2	9.92	24.24
2004:Q3	10.72	27.04
2004:Q4	10.56	20.26
2005:Q1	9.93	23.78
2005:Q2	11.48	25.35
2005:Q3	11.01	22.57
2005:Q4	8.90	13.71
2006:Q1	7.08	8.43
2006:Q2	4.72	2.84
2006:Q3	2.36	-2.60
2006:Q4	2.69	-1.38
2007:Q1	4.17	-0.93
2007:Q2	2.03	-5.89
2007:Q3	-1.50	-13.91
2007:Q4 ^e	-2.50	-14.90

e - Staff estimate. [Return to table](#)

Source: OFHEO purchase-only indexes.

Bottom-right panel
Financial Sector Results

- Writedowns more than \$80 billion in Q4
 - Most from subprime mortgages and CDO exposures
 - Banks increased loan loss provisions
- Firms raised capital and cut dividends and share repurchases
- Risks: house prices, slow activity, financial guarantors, previous commitments

Exhibit 7

Business Financial Conditions

Top-left panel

S&P 500 Earnings Per Share

Four-quarter percent change

Period	All firms	Nonfinancial firms
1999:Q1	6.87	ND
1999:Q2	10.10	ND
1999:Q3	22.37	ND
1999:Q4	21.10	ND
2000:Q1	18.50	ND
2000:Q2	16.00	ND
2000:Q3	11.00	ND
2000:Q4	-2.70	ND
2001:Q1	-10.80	ND
2001:Q2	-20.10	ND
2001:Q3	-24.80	-25.74
2001:Q4	-22.40	-23.18
2002:Q1	-8.60	-9.27
2002:Q2	5.30	-0.04
2002:Q3	13.80	7.44
2002:Q4	16.00	17.31
2003:Q1	11.30	13.13
2003:Q2	8.70	2.08
2003:Q3	17.50	14.42
2003:Q4	25.40	16.10
2004:Q1	26.30	25.60
2004:Q2	24.80	33.53
2004:Q3	15.00	20.41
2004:Q4	18.50	21.89
2005:Q1	13.00	13.97
2005:Q2	14.20	14.70

Period	All firms	Nonfinancial firms
2005:Q3	13.60	16.23
2005:Q4	13.30	8.26
2006:Q1	15.50	14.36
2006:Q2	16.50	13.34
2006:Q3	19.80	14.91
2006:Q4	11.10	4.10
2007:Q1	9.60	8.18
2007:Q2	9.40	7.07
2007:Q3	-5.70	3.98
2007:Q4*	-20.88	11.66

* Preliminary. [Return to table](#)

Source: I/B/E/S.

Top-right panel Loss Rates on High-Yield Corporate Bonds

Percent

Period	Actual	Expected	Forecast
1991:Q1	8.09	7.69	ND
1991:Q2	5.43	8.10	ND
1991:Q3	4.47	4.60	ND
1991:Q4	3.34	2.96	ND
1992:Q1	2.50	3.19	ND
1992:Q2	1.48	2.86	ND
1992:Q3	2.39	2.17	ND
1992:Q4	1.78	0.61	ND
1993:Q1	1.00	1.41	ND
1993:Q2	0.71	0.55	ND
1993:Q3	1.20	0.82	ND
1993:Q4	0.53	-0.13	ND
1994:Q1	0.54	1.33	ND
1994:Q2	0.49	0.29	ND
1994:Q3	0.74	-0.03	ND
1994:Q4	0.68	-0.23	ND
1995:Q1	0.47	-0.06	ND
1995:Q2	0.86	-0.26	ND
1995:Q3	1.12	0.00	ND
1995:Q4	1.55	-0.08	ND

Period	Actual	Expected	Forecast
1996:Q1	1.56	0.57	ND
1996:Q2	0.94	1.08	ND
1996:Q3	1.13	0.84	ND
1996:Q4	0.97	0.74	ND
1997:Q1	1.05	1.23	ND
1997:Q2	1.04	0.83	ND
1997:Q3	0.69	0.34	ND
1997:Q4	0.38	0.38	ND
1998:Q1	0.53	1.70	ND
1998:Q2	0.92	1.43	ND
1998:Q3	1.19	0.50	ND
1998:Q4	1.62	1.86	ND
1999:Q1	2.05	2.30	ND
1999:Q2	2.40	2.38	ND
1999:Q3	3.40	3.64	ND
1999:Q4	4.03	3.81	ND
2000:Q1	3.59	4.93	ND
2000:Q2	4.74	4.11	ND
2000:Q3	4.29	6.15	ND
2000:Q4	5.43	5.90	ND
2001:Q1	5.52	8.10	ND
2001:Q2	7.86	9.58	ND
2001:Q3	9.52	10.05	ND
2001:Q4	13.96	11.19	ND
2002:Q1	14.26	13.24	ND
2002:Q2	9.39	11.05	ND
2002:Q3	19.24	8.18	ND
2002:Q4	11.27	10.71	ND
2003:Q1	10.56	7.59	ND
2003:Q2	11.86	4.02	ND
2003:Q3	3.53	3.61	ND
2003:Q4	1.64	2.73	ND
2004:Q1	2.07	0.55	ND
2004:Q2	1.30	0.76	ND
2004:Q3	0.42	0.29	ND
2004:Q4	0.62	0.58	ND
2005:Q1	0.59	0.64	ND

Period	Actual	Expected	Forecast
2005:Q2	1.10	-0.17	ND
2005:Q3	1.69	1.65	ND
2005:Q4	1.65	1.06	ND
2006:Q1	0.44	1.03	ND
2006:Q2	1.22	0.75	ND
2006:Q3	1.21	0.19	ND
2006:Q4	0.51	2.85	ND
2007:Q1	-0.01	2.00	ND
2007:Q2	0.10	0.85	ND
2007:Q3	0.27	1.49	ND
2007:Q4	0.21	1.83	ND
2008:Q1	ND	ND	1.76
2008:Q2	ND	ND	3.05
2008:Q3	ND	ND	3.75
2008:Q4	ND	ND	3.52
2009:Q1	ND	ND	3.83
2009:Q2	ND	ND	4.33
2009:Q3	ND	ND	4.86
2009:Q4	ND	ND	5.58

Middle-left panel
Charge-Off Rates on Commercial Real Estate Loans at Banks

Percent

Period	Actual	Expected	Forecast
1991:Q1	1.78	1.36	ND
1991:Q2	1.84	1.43	ND
1991:Q3	1.98	1.72	ND
1991:Q4	2.38	1.98	ND
1992:Q1	2.11	1.70	ND
1992:Q2	1.77	1.70	ND
1992:Q3	2.54	2.00	ND
1992:Q4	2.22	1.86	ND
1993:Q1	1.69	1.45	ND
1993:Q2	1.48	1.56	ND
1993:Q3	1.21	1.24	ND
1993:Q4	0.97	0.98	ND
1994:Q1	0.93	0.94	ND

Period	Actual	Expected	Forecast
1994:Q2	0.66	0.77	ND
1994:Q3	0.51	0.71	ND
1994:Q4	0.49	0.66	ND
1995:Q1	0.43	0.73	ND
1995:Q2	0.48	0.83	ND
1995:Q3	0.25	0.72	ND
1995:Q4	0.20	0.60	ND
1996:Q1	0.23	0.64	ND
1996:Q2	0.12	0.54	ND
1996:Q3	0.11	0.49	ND
1996:Q4	0.03	0.46	ND
1997:Q1	0.05	0.22	ND
1997:Q2	0.01	0.23	ND
1997:Q3	0.00	0.14	ND
1997:Q4	0.00	0.05	ND
1998:Q1	0.03	-0.12	ND
1998:Q2	-0.01	-0.37	ND
1998:Q3	0.00	-0.03	ND
1998:Q4	0.03	0.12	ND
1999:Q1	0.02	0.03	ND
1999:Q2	0.03	-0.13	ND
1999:Q3	0.03	0.00	ND
1999:Q4	0.03	-0.10	ND
2000:Q1	0.04	-0.21	ND
2000:Q2	0.06	-0.40	ND
2000:Q3	0.06	-0.41	ND
2000:Q4	0.06	-0.23	ND
2001:Q1	0.10	-0.03	ND
2001:Q2	0.10	0.18	ND
2001:Q3	0.13	0.32	ND
2001:Q4	0.17	0.64	ND
2002:Q1	0.16	0.51	ND
2002:Q2	0.14	0.49	ND
2002:Q3	0.14	0.36	ND
2002:Q4	0.16	0.31	ND
2003:Q1	0.11	0.31	ND
2003:Q2	0.15	0.50	ND

Period	Actual	Expected	Forecast
2003:Q3	0.14	0.63	ND
2003:Q4	0.10	0.40	ND
2004:Q1	0.08	0.24	ND
2004:Q2	0.08	0.19	ND
2004:Q3	0.06	0.08	ND
2004:Q4	0.06	-0.17	ND
2005:Q1	0.06	-0.07	ND
2005:Q2	0.05	-0.29	ND
2005:Q3	0.05	-0.31	ND
2005:Q4	0.01	-0.29	ND
2006:Q1	0.05	-0.24	ND
2006:Q2	0.05	-0.18	ND
2006:Q3	0.04	-0.06	ND
2006:Q4	0.09	0.15	ND
2007:Q1	0.10	0.08	ND
2007:Q2	0.14	-0.10	ND
2007:Q3	0.16	0.04	ND
2007:Q4	ND	ND	0.58
2008:Q1	ND	ND	0.89
2008:Q2	ND	ND	0.99
2008:Q3	ND	ND	0.95
2008:Q4	ND	ND	0.91
2009:Q1	ND	ND	0.91
2009:Q2	ND	ND	0.91
2009:Q3	ND	ND	0.89
2009:Q4	ND	ND	0.86

Middle-right panel
Net Percentage of Banks Tightening Standards

Percent

Period	C&I (large and middle)	Commercial Real Estate
1990:Q2	56.90	ND
1990:Q3	39.45	69.38
1990:Q4	48.90	61.68
1991:Q1	36.00	46.43
1991:Q2	15.50	25.75
1991:Q3	12.25	27.13

Period	C&I (large and middle)	Commercial Real Estate
1991:Q4	9.00	14.93
1992:Q1	5.25	7.10
1992:Q2	0.90	10.10
1992:Q3	-1.70	4.38
1992:Q4	4.35	3.50
1993:Q1	2.65	2.23
1993:Q2	-7.85	2.18
1993:Q3	-19.45	-0.85
1993:Q4	-17.75	-3.88
1994:Q1	-12.95	-4.73
1994:Q2	-12.20	-7.13
1994:Q3	-6.95	-3.10
1994:Q4	-17.40	-3.05
1995:Q1	-6.85	0.45
1995:Q2	-5.90	-0.43
1995:Q3	-6.05	2.98
1995:Q4	-3.45	6.08
1996:Q1	6.95	13.33
1996:Q2	-0.90	10.90
1996:Q3	-3.70	5.70
1996:Q4	-7.80	-1.70
1997:Q1	-5.45	-1.80
1997:Q2	-6.95	-5.20
1997:Q3	-5.70	-11.40
1997:Q4	-7.00	-8.80
1998:Q1	1.80	-7.20
1998:Q2	-7.10	-7.20
1998:Q3	0.00	0.00
1998:Q4	36.40	46.40
1999:Q1	7.40	14.80
1999:Q2	10.00	5.10
1999:Q3	5.40	8.90
1999:Q4	9.10	9.10
2000:Q1	10.90	10.90
2000:Q2	24.60	21.40
2000:Q3	33.90	32.10
2000:Q4	43.80	26.30

Period	C&I (large and middle)	Commercial Real Estate
2001:Q1	59.70	44.60
2001:Q2	50.90	41.80
2001:Q3	40.40	42.60
2001:Q4	50.90	44.70
2002:Q1	45.40	46.30
2002:Q2	25.00	30.90
2002:Q3	21.40	25.50
2002:Q4	20.00	22.20
2003:Q1	22.00	13.60
2003:Q2	8.90	17.80
2003:Q3	3.50	13.80
2003:Q4	0.00	0.00
2004:Q1	-17.90	-5.50
2004:Q2	-23.20	-10.70
2004:Q3	-20.00	-8.90
2004:Q4	-21.10	-17.50
2005:Q1	-23.60	-23.70
2005:Q2	-24.10	-22.20
2005:Q3	-16.70	-12.90
2005:Q4	-8.80	-5.20
2006:Q1	-10.70	1.80
2006:Q2	-12.30	1.80
2006:Q3	-8.90	10.70
2006:Q4	0.00	36.30
2007:Q1	0.00	26.30
2007:Q2	-3.70	30.20
2007:Q3	7.50	25.00
2007:Q4	19.20	50.00
January 2008	32.20	80.30

Source: Senior Loan Officer Opinion Survey.

Bottom-left panel Borrowing Rates

Percent

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
3 January 2006	8.27	5.79	4.49
4 January 2006	8.24	5.78	4.48

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
5 January 2006	8.21	5.78	4.49
6 January 2006	8.18	5.80	4.42
9 January 2006	8.15	5.80	4.50
10 January 2006	8.17	5.85	4.51
11 January 2006	8.19	5.88	4.52
12 January 2006	8.19	5.84	4.54
13 January 2006	8.22	5.78	4.45
16 January 2006	ND	ND	ND
17 January 2006	8.24	5.76	4.53
18 January 2006	8.24	5.77	4.58
19 January 2006	8.22	5.81	4.52
20 January 2006	8.23	5.78	4.53
23 January 2006	8.21	5.78	4.59
24 January 2006	8.19	5.81	4.57
25 January 2006	8.18	5.89	4.62
26 January 2006	8.21	5.93	4.58
27 January 2006	8.18	5.90	4.61
30 January 2006	8.17	5.93	4.61
31 January 2006	8.16	5.92	4.64
1 February 2006	8.14	5.95	4.57
2 February 2006	8.14	5.94	4.61
3 February 2006	8.14	5.91	4.64
6 February 2006	8.17	5.92	4.60
7 February 2006	8.19	5.95	4.64
8 February 2006	8.20	5.97	4.66
9 February 2006	8.21	5.95	4.65
10 February 2006	8.22	5.99	4.64
13 February 2006	8.22	5.98	4.64
14 February 2006	8.23	6.01	4.64
15 February 2006	8.21	5.99	4.65
16 February 2006	8.19	5.98	4.65
17 February 2006	8.16	5.92	4.62
20 February 2006	ND	ND	ND
21 February 2006	8.16	5.94	4.63
22 February 2006	8.14	5.90	4.64
23 February 2006	8.14	5.93	4.65
24 February 2006	8.13	5.94	4.67

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
27 February 2006	8.14	5.96	4.70
28 February 2006	8.10	5.91	4.71
1 March 2006	8.13	5.96	4.72
2 March 2006	8.15	6.01	4.67
3 March 2006	8.19	6.06	4.68
6 March 2006	8.18	6.11	4.70
7 March 2006	8.20	6.12	4.72
8 March 2006	8.24	6.12	4.70
9 March 2006	8.23	6.11	4.72
10 March 2006	8.23	6.14	4.77
13 March 2006	8.23	6.16	4.74
14 March 2006	8.21	6.08	4.75
15 March 2006	8.20	6.12	4.80
16 March 2006	8.16	6.03	4.76
17 March 2006	8.19	6.05	4.79
20 March 2006	8.14	6.04	4.79
21 March 2006	8.13	6.09	4.79
22 March 2006	8.13	6.08	4.83
23 March 2006	8.13	6.12	4.83
24 March 2006	8.11	6.06	4.83
27 March 2006	8.10	6.09	4.85
28 March 2006	8.12	6.17	4.87
29 March 2006	8.15	6.20	4.86
30 March 2006	8.17	6.25	4.90
31 March 2006	8.18	6.25	4.87
3 April 2006	8.17	6.27	4.88
4 April 2006	8.19	6.26	4.86
5 April 2006	8.16	6.23	4.84
6 April 2006	8.19	6.29	4.88
7 April 2006	8.22	6.36	4.86
10 April 2006	8.24	6.36	4.91
11 April 2006	8.23	6.33	4.90
12 April 2006	8.24	6.37	4.95
13 April 2006	8.27	6.43	4.92
14 April 2006	ND	ND	ND
17 April 2006	8.27	6.40	4.98
18 April 2006	8.25	6.37	4.93

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
19 April 2006	8.26	6.42	4.94
20 April 2006	8.25	6.42	4.99
21 April 2006	8.24	6.39	5.01
24 April 2006	8.23	6.36	4.99
25 April 2006	8.24	6.44	5.04
26 April 2006	8.27	6.47	5.06
27 April 2006	8.26	6.44	5.04
28 April 2006	8.24	6.42	5.04
1 May 2006	8.25	6.47	5.03
2 May 2006	8.24	6.45	5.06
3 May 2006	8.26	6.48	5.07
4 May 2006	8.24	6.49	5.10
5 May 2006	8.23	6.44	5.11
8 May 2006	8.23	6.45	5.09
9 May 2006	8.23	6.45	5.11
10 May 2006	8.22	6.45	5.11
11 May 2006	8.23	6.49	5.12
12 May 2006	8.26	6.54	5.10
15 May 2006	8.29	6.50	5.10
16 May 2006	8.30	6.47	5.11
17 May 2006	8.37	6.53	5.14
18 May 2006	8.36	6.46	5.10
19 May 2006	8.34	6.43	5.11
22 May 2006	8.39	6.43	5.12
23 May 2006	8.39	6.46	5.11
24 May 2006	8.42	6.44	5.12
25 May 2006	8.42	6.48	5.13
26 May 2006	8.39	6.45	5.14
29 May 2006	ND	ND	ND
30 May 2006	8.41	6.50	5.17
31 May 2006	8.43	6.55	5.17
1 June 2006	8.43	6.54	5.17
2 June 2006	8.39	6.43	5.18
5 June 2006	8.42	6.46	5.17
6 June 2006	8.44	6.45	5.15
7 June 2006	8.45	6.48	5.20
8 June 2006	8.46	6.45	5.20

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
9 June 2006	8.46	6.44	5.20
12 June 2006	8.46	6.45	5.20
13 June 2006	8.49	6.44	5.23
14 June 2006	8.57	6.54	5.23
15 June 2006	8.60	6.59	5.28
16 June 2006	8.60	6.62	5.28
19 June 2006	8.61	6.64	5.34
20 June 2006	8.64	6.66	5.33
21 June 2006	8.71	6.67	5.33
22 June 2006	8.73	6.72	5.35
23 June 2006	8.75	6.75	5.37
26 June 2006	8.78	6.77	5.38
27 June 2006	8.77	6.74	5.40
28 June 2006	8.79	6.78	5.49
29 June 2006	8.74	6.74	5.47
30 June 2006	8.66	6.65	5.44
3 July 2006	8.68	6.69	5.44
4 July 2006	ND	ND	ND
5 July 2006	8.71	6.76	5.36
6 July 2006	8.71	6.72	5.38
7 July 2006	8.67	6.66	5.38
10 July 2006	8.66	6.66	5.39
11 July 2006	8.65	6.63	5.40
12 July 2006	8.66	6.63	5.40
13 July 2006	8.69	6.61	5.38
14 July 2006	8.71	6.61	5.42
17 July 2006	8.73	6.62	5.42
18 July 2006	8.74	6.67	5.42
19 July 2006	8.70	6.60	5.44
20 July 2006	8.69	6.57	5.44
21 July 2006	8.69	6.58	5.42
24 July 2006	8.71	6.58	5.43
25 July 2006	8.72	6.61	5.45
26 July 2006	8.70	6.57	5.45
27 July 2006	8.68	6.57	5.45
28 July 2006	8.66	6.52	5.45
31 July 2006	8.69	6.52	5.45

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
1 August 2006	8.68	6.51	5.43
2 August 2006	8.65	6.49	5.45
3 August 2006	8.65	6.47	5.41
4 August 2006	8.63	6.43	5.43
7 August 2006	8.62	6.45	5.41
8 August 2006	8.63	6.46	5.40
9 August 2006	8.63	6.47	5.37
10 August 2006	8.65	6.48	5.37
11 August 2006	8.65	6.51	5.38
14 August 2006	8.66	6.53	5.35
15 August 2006	8.64	6.46	5.37
16 August 2006	8.61	6.41	5.33
17 August 2006	8.58	6.40	5.38
18 August 2006	8.59	6.37	5.36
21 August 2006	8.58	6.36	5.34
22 August 2006	8.58	6.35	5.36
23 August 2006	8.57	6.36	5.34
24 August 2006	8.57	6.35	5.35
25 August 2006	8.57	6.34	5.35
28 August 2006	8.57	6.35	5.36
29 August 2006	8.57	6.34	5.35
30 August 2006	8.56	6.32	5.38
31 August 2006	8.59	6.29	5.36
1 September 2006	8.58	6.28	5.37
4 September 2006	ND	ND	ND
5 September 2006	8.57	6.33	5.34
6 September 2006	8.56	6.35	5.31
7 September 2006	8.57	6.34	5.34
8 September 2006	8.55	6.32	5.35
11 September 2006	8.55	6.35	5.36
12 September 2006	8.53	6.32	5.34
13 September 2006	8.50	6.31	5.34
14 September 2006	8.49	6.33	5.33
15 September 2006	8.48	6.34	5.35
18 September 2006	8.49	6.35	5.35
19 September 2006	8.49	6.28	5.31
20 September 2006	8.48	6.27	5.35

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
21 September 2006	8.49	6.21	5.36
22 September 2006	8.49	6.16	5.35
25 September 2006	8.48	6.12	5.35
26 September 2006	8.47	6.14	5.34
27 September 2006	8.45	6.15	5.34
28 September 2006	8.46	6.19	5.37
29 September 2006	8.45	6.20	5.35
2 October 2006	8.44	6.18	5.35
3 October 2006	8.38	6.17	5.35
4 October 2006	8.43	6.13	5.33
5 October 2006	8.41	6.17	5.34
6 October 2006	8.42	6.25	5.33
9 October 2006	ND	ND	ND
10 October 2006	8.43	6.30	5.35
11 October 2006	8.42	6.34	5.36
12 October 2006	8.40	6.33	5.33
13 October 2006	8.39	6.35	5.38
16 October 2006	8.39	6.33	5.35
17 October 2006	8.39	6.32	5.34
18 October 2006	8.37	6.29	5.33
19 October 2006	8.38	6.31	5.34
20 October 2006	8.38	6.30	5.34
23 October 2006	8.39	6.34	5.34
24 October 2006	8.39	6.34	5.36
25 October 2006	8.39	6.29	5.33
26 October 2006	8.37	6.23	5.35
27 October 2006	8.35	6.19	5.33
30 October 2006	8.34	6.18	5.35
31 October 2006	8.36	6.11	5.36
1 November 2006	8.34	6.06	5.34
2 November 2006	8.33	6.09	5.34
3 November 2006	8.32	6.19	5.34
6 November 2006	8.33	6.18	5.30
7 November 2006	8.30	6.13	5.34
8 November 2006	8.29	6.10	5.36
9 November 2006	8.26	6.09	5.34
10 November 2006	8.25	6.05	5.31

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
13 November 2006	8.24	6.06	5.32
14 November 2006	8.23	6.03	5.34
15 November 2006	8.23	6.08	5.35
16 November 2006	8.21	6.12	5.34
17 November 2006	8.24	6.07	5.36
20 November 2006	8.24	6.06	5.35
21 November 2006	8.25	6.04	5.38
22 November 2006	8.27	6.04	5.34
23 November 2006	ND	ND	ND
24 November 2006	8.26	6.02	5.46
27 November 2006	8.27	6.01	5.35
28 November 2006	8.29	5.99	5.35
29 November 2006	8.26	5.99	5.32
30 November 2006	8.28	5.95	5.38
1 December 2006	8.27	5.92	5.35
4 December 2006	8.26	5.92	5.39
5 December 2006	8.23	5.93	5.35
6 December 2006	8.20	5.96	5.35
7 December 2006	8.19	5.95	5.38
8 December 2006	8.20	6.02	5.38
11 December 2006	8.20	5.99	5.38
12 December 2006	8.20	5.97	5.37
13 December 2006	8.22	6.05	5.37
14 December 2006	8.24	6.07	5.38
15 December 2006	8.22	6.07	5.39
18 December 2006	8.22	6.06	5.39
19 December 2006	8.21	6.07	5.39
20 December 2006	8.21	6.07	5.38
21 December 2006	8.20	6.03	5.39
22 December 2006	8.21	6.09	5.40
25 December 2006	ND	ND	ND
26 December 2006	8.20	6.07	5.41
27 December 2006	8.21	6.12	5.36
28 December 2006	8.21	6.16	5.36
29 December 2006	8.20	6.17	5.36
1 January 2007	ND	ND	ND
2 January 2007	8.27	6.16	5.35

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
3 January 2007	8.24	6.13	5.34
4 January 2007	8.25	6.08	5.36
5 January 2007	8.27	6.11	5.35
8 January 2007	8.26	6.11	5.35
9 January 2007	8.25	6.11	5.33
10 January 2007	8.25	6.14	5.33
11 January 2007	8.25	6.19	5.34
12 January 2007	8.25	6.22	5.32
15 January 2007	ND	ND	ND
16 January 2007	8.23	6.20	5.34
17 January 2007	8.22	6.23	5.33
18 January 2007	8.20	6.19	5.36
19 January 2007	8.18	6.20	5.34
22 January 2007	8.17	6.19	5.35
23 January 2007	8.17	6.23	5.36
24 January 2007	8.15	6.23	5.36
25 January 2007	8.14	6.28	5.33
26 January 2007	8.16	6.29	5.34
29 January 2007	8.16	6.30	5.32
30 January 2007	8.19	6.29	5.31
31 January 2007	8.20	6.24	5.33
1 February 2007	8.17	6.25	5.33
2 February 2007	8.17	6.24	5.33
5 February 2007	8.15	6.21	5.35
6 February 2007	8.12	6.17	5.35
7 February 2007	8.08	6.14	5.37
8 February 2007	8.09	6.13	5.33
9 February 2007	8.08	6.18	5.33
12 February 2007	8.10	6.19	5.34
13 February 2007	8.09	6.20	5.35
14 February 2007	8.05	6.12	5.31
15 February 2007	8.02	6.09	5.30
16 February 2007	7.99	6.07	5.33
19 February 2007	ND	ND	ND
20 February 2007	7.99	6.06	5.35
21 February 2007	7.97	6.07	5.35
22 February 2007	7.96	6.10	5.34

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
23 February 2007	7.95	6.04	5.34
26 February 2007	7.95	6.00	5.35
27 February 2007	8.00	5.91	5.31
28 February 2007	8.04	5.95	5.34
1 March 2007	8.08	5.96	5.33
2 March 2007	8.11	5.93	5.32
5 March 2007	8.17	5.96	5.38
6 March 2007	8.14	5.97	5.33
7 March 2007	8.09	5.94	5.32
8 March 2007	8.05	5.94	5.32
9 March 2007	8.05	6.02	5.33
12 March 2007	8.05	5.98	5.33
13 March 2007	8.10	5.95	5.33
14 March 2007	8.13	5.98	5.35
15 March 2007	8.11	5.99	5.34
16 March 2007	8.11	6.00	5.33
19 March 2007	8.11	6.02	5.36
20 March 2007	8.11	6.01	5.36
21 March 2007	8.09	5.99	5.36
22 March 2007	8.08	6.06	5.31
23 March 2007	8.08	6.08	5.34
26 March 2007	8.08	6.06	5.33
27 March 2007	8.09	6.09	5.34
28 March 2007	8.12	6.10	5.36
29 March 2007	8.11	6.11	5.34
30 March 2007	8.10	6.13	5.36
2 April 2007	8.10	6.13	5.34
3 April 2007	8.10	6.15	5.33
4 April 2007	8.13	6.15	5.35
5 April 2007	8.10	6.17	5.35
6 April 2007	ND	ND	ND
9 April 2007	8.10	6.23	5.34
10 April 2007	8.09	6.20	5.35
11 April 2007	8.08	6.21	5.34
12 April 2007	8.08	6.21	5.34
13 April 2007	8.07	6.23	5.34
16 April 2007	8.05	6.20	5.35

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
17 April 2007	8.02	6.15	5.34
18 April 2007	8.02	6.11	5.35
19 April 2007	8.00	6.13	5.37
20 April 2007	7.97	6.13	5.33
23 April 2007	7.96	6.11	5.34
24 April 2007	7.95	6.08	5.33
25 April 2007	7.94	6.11	5.33
26 April 2007	7.94	6.14	5.33
27 April 2007	7.95	6.16	5.34
30 April 2007	7.96	6.08	5.34
1 May 2007	7.97	6.09	5.33
2 May 2007	7.96	6.09	5.33
3 May 2007	7.96	6.12	5.34
4 May 2007	7.95	6.09	5.35
7 May 2007	7.94	6.08	5.32
8 May 2007	7.94	6.07	5.35
9 May 2007	7.94	6.11	5.30
10 May 2007	7.93	6.09	5.35
11 May 2007	7.93	6.11	5.34
14 May 2007	7.93	6.12	5.35
15 May 2007	7.92	6.14	5.35
16 May 2007	7.92	6.14	5.35
17 May 2007	7.92	6.18	5.32
18 May 2007	7.93	6.23	5.35
21 May 2007	7.91	6.21	5.33
22 May 2007	7.91	6.25	5.34
23 May 2007	7.92	6.28	5.34
24 May 2007	7.92	6.28	5.33
25 May 2007	7.93	6.28	5.34
28 May 2007	ND	ND	ND
29 May 2007	7.93	6.30	5.35
30 May 2007	7.95	6.31	5.34
31 May 2007	7.93	6.33	5.35
1 June 2007	7.94	6.39	5.34
4 June 2007	7.97	6.36	5.35
5 June 2007	7.96	6.41	5.33
6 June 2007	8.01	6.41	5.35

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
7 June 2007	8.10	6.55	5.35
8 June 2007	8.15	6.58	5.33
11 June 2007	8.15	6.60	5.36
12 June 2007	8.23	6.71	5.35
13 June 2007	8.23	6.66	5.34
14 June 2007	8.23	6.67	5.34
15 June 2007	8.21	6.62	5.36
18 June 2007	8.19	6.60	5.35
19 June 2007	8.22	6.54	5.34
20 June 2007	8.23	6.58	5.35
21 June 2007	8.30	6.63	5.38
22 June 2007	8.32	6.61	5.36
25 June 2007	8.37	6.56	5.37
26 June 2007	8.38	6.59	5.35
27 June 2007	8.44	6.56	5.39
28 June 2007	8.43	6.60	5.40
29 June 2007	8.43	6.52	5.36
2 July 2007	8.47	6.49	5.40
3 July 2007	8.47	6.54	5.35
4 July 2007	ND	ND	ND
5 July 2007	8.49	6.64	5.34
6 July 2007	8.50	6.69	5.38
9 July 2007	8.50	6.65	5.34
10 July 2007	8.57	6.54	5.34
11 July 2007	8.62	6.60	5.35
12 July 2007	8.60	6.63	5.33
13 July 2007	8.56	6.62	5.36
16 July 2007	8.53	6.57	5.35
17 July 2007	8.56	6.60	5.35
18 July 2007	8.64	6.55	5.34
19 July 2007	8.63	6.58	5.34
20 July 2007	8.70	6.53	5.35
23 July 2007	8.79	6.55	5.36
24 July 2007	8.93	6.55	5.33
25 July 2007	8.97	6.53	5.35
26 July 2007	9.22	6.55	5.35
27 July 2007	9.31	6.60	5.34

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
30 July 2007	9.30	6.64	5.38
31 July 2007	9.20	6.60	5.37
1 August 2007	9.26	6.59	5.38
2 August 2007	9.19	6.58	5.39
3 August 2007	9.16	6.52	5.42
6 August 2007	9.21	6.57	5.45
7 August 2007	9.15	6.58	5.47
8 August 2007	9.02	6.67	5.52
9 August 2007	9.03	6.62	5.69
10 August 2007	9.08	6.62	5.89
13 August 2007	9.04	6.61	5.89
14 August 2007	9.04	6.58	5.83
15 August 2007	9.09	6.59	5.90
16 August 2007	9.19	6.52	5.90
17 August 2007	9.16	6.60	6.05
20 August 2007	9.13	6.57	6.09
21 August 2007	9.09	6.54	6.06
22 August 2007	9.05	6.56	6.09
23 August 2007	9.01	6.54	6.02
24 August 2007	9.01	6.55	6.01
27 August 2007	8.99	6.51	6.07
28 August 2007	9.00	6.47	5.98
29 August 2007	9.02	6.49	6.07
30 August 2007	9.01	6.46	6.12
31 August 2007	9.02	6.46	5.95
3 September 2007	ND	ND	ND
4 September 2007	9.01	6.48	6.12
5 September 2007	9.00	6.40	6.13
6 September 2007	8.97	6.44	6.07
7 September 2007	8.99	6.34	5.98
10 September 2007	8.99	6.31	6.03
11 September 2007	8.98	6.35	5.96
12 September 2007	8.98	6.40	5.95
13 September 2007	8.98	6.47	5.90
14 September 2007	8.97	6.45	5.75
17 September 2007	8.95	6.46	5.73
18 September 2007	8.90	6.47	5.66

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
19 September 2007	8.79	6.49	5.32
20 September 2007	8.82	6.60	5.29
21 September 2007	8.75	6.55	5.33
24 September 2007	8.71	6.53	5.41
25 September 2007	8.73	6.53	5.32
26 September 2007	8.71	6.53	5.40
27 September 2007	8.70	6.48	5.41
28 September 2007	8.71	6.48	5.33
1 October 2007	8.71	6.45	5.31
2 October 2007	8.69	6.43	5.33
3 October 2007	8.64	6.43	5.31
4 October 2007	8.66	6.40	5.32
5 October 2007	8.65	6.50	5.27
8 October 2007	ND	ND	ND
9 October 2007	8.60	6.49	5.30
10 October 2007	8.58	6.47	5.27
11 October 2007	8.54	6.46	5.27
12 October 2007	8.53	6.48	5.26
15 October 2007	8.53	6.46	5.24
16 October 2007	8.58	6.46	5.29
17 October 2007	8.59	6.36	5.25
18 October 2007	8.63	6.32	5.27
19 October 2007	8.68	6.24	5.17
22 October 2007	8.71	6.25	5.16
23 October 2007	8.67	6.26	5.18
24 October 2007	8.68	6.20	5.11
25 October 2007	8.68	6.23	5.13
26 October 2007	8.69	6.26	5.07
29 October 2007	8.68	6.25	4.98
30 October 2007	8.67	6.26	5.03
31 October 2007	8.75	6.37	4.98
1 November 2007	8.79	6.28	4.80
2 November 2007	8.82	6.24	4.86
5 November 2007	8.84	6.28	4.83
6 November 2007	8.84	6.32	4.90
7 November 2007	8.87	6.33	4.89
8 November 2007	8.92	6.31	4.87

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
9 November 2007	8.96	6.28	4.88
12 November 2007	ND	ND	ND
13 November 2007	9.00	6.33	4.88
14 November 2007	8.99	6.35	4.84
15 November 2007	9.05	6.28	4.93
16 November 2007	9.11	6.29	4.95
19 November 2007	9.20	6.25	4.98
20 November 2007	9.25	6.27	4.96
21 November 2007	9.33	6.24	4.98
22 November 2007	ND	ND	ND
23 November 2007	9.34	6.25	5.14
26 November 2007	9.31	6.10	5.12
27 November 2007	9.36	6.21	5.05
28 November 2007	9.30	6.30	5.08
29 November 2007	9.25	6.25	5.25
30 November 2007	9.27	6.28	5.19
3 December 2007	9.27	6.22	5.42
4 December 2007	9.30	6.23	5.49
5 December 2007	9.27	6.30	5.47
6 December 2007	9.27	6.41	5.48
7 December 2007	9.26	6.53	5.51
10 December 2007	9.23	6.55	5.48
11 December 2007	9.18	6.41	5.25
12 December 2007	9.22	6.48	5.51
13 December 2007	9.26	6.57	5.63
14 December 2007	9.26	6.62	5.52
17 December 2007	9.27	6.58	5.57
18 December 2007	9.25	6.50	5.62
19 December 2007	9.28	6.45	5.59
20 December 2007	9.29	6.41	5.64
21 December 2007	9.30	6.55	5.65
24 December 2007	9.31	6.58	5.69
25 December 2007	ND	ND	ND
26 December 2007	9.31	6.65	5.65
27 December 2007	9.29	6.57	5.60
28 December 2007	9.28	6.47	5.20
31 December 2007	9.43	6.42	4.90

Date	10-year high-yield	10-year BBB	30-day A2/P2 nonfinancial commercial paper rate
1 January 2008	ND	ND	ND
2 January 2008	9.43	6.30	4.78
3 January 2008	9.49	6.32	4.70
4 January 2008	9.57	6.32	4.65
7 January 2008	9.60	6.31	4.66
8 January 2008	9.63	6.33	4.61
9 January 2008	9.76	6.33	4.50
10 January 2008	9.76	6.43	4.58
11 January 2008	9.74	6.37	4.48
14 January 2008	9.74	6.37	4.47
15 January 2008	9.75	6.30	4.28
16 January 2008	9.83	6.31	4.45
17 January 2008	9.91	6.29	4.28
18 January 2008	9.97	6.31	4.32
21 January 2008	ND	ND	ND
22 January 2008	10.05	6.23	3.84
23 January 2008	10.07	6.20	3.65
24 January 2008	9.98	6.31	3.59
25 January 2008	9.91	6.33	3.55
28 January 2008	9.90	6.33	3.50

Bottom-right panel

Net Changes in Selected Components of Nonfinancial Business Debt

Billions of dollars, monthly rate

Period	Commercial Paper	C&I loans	Bonds
2005	-0.38	9.91	4.99
2006	3.89	12.97	18.22
2007:H1	1.24	12.17	28.01
2007:Q3	-4.05	36.69	17.67
2007:Q4	-0.20	21.48	30.75
January 2008*	15.00	10.00	24.00

* Preliminary. [Return to table](#)

Exhibit 8

Household Financial Conditions

Top-left panel

Consumer Loan Delinquency Rates

At commercial banks

Percent

Period	Credit card loans
1996:Q1	4.04
1996:Q2	4.26
1996:Q3	4.46
1996:Q4	4.59
1997:Q1	4.68
1997:Q2	4.72
1997:Q3	4.68
1997:Q4	4.78
1998:Q1	4.74
1998:Q2	4.74
1998:Q3	4.71
1998:Q4	4.70
1999:Q1	4.64
1999:Q2	4.47
1999:Q3	4.54
1999:Q4	4.50
2000:Q1	4.39
2000:Q2	4.51
2000:Q3	4.53
2000:Q4	4.56
2001:Q1	4.81
2001:Q2	4.95
2001:Q3	5.00
2001:Q4	4.68
2002:Q1	4.94
2002:Q2	4.79
2002:Q3	4.89
2002:Q4	4.84
2003:Q1	4.68
2003:Q2	4.53
2003:Q3	4.23
2003:Q4	4.42
2004:Q1	4.21
2004:Q2	4.15
2004:Q3	4.06

Period	Credit card loans
2004:Q4	4.02
2005:Q1	3.72
2005:Q2	3.67
2005:Q3	3.88
2005:Q4	3.52
2006:Q1	3.90
2006:Q2	4.14
2006:Q3	4.08
2006:Q4	3.92
2007:Q1	4.06
2007:Q2	4.03
2007:Q3	4.34

As shown in the figure, the series "Nonrevolving consumer loans at commercial banks" begins in early 1996 at about 2.9 percent, generally increases to about 3.25 by early 1999, fluctuates around 3 from mid-1999 through late 2001, and generally decreases to about 2.1 by mid-2005. The curve begins to increase again in early 2006, and continues to edge up in 2007:Q3 to end at about 2.5 percent.

Note: Loans 30 or more days past due for credit card loans.

At domestic auto finance companies

Percent

Period	Auto loans
January 1996	2.98
February 1996	3.12
March 1996	2.89
April 1996	3.16
May 1996	3.26
June 1996	3.37
July 1996	3.27
August 1996	3.32
September 1996	3.42
October 1996	3.43
November 1996	3.42
December 1996	3.50
January 1997	3.52
February 1997	3.53
March 1997	3.65
April 1997	3.61
May 1997	3.52
June 1997	3.54

Period	Auto loans
July 1997	3.55
August 1997	3.48
September 1997	3.31
October 1997	3.17
November 1997	3.23
December 1997	3.06
January 1998	2.99
February 1998	2.92
March 1998	2.92
April 1998	2.86
May 1998	2.84
June 1998	2.79
July 1998	2.53
August 1998	2.82
September 1998	2.74
October 1998	2.67
November 1998	2.83
December 1998	2.56
January 1999	2.68
February 1999	2.55
March 1999	2.55
April 1999	2.44
May 1999	2.33
June 1999	2.32
July 1999	2.23
August 1999	2.23
September 1999	2.25
October 1999	2.27
November 1999	2.25
December 1999	2.26
January 2000	2.28
February 2000	2.23
March 2000	2.03
April 2000	2.17
May 2000	2.24
June 2000	2.18
July 2000	2.23

Period	Auto loans
August 2000	2.21
September 2000	2.15
October 2000	2.22
November 2000	2.20
December 2000	2.25
January 2001	2.27
February 2001	2.29
March 2001	2.17
April 2001	2.26
May 2001	2.33
June 2001	2.37
July 2001	2.39
August 2001	2.32
September 2001	2.37
October 2001	2.35
November 2001	2.25
December 2001	2.23
January 2002	2.14
February 2002	2.15
March 2002	2.08
April 2002	2.10
May 2002	2.04
June 2002	2.04
July 2002	2.07
August 2002	2.07
September 2002	2.09
October 2002	2.07
November 2002	2.11
December 2002	2.12
January 2003	2.14
February 2003	2.16
March 2003	2.24
April 2003	2.19
May 2003	2.18
June 2003	2.15
July 2003	2.09
August 2003	2.07

Period	Auto loans
September 2003	2.04
October 2003	2.01
November 2003	2.01
December 2003	2.01
January 2004	2.05
February 2004	2.09
March 2004	1.97
April 2004	2.03
May 2004	2.03
June 2004	2.04
July 2004	1.98
August 2004	2.06
September 2004	2.01
October 2004	1.98
November 2004	2.01
December 2004	2.02
January 2005	2.04
February 2005	2.04
March 2005	2.06
April 2005	2.13
May 2005	2.02
June 2005	2.09
July 2005	2.20
August 2005	2.18
September 2005	2.22
October 2005	2.32
November 2005	2.29
December 2005	2.25
January 2006	2.13
February 2006	2.21
March 2006	2.23
April 2006	2.29
May 2006	2.34
June 2006	2.36
July 2006	2.35
August 2006	2.30
September 2006	2.27

Period	Auto loans
October 2006	2.29
November 2006	2.24
December 2006	2.26
January 2007	2.18
February 2007	2.34
March 2007	2.34
April 2007	2.35
May 2007	2.35
June 2007	2.36
July 2007	2.35
August 2007	2.41
September 2007	2.52
October 2007	2.55
November 2007	2.62

Note: Loans 30 or more days past due.

Top-right panel **Mortgage Delinquency Rates**

Percent of loans

Period	Fixed-rate prime and near-prime	Adjustable-rate prime and near-prime	Fixed-rate subprime	Adjustable-rate subprime
January 2001	0.97	1.62	6.96	9.43
February 2001	0.97	1.63	6.97	9.48
March 2001	0.94	1.59	6.84	9.28
April 2001	0.93	1.63	6.77	9.20
May 2001	0.92	1.62	7.24	9.19
June 2001	0.95	1.65	7.64	9.51
July 2001	0.98	1.68	7.70	9.67
August 2001	1.00	1.69	7.72	9.94
September 2001	1.05	1.76	8.10	10.19
October 2001	1.06	1.77	8.09	10.28
November 2001	1.09	1.80	8.29	10.50
December 2001	1.13	1.85	8.41	10.55
January 2002	1.15	1.90	8.60	10.63
February 2002	1.12	1.84	8.68	10.61
March 2002	1.06	1.74	8.45	9.95
April 2002	1.01	1.61	8.53	9.51
May 2002	1.03	1.55	8.39	9.11

Period	Fixed-rate prime and near-prime	Adjustable-rate prime and near-prime	Fixed-rate subprime	Adjustable-rate subprime
June 2002	1.04	1.53	8.57	9.09
July 2002	1.04	1.47	8.60	8.94
August 2002	1.07	1.45	8.70	9.04
September 2002	1.11	1.45	8.90	9.31
October 2002	1.10	1.40	8.94	9.21
November 2002	1.14	1.40	9.03	9.23
December 2002	1.17	1.37	8.91	9.29
January 2003	1.15	1.21	8.33	9.21
February 2003	1.16	1.19	8.25	8.99
March 2003	1.10	1.13	8.18	8.70
April 2003	1.09	1.07	8.03	8.51
May 2003	1.07	1.01	7.89	8.42
June 2003	1.07	0.99	7.46	8.21
July 2003	1.09	0.96	7.10	7.76
August 2003	1.11	0.94	6.98	7.77
September 2003	1.13	0.90	6.91	7.87
October 2003	1.08	0.83	6.74	7.77
November 2003	1.12	0.84	6.77	7.80
December 2003	1.11	0.80	6.67	7.62
January 2004	1.13	0.79	6.82	7.50
February 2004	1.11	0.77	6.54	7.13
March 2004	1.05	0.70	6.33	6.89
April 2004	1.07	0.67	5.94	6.38
May 2004	1.07	0.65	5.87	6.34
June 2004	1.07	0.63	5.79	6.28
July 2004	1.08	0.62	5.81	6.16
August 2004	1.07	0.61	5.63	6.12
September 2004	1.08	0.60	5.64	6.07
October 2004	1.10	0.60	5.64	6.13
November 2004	1.12	0.60	5.83	6.20
December 2004	1.11	0.59	5.79	6.12
January 2005	1.12	0.59	5.87	6.26
February 2005	1.08	0.58	5.72	6.09
March 2005	1.00	0.54	5.47	5.73
April 2005	0.96	0.51	5.31	5.50
May 2005	0.95	0.51	5.34	5.50

Period	Fixed-rate prime and near-prime	Adjustable-rate prime and near-prime	Fixed-rate subprime	Adjustable-rate subprime
June 2005	0.94	0.51	5.27	5.49
July 2005	0.94	0.53	5.32	5.63
August 2005	0.97	0.55	5.30	5.73
September 2005	0.98	0.56	5.33	5.91
October 2005	1.01	0.57	5.46	6.30
November 2005	1.13	0.64	5.77	6.79
December 2005	1.15	0.66	5.85	7.06
January 2006	1.14	0.67	5.86	7.38
February 2006	1.09	0.65	5.73	7.45
March 2006	0.98	0.60	5.36	7.12
April 2006	0.96	0.59	5.28	7.27
May 2006	0.92	0.59	5.10	7.38
June 2006	0.91	0.60	5.07	7.69
July 2006	0.92	0.62	5.08	8.16
August 2006	0.91	0.64	5.08	8.48
September 2006	0.90	0.67	5.16	8.98
October 2006	0.91	0.71	5.13	9.39
November 2006	0.92	0.76	5.21	9.98
December 2006	0.87	0.78	5.33	10.59
January 2007	0.86	0.82	5.33	10.97
February 2007	0.86	0.86	5.30	11.25
March 2007	0.81	0.86	5.12	11.26
April 2007	0.79	0.91	5.14	11.72
May 2007	0.79	0.97	5.19	12.30
June 2007	0.81	1.07	5.62	13.43
July 2007	0.85	1.20	5.84	14.63
August 2007	0.87	1.32	6.02	15.76
September 2007	0.95	1.50	6.53	17.50
October 2007	1.00	1.70	6.78	18.88
November 2007	1.07	1.97	7.22	20.65

Source: First American LoanPerformance.

Middle-left panel Lending Conditions

- January Senior Loan Officer Survey
 - Net tightening of standards on credit cards and other consumer loans
 - Substantial net tightening of standards for subprime and prime mortgages

- Risk spreads on consumer ABS jumped in January

Middle-right panel

Gross Issuance of Consumer ABS

Billions of dollars, monthly rate

Period	Auto	Credit Card	Sum
2005	9.00	5.23	14.23
2006	8.11	5.23	13.34
2007:H1	7.20	7.47	14.67
2007:Q3	4.76	7.43	12.19
2007:Q4	5.02	7.16	12.18
January 2008*	5.40	7.73	13.13

Note: Autos includes car loans and leases, and financing for buyers of motorcycles, trucks and other vehicles.

* Preliminary. [Return to table](#)

Source: Inside MBS & ABS and Merrill Lynch.

Bottom-left panel

Gross Issuance of MBS by Type

Billions of dollars, monthly rate

Period	Agency	Non-agency	Sum
2004	84.73	72.01	156.74
2005	80.42	99.28	179.70
2006	74.87	95.45	170.32
2007:H1	90.22	44.20	134.42
2007:Q3	103.55	41.38	144.93
2007:Q4	97.81	17.50	115.31

Bottom-right panel

Mortgage Rates

Percent

Period	30-year FRM	30-year fixed-rate jumbo	1-year ARM
11 January 2006	6.15	6.36	5.15
18 January 2006	6.10	6.35	5.18
25 January 2006	6.12	6.20	5.20
1 February 2006	6.23	6.44	5.33
8 February 2006	6.24	6.45	5.34
15 February 2006	6.28	6.45	5.36
22 February 2006	6.26	6.55	5.32
1 March 2006	6.24	6.45	5.34

Period	30-year FRM	30-year fixed-rate jumbo	1-year ARM
8 March 2006	6.37	6.58	5.45
15 March 2006	6.34	6.51	5.37
22 March 2006	6.32	6.49	5.41
29 March 2006	6.35	6.52	5.51
5 April 2006	6.43	6.60	5.57
12 April 2006	6.49	6.57	5.61
19 April 2006	6.53	6.61	5.63
26 April 2006	6.58	6.66	5.68
3 May 2006	6.59	6.76	5.67
10 May 2006	6.58	6.79	5.62
17 May 2006	6.60	6.81	5.62
24 May 2006	6.62	6.79	5.61
31 May 2006	6.67	6.88	5.68
7 June 2006	6.62	6.79	5.63
14 June 2006	6.63	6.71	5.66
21 June 2006	6.71	6.79	5.75
28 June 2006	6.78	6.91	5.82
5 July 2006	6.79	6.92	5.83
12 July 2006	6.74	6.87	5.75
19 July 2006	6.80	6.88	5.80
26 July 2006	6.72	6.80	5.78
2 August 2006	6.63	6.76	5.69
9 August 2006	6.55	6.68	5.69
16 August 2006	6.52	6.58	5.65
23 August 2006	6.48	ND	5.60
30 August 2006	6.44	ND	5.59
6 September 2006	6.47	6.53	5.63
13 September 2006	6.43	6.56	5.60
20 September 2006	6.40	6.53	5.54
27 September 2006	6.31	6.37	5.47
4 October 2006	6.30	6.43	5.46
11 October 2006	6.37	6.43	5.56
18 October 2006	6.36	6.42	5.57
25 October 2006	6.40	6.40	5.60
1 November 2006	6.31	6.44	5.53
8 November 2006	6.33	6.46	5.55
15 November 2006	6.24	6.49	5.53

Period	30-year FRM	30-year fixed-rate jumbo	1-year ARM
22 November 2006	6.18	6.37	5.49
29 November 2006	6.14	6.39	5.46
6 December 2006	6.11	6.30	5.43
13 December 2006	6.12	6.30	5.45
20 December 2006	6.13	ND	5.44
27 December 2006	6.18	ND	5.47
3 January 2007	6.18	6.38	5.42
10 January 2007	6.21	6.34	5.44
17 January 2007	6.23	6.29	5.51
24 January 2007	6.25	6.31	5.49
31 January 2007	6.34	6.40	5.54
7 February 2007	6.28	6.34	5.49
14 February 2007	6.30	6.43	5.52
21 February 2007	6.22	6.28	5.49
28 February 2007	6.18	6.24	5.49
7 March 2007	6.14	6.28	5.47
14 March 2007	6.14	6.31	5.42
21 March 2007	6.16	6.38	5.40
28 March 2007	6.16	6.38	5.43
4 April 2007	6.17	6.30	5.44
11 April 2007	6.22	6.39	5.47
18 April 2007	6.17	6.34	5.45
25 April 2007	6.16	6.42	5.43
2 May 2007	6.16	6.33	5.42
9 May 2007	6.15	6.32	5.48
16 May 2007	6.21	6.42	5.48
23 May 2007	6.37	6.54	5.64
30 May 2007	6.42	6.55	5.57
6 June 2007	6.53	6.66	5.65
13 June 2007	6.74	6.87	5.75
20 June 2007	6.69	6.94	5.66
27 June 2007	6.67	6.88	5.65
4 July 2007	6.63	6.84	5.71
11 July 2007	6.73	7.02	5.71
18 July 2007	6.73	6.86	5.72
25 July 2007	6.69	7.02	5.69
1 August 2007	6.68	7.10	5.59

Period	30-year FRM	30-year fixed-rate jumbo	1-year ARM
8 August 2007	6.59	7.47	5.65
15 August 2007	6.62	7.12	5.67
22 August 2007	6.52	ND	5.60
29 August 2007	6.45	ND	5.84
5 September 2007	6.46	7.17	5.74
12 September 2007	6.31	7.06	5.66
19 September 2007	6.34	6.97	5.65
26 September 2007	6.42	6.92	5.60
3 October 2007	6.37	6.95	5.58
10 October 2007	6.40	6.90	5.73
17 October 2007	6.40	6.86	5.76
24 October 2007	6.33	6.79	5.66
31 October 2007	6.26	6.68	5.57
7 November 2007	6.24	6.62	5.50
14 November 2007	6.24	6.82	5.50
21 November 2007	6.20	6.95	5.42
28 November 2007	6.10	6.90	5.43
5 December 2007	5.96	6.88	5.46
12 December 2007	6.11	7.03	5.50
19 December 2007	6.14	ND	5.51
26 December 2007	6.17	ND	5.53
2 January 2008	6.07	6.90	5.47
9 January 2008	5.87	6.70	5.37
16 January 2008	5.69	6.57	5.26
23 January 2008	5.48	6.61	4.99

Source: Freddie Mac for conforming rates and Inside Mortgage Finance for offer rate on prime jumbo.

6-month LIBOR

Date	Percent
3 January 2006	4.71
4 January 2006	4.68
5 January 2006	4.68
6 January 2006	4.68
9 January 2006	4.70
10 January 2006	4.70
11 January 2006	4.72
12 January 2006	4.74

Date	Percent
13 January 2006	4.73
16 January 2006	4.72
17 January 2006	4.72
18 January 2006	4.72
19 January 2006	4.73
20 January 2006	4.74
23 January 2006	4.73
24 January 2006	4.74
25 January 2006	4.75
26 January 2006	4.78
27 January 2006	4.79
30 January 2006	4.81
31 January 2006	4.81
1 February 2006	4.82
2 February 2006	4.86
3 February 2006	4.86
6 February 2006	4.87
7 February 2006	4.89
8 February 2006	4.89
9 February 2006	4.91
10 February 2006	4.92
13 February 2006	4.93
14 February 2006	4.93
15 February 2006	4.93
16 February 2006	4.94
17 February 2006	4.94
20 February 2006	4.94
21 February 2006	4.94
22 February 2006	4.96
23 February 2006	4.96
24 February 2006	4.98
27 February 2006	4.99
28 February 2006	4.99
1 March 2006	4.98
2 March 2006	4.99
3 March 2006	5.00
6 March 2006	5.01

Date	Percent
7 March 2006	5.03
8 March 2006	5.03
9 March 2006	5.04
10 March 2006	5.05
13 March 2006	5.07
14 March 2006	5.07
15 March 2006	5.04
16 March 2006	5.06
17 March 2006	5.03
20 March 2006	5.03
21 March 2006	5.05
22 March 2006	5.07
23 March 2006	5.08
24 March 2006	5.09
27 March 2006	5.06
28 March 2006	5.07
29 March 2006	5.11
30 March 2006	5.12
31 March 2006	5.14
3 April 2006	5.14
4 April 2006	5.16
5 April 2006	5.16
6 April 2006	5.16
7 April 2006	5.17
10 April 2006	5.21
11 April 2006	5.20
12 April 2006	5.21
13 April 2006	5.22
14 April 2006	ND
17 April 2006	ND
18 April 2006	5.22
19 April 2006	5.19
20 April 2006	5.21
21 April 2006	5.22
24 April 2006	5.23
25 April 2006	5.22
26 April 2006	5.26

Date	Percent
27 April 2006	5.29
28 April 2006	5.22
1 May 2006	ND
2 May 2006	5.25
3 May 2006	5.25
4 May 2006	5.27
5 May 2006	5.28
8 May 2006	5.26
9 May 2006	5.27
10 May 2006	5.27
11 May 2006	5.28
12 May 2006	5.28
15 May 2006	5.27
16 May 2006	5.28
17 May 2006	5.27
18 May 2006	5.30
19 May 2006	5.30
22 May 2006	5.31
23 May 2006	5.32
24 May 2006	5.31
25 May 2006	5.32
26 May 2006	5.32
29 May 2006	ND
30 May 2006	5.32
31 May 2006	5.33
1 June 2006	5.39
2 June 2006	5.38
5 June 2006	5.32
6 June 2006	5.37
7 June 2006	5.38
8 June 2006	5.39
9 June 2006	5.41
12 June 2006	5.42
13 June 2006	5.42
14 June 2006	5.44
15 June 2006	5.52
16 June 2006	5.53

Date	Percent
19 June 2006	5.55
20 June 2006	5.55
21 June 2006	5.57
22 June 2006	5.57
23 June 2006	5.60
26 June 2006	5.62
27 June 2006	5.63
28 June 2006	5.62
29 June 2006	5.64
30 June 2006	5.59
3 July 2006	5.58
4 July 2006	5.59
5 July 2006	5.59
6 July 2006	5.63
7 July 2006	5.63
10 July 2006	5.61
11 July 2006	5.61
12 July 2006	5.61
13 July 2006	5.61
14 July 2006	5.58
17 July 2006	5.56
18 July 2006	5.58
19 July 2006	5.61
20 July 2006	5.59
21 July 2006	5.55
24 July 2006	5.56
25 July 2006	5.56
26 July 2006	5.57
27 July 2006	5.54
28 July 2006	5.55
31 July 2006	5.51
1 August 2006	5.51
2 August 2006	5.52
3 August 2006	5.53
4 August 2006	5.55
7 August 2006	5.49
8 August 2006	5.50

Date	Percent
9 August 2006	5.46
10 August 2006	5.46
11 August 2006	5.47
14 August 2006	5.50
15 August 2006	5.52
16 August 2006	5.49
17 August 2006	5.45
18 August 2006	5.47
21 August 2006	5.46
22 August 2006	5.46
23 August 2006	5.46
24 August 2006	5.46
25 August 2006	5.45
28 August 2006	ND
29 August 2006	5.46
30 August 2006	5.45
31 August 2006	5.43
1 September 2006	5.42
4 September 2006	5.42
5 September 2006	5.42
6 September 2006	5.42
7 September 2006	5.42
8 September 2006	5.42
11 September 2006	5.42
12 September 2006	5.43
13 September 2006	5.43
14 September 2006	5.42
15 September 2006	5.44
18 September 2006	5.44
19 September 2006	5.44
20 September 2006	5.42
21 September 2006	5.42
22 September 2006	5.38
25 September 2006	5.37
26 September 2006	5.36
27 September 2006	5.37
28 September 2006	5.37

Date	Percent
29 September 2006	5.37
2 October 2006	5.38
3 October 2006	5.36
4 October 2006	5.37
5 October 2006	5.36
6 October 2006	5.37
9 October 2006	5.38
10 October 2006	5.39
11 October 2006	5.39
12 October 2006	5.40
13 October 2006	5.40
16 October 2006	5.41
17 October 2006	5.40
18 October 2006	5.41
19 October 2006	5.40
20 October 2006	5.41
23 October 2006	5.42
24 October 2006	5.43
25 October 2006	5.43
26 October 2006	5.42
27 October 2006	5.40
30 October 2006	5.39
31 October 2006	5.39
1 November 2006	5.37
2 November 2006	5.35
3 November 2006	5.36
6 November 2006	5.40
7 November 2006	5.40
8 November 2006	5.38
9 November 2006	5.39
10 November 2006	5.38
13 November 2006	5.38
14 November 2006	5.39
15 November 2006	5.38
16 November 2006	5.39
17 November 2006	5.39
20 November 2006	5.37

Date	Percent
21 November 2006	5.37
22 November 2006	5.37
23 November 2006	5.37
24 November 2006	5.36
27 November 2006	5.36
28 November 2006	5.35
29 November 2006	5.35
30 November 2006	5.35
1 December 2006	5.33
4 December 2006	5.29
5 December 2006	5.29
6 December 2006	5.30
7 December 2006	5.32
8 December 2006	5.32
11 December 2006	5.36
12 December 2006	5.36
13 December 2006	5.35
14 December 2006	5.37
15 December 2006	5.38
18 December 2006	5.37
19 December 2006	5.37
20 December 2006	5.37
21 December 2006	5.37
22 December 2006	5.36
25 December 2006	ND
26 December 2006	ND
27 December 2006	5.36
28 December 2006	5.37
29 December 2006	5.37
1 January 2007	ND
2 January 2007	5.37
3 January 2007	5.37
4 January 2007	5.36
5 January 2007	5.35
8 January 2007	5.37
9 January 2007	5.38
10 January 2007	5.37

Date	Percent
11 January 2007	5.38
12 January 2007	5.38
15 January 2007	5.39
16 January 2007	5.39
17 January 2007	5.39
18 January 2007	5.39
19 January 2007	5.39
22 January 2007	5.39
23 January 2007	5.39
24 January 2007	5.40
25 January 2007	5.40
26 January 2007	5.40
29 January 2007	5.40
30 January 2007	5.40
31 January 2007	5.40
1 February 2007	5.40
2 February 2007	5.40
5 February 2007	5.40
6 February 2007	5.40
7 February 2007	5.40
8 February 2007	5.40
9 February 2007	5.40
12 February 2007	5.40
13 February 2007	5.40
14 February 2007	5.40
15 February 2007	5.39
16 February 2007	5.39
19 February 2007	5.39
20 February 2007	5.39
21 February 2007	5.38
22 February 2007	5.39
23 February 2007	5.39
26 February 2007	5.38
27 February 2007	5.37
28 February 2007	5.33
1 March 2007	5.33
2 March 2007	5.32

Date	Percent
5 March 2007	5.26
6 March 2007	5.30
7 March 2007	5.29
8 March 2007	5.29
9 March 2007	5.30
12 March 2007	5.34
13 March 2007	5.33
14 March 2007	5.30
15 March 2007	5.31
16 March 2007	5.32
19 March 2007	5.34
20 March 2007	5.34
21 March 2007	5.34
22 March 2007	5.31
23 March 2007	5.32
26 March 2007	5.33
27 March 2007	5.33
28 March 2007	5.32
29 March 2007	5.32
30 March 2007	5.33
2 April 2007	5.33
3 April 2007	5.33
4 April 2007	5.34
5 April 2007	5.33
6 April 2007	ND
9 April 2007	ND
10 April 2007	5.36
11 April 2007	5.36
12 April 2007	5.37
13 April 2007	5.37
16 April 2007	5.37
17 April 2007	5.37
18 April 2007	5.36
19 April 2007	5.35
20 April 2007	5.35
23 April 2007	5.36
24 April 2007	5.35

Date	Percent
25 April 2007	5.35
26 April 2007	5.36
27 April 2007	5.36
30 April 2007	5.36
1 May 2007	5.35
2 May 2007	5.36
3 May 2007	5.36
4 May 2007	5.37
7 May 2007	ND
8 May 2007	5.36
9 May 2007	5.36
10 May 2007	5.37
11 May 2007	5.36
14 May 2007	5.37
15 May 2007	5.37
16 May 2007	5.36
17 May 2007	5.36
18 May 2007	5.37
21 May 2007	5.38
22 May 2007	5.37
23 May 2007	5.38
24 May 2007	5.38
25 May 2007	5.38
28 May 2007	ND
29 May 2007	5.38
30 May 2007	5.38
31 May 2007	5.38
1 June 2007	5.39
4 June 2007	5.39
5 June 2007	5.39
6 June 2007	5.40
7 June 2007	5.39
8 June 2007	5.40
11 June 2007	5.40
12 June 2007	5.40
13 June 2007	5.41
14 June 2007	5.41

Date	Percent
15 June 2007	5.41
18 June 2007	5.40
19 June 2007	5.40
20 June 2007	5.39
21 June 2007	5.39
22 June 2007	5.39
25 June 2007	5.38
26 June 2007	5.38
27 June 2007	5.38
28 June 2007	5.38
29 June 2007	5.39
2 July 2007	5.38
3 July 2007	5.38
4 July 2007	5.38
5 July 2007	5.39
6 July 2007	5.39
9 July 2007	5.40
10 July 2007	5.39
11 July 2007	5.38
12 July 2007	5.39
13 July 2007	5.39
16 July 2007	5.39
17 July 2007	5.39
18 July 2007	5.38
19 July 2007	5.38
20 July 2007	5.38
23 July 2007	5.37
24 July 2007	5.37
25 July 2007	5.37
26 July 2007	5.37
27 July 2007	5.33
30 July 2007	5.31
31 July 2007	5.33
1 August 2007	5.30
2 August 2007	5.32
3 August 2007	5.31
6 August 2007	5.26

Date	Percent
7 August 2007	5.28
8 August 2007	5.34
9 August 2007	5.39
10 August 2007	5.40
13 August 2007	5.40
14 August 2007	5.40
15 August 2007	5.39
16 August 2007	5.38
17 August 2007	5.36
20 August 2007	5.35
21 August 2007	5.33
22 August 2007	5.37
23 August 2007	5.43
24 August 2007	5.41
27 August 2007	ND
28 August 2007	5.43
29 August 2007	5.43
30 August 2007	5.46
31 August 2007	5.54
3 September 2007	5.55
4 September 2007	5.56
5 September 2007	5.60
6 September 2007	5.56
7 September 2007	5.57
10 September 2007	5.48
11 September 2007	5.49
12 September 2007	5.52
13 September 2007	5.51
14 September 2007	5.46
17 September 2007	5.42
18 September 2007	5.42
19 September 2007	5.11
20 September 2007	5.07
21 September 2007	5.10
24 September 2007	5.11
25 September 2007	5.14
26 September 2007	5.14

Date	Percent
27 September 2007	5.14
28 September 2007	5.13
1 October 2007	5.15
2 October 2007	5.16
3 October 2007	5.17
4 October 2007	5.18
5 October 2007	5.18
8 October 2007	5.22
9 October 2007	5.21
10 October 2007	5.22
11 October 2007	5.21
12 October 2007	5.14
15 October 2007	5.15
16 October 2007	5.13
17 October 2007	5.11
18 October 2007	5.08
19 October 2007	5.01
22 October 2007	4.93
23 October 2007	4.94
24 October 2007	4.90
25 October 2007	4.84
26 October 2007	4.83
29 October 2007	4.83
30 October 2007	4.82
31 October 2007	4.81
1 November 2007	4.85
2 November 2007	4.79
5 November 2007	4.81
6 November 2007	4.85
7 November 2007	4.84
8 November 2007	4.80
9 November 2007	4.76
12 November 2007	4.74
13 November 2007	4.74
14 November 2007	4.78
15 November 2007	4.79
16 November 2007	4.81

Date	Percent
19 November 2007	4.85
20 November 2007	4.86
21 November 2007	4.85
22 November 2007	4.86
23 November 2007	4.86
26 November 2007	4.89
27 November 2007	4.86
28 November 2007	4.91
29 November 2007	4.91
30 November 2007	4.91
3 December 2007	4.90
4 December 2007	4.91
5 December 2007	4.90
6 December 2007	4.90
7 December 2007	4.93
10 December 2007	4.97
11 December 2007	4.96
12 December 2007	4.93
13 December 2007	4.83
14 December 2007	4.85
17 December 2007	4.85
18 December 2007	4.83
19 December 2007	4.78
20 December 2007	4.75
21 December 2007	4.73
24 December 2007	4.72
25 December 2007	ND
26 December 2007	ND
27 December 2007	4.72
28 December 2007	4.65
31 December 2007	4.60
1 January 2008	ND
2 January 2008	4.57
3 January 2008	4.47
4 January 2008	4.47
7 January 2008	4.36
8 January 2008	4.33

Date	Percent
9 January 2008	4.26
10 January 2008	4.19
11 January 2008	4.08
14 January 2008	3.85
15 January 2008	3.83
16 January 2008	3.79
17 January 2008	3.81
18 January 2008	3.75
21 January 2008	3.67
22 January 2008	3.49
23 January 2008	3.16
24 January 2008	3.15
25 January 2008	3.30
28 January 2008	3.18

Exhibit 9

Mortgage Default Outlook

Top-left panel

Cumulative Defaults on Subprime 2/28 Loans

Percent

Loan Age (Months)	2001-2004 Average	2005	2006	2007
1	0.00	0	0	0
2	0.01	0	0	0
3	0.06	0	0	0
4	0.17	0	0	2
5	0.34	0	1	4
6	0.55	1	2	8
7	0.80	1	3	ND
8	1.06	1	4	ND
9	1.33	2	5	ND
10	1.62	2	6	ND
11	1.91	3	7	ND
12	2.21	3	9	ND
13	2.51	4	10	ND
14	2.82	4	11	ND
15	3.12	5	13	ND

Loan Age (Months)	2001-2004 Average	2005	2006	2007
16	3.43	5	14	ND
17	3.75	6	16	ND
18	4.04	7	18	ND
19	4.35	7	ND	ND
20	4.66	8	ND	ND
21	4.95	9	ND	ND
22	5.24	9	ND	ND
23	5.54	10	ND	ND
24	5.83	11	ND	ND
25	6.12	11	ND	ND
26	6.42	12	ND	ND
27	6.72	13	ND	ND
28	7.04	14	ND	ND
29	7.33	15	ND	ND
30	7.62	15	ND	ND
31	7.89	16	ND	ND
32	8.15	17	ND	ND
33	8.42	ND	ND	ND
34	8.66	ND	ND	ND
35	8.89	ND	ND	ND
36	9.11	ND	ND	ND
37	9.31	ND	ND	ND
38	9.51	ND	ND	ND
39	9.70	ND	ND	ND
40	9.88	ND	ND	ND
41	10.05	ND	ND	ND
42	10.22	ND	ND	ND
43	10.37	ND	ND	ND
44	10.52	ND	ND	ND

As shown in the figure, there is a vertical tripwire labeled "First Reset" at the loan age of 24 months. Data for 2001-2004 are shown as a range that begins at 0, increases to about 4.7-7.4 by the first reset, and continues to increase to about 8.7-12.1 by the loan age of 44 months.

Source: Staff calculations from First American LoanPerformance data as of November 2007. Last nine months based on incomplete data.

Top-right panel
Subprime First Mortgage Rate Resets

Quarterly

Thousands of loans

Period	Resets
2007:Q3	247.47
2007:Q4	343.25
2008:Q1	344.24
2008:Q2	367.06
2008:Q3	401.78
2008:Q4	395.05
2009:Q1	300.28
2009:Q2	160.80
2009:Q3	88.82
2009:Q4	68.06

Source: Staff calculations based on First American LoanPerformance data as of November 2007.

Middle-left panel

Model of Subprime ARM Defaults

- Loan-level model of prepayments and defaults
- Loan and borrower characteristics at origination
- Subsequent MSA or state house prices and employment, interest rates, and "vintage" effects

Middle-right panel

Subprime ARM Defaults

Thousands of loans, annual rate

Period	Defaults	Forecast
2003	92	ND
2004	155	ND
2005	213	ND
2006	324	ND
2007:Q1-Q3	561	ND
2007:Q4	ND	636
2008	ND	760
2009	ND	740

Note: Staff calculations from First American LoanPerformance data and Mortgage Bankers Association National Delinquency Survey.

Bottom-left panel

Estimated Loan-to-Value Ratios

(Percent of existing mortgages)

LTV > 100*

	2007:Q3	2009:Q4**
Subprime	20	44
Prime	5	15

* Includes closed-end second liens. [Return to table](#)

** Assumes Greenbook house price path. [Return to table](#)

Bottom-right panel

Loan Modifications

- Loan workouts and modifications were modest in Q3, but likely accelerated in Q4.
- Servicers are strained with loans that are delinquent before the first reset.
- Servicers assisted about 15 percent of subprime borrowers with past-due accounts in Q3.

Exhibit 10

Projected Credit Losses

Top panel

Method

- Projections of credit losses in the next two years for major categories of business and household debt.
- The paths for house prices, unemployment, interest rates, and other factors from the Greenbook baseline.
- Also from the alternative recession scenario with the assumption that national house prices fall 20 percent.
 - Real GDP growth turns negative in 2008 and the unemployment rate rises above 6 percent in 2009.

Bottom panel

Projected Credit Losses in 2008 and 2009 by Scenario

(Billions of dollars)

	Average based on long-run loss rates	Greenbook baseline	Recession alternative and 20 percent house price decline
1. All Mortgages	180	417	677
2. Nonprime - first liens	89	192	335
3. Consumer credit	129	154	184
4. Nonfinancial business	131	156	233
5. CRE at banks	13	28	35
6. Total	440	727	1094

Exhibit 11

U.S. Trade Outlook

Top panel

Trade in Real Goods and Services

	2006	2007			2008p	2009p
		H1	Q3	Q4e		
Growth rates (percent, annual rate*)						
1. Exports	9.3	4.3	19.1	4.6	7.2	7.3
2. Imports	3.7	0.5	4.4	2.1	1.9	3.8
Contribution to U.S. real GDP growth (percentage points, annual rate*)						
3. Net exports	0.4	0.4	1.4	0.2	0.5	0.3
<i>Memo:</i>						
4. Current account balance (% of GDP)	-6.2	-5.7	-5.1	-5.5	-5.4	-4.7
5. Non-oil trade balance (% of GDP)	-3.5	-3.0	-2.6	-2.4	-2.0	-1.6

* Years are Q4/Q4; half year is Q2/Q4. [Return to table](#)

Bottom-left panel

Core Import Prices

A line and bar chart shows the annual rate of percent change of core import prices from 2005:H1 through 2007:H2, and forecasts for 2008:H1 through 2009:H2. Starting at just over 3% in 2005:H1, core import prices fell to 1% in the second half of that year, and then gradually returned to around 3% in 2007. Prices are expected to fall towards 1% again by 2009. This panel also indicates the contribution of foreign prices and the contribution of commodity prices. In general, foreign prices have contributed about 1% over this period. Their contribution increased to around 2.5% in late 2007 and is expected to remain slightly elevated in early 2008, but then it is expected to fall back to 1% by the end of 2008 and remain at that level throughout the forecast period. Commodity price contributions are more volatile, contributing about 1% in 2005, about 2% in 2006 and the beginning of 2007, and a quarter of a percent in late 2007. Commodity prices are forecasted to have little contribution throughout the forecast period.

Bottom-right panel

Oil Imports

A line chart shows oil imports as a percent of GDP from 1997 through 2009. Oil imports fluctuated around 1% of GDP from 1997 through 2001, at which point they began increasing to their present level of about 3% of GDP. The forecast shows them falling slightly to about 2.5% of GDP by the end of 2009.

Exhibit 12

Long-Term Performance of U.S. Trade

Top panel

Contribution of Real Net Exports to U.S. GDP Growth

A bar chart shows the contribution of real net exports to U.S. GDP growth from 1997 through 2009. Unit is percentage points, Q4/Q4. From 1997 through 2005, real net exports' effect on GDP growth

ranged from -1.1 (1998) to -0.1 percentage point (2003 and 2005). The contribution swung into positive territory starting in 2006, contributing 0.4 in 2006 and 0.6 in 2007. The forecast continues to expect a positive effect, with a forecast of 0.5 in 2008 and 0.3 percentage point in 2009.

Average

Period	Percentage points, Q4/Q4
1997 - 2005	-0.7
2006 - 2007	0.5
2008 - 2009p	0.4

Middle-left panel

Real Export and Import Growth

Percent, Q4/Q4

	Avg. Growth	Avg. Contribution*
Exports		
1. 1997-2005	3.7	0.4
2. 2006-2007	8.6	1.0
3. 2008-2009p	7.3	0.9
Imports		
4. 1997-2005	8.0	-1.1
5. 2006-2007	2.8	-0.5
6. 2008-2009p	2.9	-0.5

* Contribution to U.S. GDP growth. [Return to table](#)

Middle-right panel

Real Trade-Weighted Dollar

A line chart illustrates the broad real dollar, the dollar against major currencies, and against other important trading partners. Unit is an index, 2002:Q1=100. The dollar is currently down a little over 20% since 2002 in broad real terms, and is expected to fall slightly more by the end of 2009.

Similarly, the dollar is down about 30% against major currencies, and is expected to remain at this level throughout the forecast period. The dollar is down about 10% against other important trading partners, and is expected to fall about another 10% by the end of 2009.

Bottom panel

Differential Between U.S. and Foreign Real GDP Growth

A bar chart shows the differential between U.S. and foreign real GDP growth from 1997 through 2009. Unit is percentage points, Q4/Q4. From 1997 to 2005, U.S. growth was on average just ¼ percentage point below that of our trading partners. The broadest positive gap occurred in 1998, when U.S. growth was about 3% higher than our trading partners, and the largest negative gap occurred a few years later in 2000, when U.S. growth was about 2% below that of our trading partners. In 2006, the gap was about -1.25%, and in 2007 it increased slightly more, to about -1.75%. The forecast shows this gap narrowing slightly in the forecast period to about -1.3%.

Average

Period	Percentage points, Q4/Q4
1997 - 2005	-0.2
2006 - 2007	-1.5
2008 - 2009p	-1.3

Exhibit 13 Outlook for Foreign Growth

Top-left panel

Euro Area

A line chart. From 2006 through mid-2007, economic sentiment increased from about 2 percent to 12 percent above the long-term average. However, starting in mid-2007, sentiment began falling and is now about 5 percent above the long-term average. Also, from 2006 through mid-2007, changes in credit standards to households* remained between zero and -10 percent balance, so fairly loose. Recently, they have started tightening to about positive 20 percent balance by the end of 2007. Credit standards to enterprises* have followed a pattern similar to those to households. They remained unchanged or slightly loosened through mid-2007, and then sharply tightened in the second half of the year with about a 40% increase in tightening.

* From ECB lending survey. Positive values indicate tighter standards. [Return to text](#)

Top-right panel

United Kingdom

A line chart shows U.K. corporate credit availability in the last few months as well as new mortgage lending from 2006 through 2007. Corporate credit availability fell from about 0 to a -50 percent balance. Meanwhile, new mortgage lending has been volatile, fluctuating between about 8 to 10 billion UK pounds. It reached a peak in this two-year period of about 10.5 billion pounds in late 2006, but since the beginning of 2007 it has been falling and is now around 7.75 billion pounds.

Middle-left panel

Japan

A line chart shows the Japanese Tankan survey (diffusion index) and housing starts (twelve-month percent change) over 2006 and 2007. The Tankan survey gradually rose from about 5 to 8 over 2006, however over 2007 it has been steadily falling and is now at about 2. Housing starts remained largely unchanged throughout 2006 and the first half of 2007, but in the past few months they have dropped sharply, with a -45% change in the third quarter of 2007. Since then they have risen slightly to -25%.

Middle-right panel

Sources of Near-Term Slowing

- Headwinds from financial turmoil, including sharp recent declines in equity markets
- Softening of U.S. growth
- Expected cyclical moderation

Bottom panel

Real GDP Projections*

Percent change, annual rate**

	2006	2007		2008p		2009p
		Q1-Q3	Q4e	H1	H2	
1. Total Foreign	4.0	4.4	2.8	2.7	3.0	3.4
2. Advanced Foreign	2.5	2.9	1.7	1.4	1.7	2.2
3. Euro Area	3.2	2.5	1.5	1.2	1.6	2.2
4. United Kingdom	3.3	3.1	2.5	1.6	2.0	2.6
5. Japan	2.5	1.0	1.1	0.9	1.2	1.4
6. Canada	1.9	3.4	1.7	1.3	1.6	2.2
7. Emerging Markets	5.9	6.4	4.3	4.5	4.8	5.0
8. Mexico	4.3	4.3	1.5	2.3	3.2	3.3
9. China	10.5	11.8	9.6	9.2	9.5	9.4

* Aggregates weighted by U.S. exports. [Return to text](#)

** Years are Q4/Q4; half years are Q2/Q4 or Q4/Q2; Q1-Q3 is Q3/Q4. [Return to table](#)

Exhibit 14

Top-left panel

Policy Interest Rates

A line chart shows the policy interest rates for the UK, Canada, the euro area, and Japan from 2005 through early 2010.

The UK kept rates around 4.50-4.75 throughout 2005-2006. Beginning in 2007, the UK gradually increased rates to 5.75 percent, then slightly lowered rates to 5.50 percent in the last quarter of 2007. Over the next few quarters the forecast anticipates that the UK will lower rates to 4.75 percent and keep rates at this level throughout the forecast period.

Canada increased rates from 2.50 to 4.50 percent from 2005 through late 2007. Recently, Canada rates have stepped down to 4.00 percent, and the forecast expects them to drop slightly further to 3.50 percent and remain there throughout the forecast period.

The euro area saw a similar pattern in rates, with rates increasing from 2.00 percent in 2005 to the current level of 4.00 percent. The forecast anticipates rates to fall to about 3.50 percent and remain between 3.50-3.75 through the forecast period.

Japan's rates increased from 0.00 to 0.50 percent from 2005-2007. The forecast anticipates that rates will remain at 0.50 throughout most of the forecast period.

Top-right panel

Risks to the Foreign Outlook

- Financial headwinds or U.S. slowing may exceed current projections.
- Year-end financial statements could bring bad news.
- Overly optimistic expectations of decoupling might lead to policy mistakes.
- Housing markets in some countries may be vulnerable.

Bottom-left panel

House Prices

A line chart shows the percent change (from a year earlier) in house prices for the UK, US, France, Spain, and Canada, from 2004 to 2007. House prices in the US rose at a rate of about 10% throughout 2004 and 2005. Since late 2005, this rate has been slowing, and as of 2007:Q3, house prices have only increased 2%. France has seen a similar trend, with prices rising about 15% throughout 2004 and 2005, then falling to their current rate of 5% in 2007:Q3. In the UK, by late 2004 house prices had risen over 20%, but then this rate quickly slowed to 2% by mid-2005. Prices began rising again to about 11% by mid-2007, but have since fallen to about 4% as of December. Spain has been seeing a slowdown in house prices over the period, from 18% at the beginning of 2004 to about 5% by 2007:Q3. Canada's house prices were increasing at about 5% through 2004 and 2005, and in late 2005 they began rising steadily to 12% by mid-2006. However, their prices have also experienced a slowdown to 6% by November 2007.

Bottom-right panel

Residential Investment: Contribution to GDP Growth

A bar chart shows the contribution to GDP growth of residential investment (percentage points, annual rate) for the US, Canada, the UK, and the euro area. On average, from 2003 to 2005, residential investment contributed between about 0.1 and 0.5 percentage point to GDP growth, with the US having the largest contribution at about 0.5 percentage point. In 2006, the US experienced a sharp fall, with residential investment contributing about -0.8 percentage point. Canada's fell slightly, to about -0.05 percentage point, while the UK and euro area's remained around 0.3 percentage point. In 2007:Q1-Q3, the US continued to experience a marked downward swing in contributions of about -0.9 percentage point, while Canada, the UK, and the euro area experienced positive contributions between about 0.1 and 0.5 percentage point.

Exhibit 15

Outlook for Foreign Inflation

Top panel

Headline CPI Projections*

Percent change, annual rate**

	2006	2007		2008p		2009p
		Q1-Q3	Q4e	H1	H2	
1. Average Foreign	2.1	3.4	4.5	2.7	2.5	2.5
2. Advanced Foreign	1.3	1.9	3.1	1.8	1.7	1.7
3. Euro Area	1.8	2.2	5.1	1.8	1.8	1.9
4. United Kingdom	2.7	1.5	3.8	2.8	2.1	2.1
5. Japan	0.3	0.2	1.6	0.3	0.6	0.6
6. Canada	1.3	2.7	2.2	2.3	2.1	2.0
7. Emerging Markets	2.9	4.8	5.8	3.6	3.3	3.2
8. Mexico	4.1	3.7	4.1	3.5	3.5	3.3

	2006	2007		2008p		2009p
		Q1-Q3	Q4e	H1	H2	
9. China	2.1	6.8	6.3	3.5	3.0	3.0

* Aggregates weighted by U.S. non-oil imports. [Return to text](#)

** Years are Q4/Q4; half years are Q2/Q4 or Q4/Q2; Q1-Q3 is Q3/Q4. [Return to table](#)

Ten-Year Inflation Expectations

Middle-left panel

Advanced Foreign*

A line chart shows the break-even rate and Consensus Economics survey for advanced foreign economies from 2004 through 2007. The break-even rate has fluctuated between about 2.1 and 2.8 percent over this period, largely hovering around 2.3 percent on average. The Consensus Economics survey has also shown that long-term inflation forecasts have stayed around 2 percent.

* Excludes Japan. [Return to text](#)

Middle-right panel

Emerging Markets*

A line chart shows the Consensus Economics survey of ten-year inflation expectations for emerging markets from 2004 through 2007. These rates have remained between about 3.0 and 3.5 percent over the period.

* Excludes Israel, the Philippines, and Saudi Arabia. [Return to text](#)

Commodities Prices

Bottom-left panel

Oil*

A line chart shows the four-quarter percent change in oil prices (WTI) from 2004 through 2009. Oil prices increased in 2004 to a 50 percent increase by the end of that year. From late 2004 through early 2007, oil prices decelerated, even experiencing a 10 percent decline in prices in the first half of 2007. The second half of 2007 has seen an increase in prices, and prices are currently up 40 percent over this four quarter period. The forecast anticipates that prices will decelerate once again through 2008 and will even slightly contract in 2009. The series ends at about -4 percent in 2009:Q4.

* In terms of foreign currency. [Return to text](#)

Bottom-right panel

Non-Fuel*

A line chart shows the four-quarter percent change in metals and food prices from 2004 through 2009. Metal prices increased at a rate of about 30 percent in 2004 and early 2005. Beginning in late 2005, they accelerated to nearly 70 percent by mid-2006. However, metal prices quickly decelerated and decreased at a rate of -10 percent by the end of 2007. The forecast expects prices to fall another 10 percent by mid-2008, then to stabilize by the end of 2008. Food prices have been increasing at a pace of between -10 to 20 percent, averaging about 10 percent over the last few years. The forecast expects them to continue to increase at a pace of 0 to 20 percent over the next two years.

* In terms of foreign currency. [Return to text](#)

Appendix 3: Materials used by Mr. Madigan

Material for FOMC Briefing on Economic Projections

Brian Madigan

January 29, 2008

Class I FOMC - Restricted Controlled (FR)

Table 1:

Economic Projections of Federal Reserve Governors and Reserve Bank Presidents¹

	2008	2009	2010
Central Tendencies			
Real GDP Growth	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
<i>October projections</i>	<i>1.8 to 2.5</i>	<i>2.3 to 2.7</i>	<i>2.5 to 2.6</i>
Unemployment Rate	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
<i>October projections</i>	<i>4.8 to 4.9</i>	<i>4.8 to 4.9</i>	<i>4.7 to 4.9</i>
PCE Inflation	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
<i>October projections</i>	<i>1.8 to 2.1</i>	<i>1.7 to 2.0</i>	<i>1.6 to 1.9</i>
Core PCE Inflation	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
<i>October projections</i>	<i>1.7 to 1.9</i>	<i>1.7 to 1.9</i>	<i>1.6 to 1.9</i>
Ranges			
Real GDP Growth	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
<i>October projections</i>	<i>1.6 to 2.6</i>	<i>2.0 to 2.8</i>	<i>2.2 to 2.7</i>
Unemployment Rate	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
<i>October projections</i>	<i>4.6 to 5.0</i>	<i>4.6 to 5.0</i>	<i>4.6 to 5.0</i>
PCE Inflation	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
<i>October projections</i>	<i>1.7 to 2.3</i>	<i>1.5 to 2.2</i>	<i>1.5 to 2.0</i>
Core PCE Inflation	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0
<i>October projections</i>	<i>1.7 to 2.0</i>	<i>1.5 to 2.0</i>	<i>1.5 to 2.0</i>

1. Projections of real GDP growth, PCE inflation and core PCE inflation are fourth-quarter-to-fourth-quarter growth rates, i.e. percentage changes from the fourth quarter of the prior year to the fourth quarter of the indicated year. PCE inflation and core PCE inflation are the percentage rates of change in the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy, respectively. Each participant's projections are based on his or her assessment of appropriate monetary policy. The range for each variable in a given year includes all participants' projections, from lowest to highest, for that variable in the given year; the central tendencies exclude the three highest and three lowest projections for each variable in each year. [Return to text](#)

Exhibit 2

Uncertainty and Risks - GDP Growth

Top panel

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.

Number of Participants

	Higher (A)	Broadly similar (B)	Lower (C)
January Projections	15	2	0
October Projections	13	4	0

Bottom panel

2(b): Please indicate your judgment of the risk weighting around your projections.

Number of Participants

	Weighted to upside (A)	Broadly balanced (B)	Weighted to downside (C)
January Projections	1	3	13
October Projections	0	4	13

Exhibit 3

Uncertainty and Risks - Total PCE Inflation

Top panel

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.

Number of Participants

	Higher (A)	Broadly similar (B)	Lower (C)
January Projections	5	12	0
October Projections	7	9	1

Bottom panel

2(b): Please indicate your judgment of the risk weighting around your projections.

Number of Participants

	Weighted to upside (A)	Broadly balanced (B)	Weighted to downside (C)
January Projections	6	10	1
October Projections	8	9	0

Appendix 4: Materials used by Mr. Stockton

Class II FOMC - RESTRICTED (FR)

Gross Domestic Product

(percent change at an annual rate)

	2007-Q3	2007-Q4	
	Final	Greenbook	Advance
Real GDP	4.9	0.5	0.6
Final Sales	4.0	1.7	1.9
Personal Consumption	2.8	2.2	2.0
Durables	4.5	5.2	4.2
Nondurables	2.2	1.7	1.9
Services	2.8	1.9	1.6
Business Fixed Investment	9.3	7.4	7.5
Nonresidential Structures	16.4	15.3	15.8
Equipment and Software	6.2	3.8	3.8
Residential Investment	-20.5	-30.6	-23.9
Government	3.8	4.0	2.6
Federal	7.1	4.8	0.3
State and Local	1.9	3.6	4.0
Exports	19.1	4.6	3.9
Imports	4.4	2.1	0.3
Level in chained 2000 dollars:			
Change in nonfarm business inventories	26.0	-8.1	-6.9
Change in farm inventories	4.1	1.0	2.5
Net Exports	-533.1	-526.9	-521.0
Price Indexes:			
Total PCE Chain Price Index	1.8	3.9	3.9
Core PCE Chain Price Index	2.0	2.7	2.7

Appendix 5: Materials used by Mr. Madigan

Material for FOMC Briefing on Monetary Policy Alternatives

Brian Madigan

January 29-30, 2008

Class I FOMC - Restricted Controlled (FR)

Exhibit 1

Risk Management Strategies

Benefits

Top-left panel
Federal funds rate

Percent

Period	Outcome-Based Rule	Risk Management
2007:Q4	4.50	4.50
2008:Q1	3.06	1.50
2008:Q2	2.27	1.50
2008:Q3	1.99	1.44
2008:Q4	1.21	1.00
2009:Q1	0.85	0.93
2009:Q2	0.68	0.98
2009:Q3	0.73	1.15
2009:Q4	0.80	1.27
2010:Q1	1.10	1.57
2010:Q2	1.45	1.89
2010:Q3	1.77	2.17
2010:Q4	2.05	2.41
2011:Q1	2.27	2.60
2011:Q2	2.83	3.13
2011:Q3	3.11	3.39
2011:Q4	3.36	3.61
2012:Q1	3.57	3.80
2012:Q2	3.75	3.96
2012:Q3	3.90	4.09
2012:Q4	4.03	4.19

Middle-left panel
Civilian unemployment rate

Percent

Period	Outcome-Based Rule	Risk Management
2007:Q4	4.80	4.80
2008:Q1	5.07	5.08
2008:Q2	5.29	5.26
2008:Q3	5.43	5.36
2008:Q4	5.75	5.64
2009:Q1	5.92	5.78
2009:Q2	6.04	5.87
2009:Q3	6.06	5.88
2009:Q4	6.07	5.88

Period	Outcome-Based Rule	Risk Management
2010:Q1	5.99	5.80
2010:Q2	5.87	5.69
2010:Q3	5.74	5.57
2010:Q4	5.60	5.44
2011:Q1	5.45	5.30
2011:Q2	5.31	5.18
2011:Q3	5.18	5.06
2011:Q4	5.06	4.95
2012:Q1	4.94	4.85
2012:Q2	4.84	4.76
2012:Q3	4.75	4.69
2012:Q4	4.67	4.63

Bottom-left panel
Core PCE inflation

Four-quarter moving average
Percent

Period	Outcome-Based Rule	Risk Management
2007:Q4	2.10	2.10
2008:Q1	2.11	2.15
2008:Q2	2.30	2.36
2008:Q3	2.29	2.37
2008:Q4	2.10	2.20
2009:Q1	1.95	2.04
2009:Q2	1.88	1.95
2009:Q3	1.82	1.88
2009:Q4	1.75	1.81
2010:Q1	1.70	1.75
2010:Q2	1.64	1.69
2010:Q3	1.60	1.66
2010:Q4	1.56	1.62
2011:Q1	1.52	1.59
2011:Q2	1.50	1.57
2011:Q3	1.47	1.55
2011:Q4	1.46	1.54
2012:Q1	1.44	1.53
2012:Q2	1.43	1.53
2012:Q3	1.42	1.52

Period	Outcome-Based Rule	Risk Management
2012:Q4	1.41	1.52

Costs

Top-right panel Federal funds rate

Percent

Period	Prompt Reversal	Gradual Reversal	Greenbook Baseline
2007:Q4	4.50	4.50	4.50
2008:Q1	1.50	1.50	3.35
2008:Q2	1.50	1.50	3.00
2008:Q3	3.25	2.10	3.00
2008:Q4	4.00	2.72	3.00
2009:Q1	4.14	3.20	3.00
2009:Q2	3.96	3.50	3.00
2009:Q3	3.67	3.65	3.00
2009:Q4	3.38	3.68	3.00
2010:Q1	3.16	3.65	3.00
2010:Q2	3.02	3.59	3.00
2010:Q3	2.95	3.53	3.00
2010:Q4	2.93	3.48	3.00
2011:Q1	2.94	3.43	3.00
2011:Q2	3.34	3.79	3.39
2011:Q3	3.50	3.90	3.53
2011:Q4	3.65	4.02	3.67
2012:Q1	3.76	4.10	3.79
2012:Q2	3.85	4.16	3.88
2012:Q3	3.91	4.20	3.95
2012:Q4	3.95	4.22	4.00

Middle-right panel Civilian unemployment rate

Percent

Period	Prompt Reversal	Gradual Reversal	Greenbook Baseline
2007:Q4	4.80	4.80	4.80
2008:Q1	4.98	4.98	4.98

Period	Prompt Reversal	Gradual Reversal	Greenbook Baseline
2008:Q2	5.02	5.02	5.06
2008:Q3	5.01	5.01	5.10
2008:Q4	5.01	4.99	5.14
2009:Q1	5.03	4.97	5.17
2009:Q2	5.06	4.95	5.18
2009:Q3	5.08	4.92	5.17
2009:Q4	5.09	4.90	5.15
2010:Q1	5.10	4.89	5.14
2010:Q2	5.09	4.87	5.11
2010:Q3	5.08	4.85	5.08
2010:Q4	5.04	4.83	5.04
2011:Q1	5.01	4.81	5.00
2011:Q2	4.97	4.78	4.96
2011:Q3	4.93	4.75	4.92
2011:Q4	4.90	4.74	4.88
2012:Q1	4.88	4.73	4.85
2012:Q2	4.86	4.72	4.83
2012:Q3	4.85	4.73	4.81
2012:Q4	4.84	4.73	4.80

Bottom-right panel

Core PCE inflation

Four-quarter moving average

Percent

Period	Prompt Reversal	Gradual Reversal	Greenbook Baseline
2007:Q4	2.10	2.10	2.10
2008:Q1	2.15	2.15	2.11
2008:Q2	2.37	2.37	2.28
2008:Q3	2.38	2.40	2.29
2008:Q4	2.18	2.24	2.10
2009:Q1	2.02	2.11	1.99
2009:Q2	1.94	2.06	1.95
2009:Q3	1.90	2.01	1.93
2009:Q4	1.89	1.99	1.91
2010:Q1	1.87	1.96	1.89
2010:Q2	1.86	1.93	1.87
2010:Q3	1.86	1.93	1.85

Period	Prompt Reversal	Gradual Reversal	Greenbook Baseline
2010:Q4	1.86	1.92	1.84
2011:Q1	1.85	1.92	1.83
2011:Q2	1.84	1.91	1.81
2011:Q3	1.84	1.91	1.80
2011:Q4	1.83	1.92	1.80
2012:Q1	1.82	1.92	1.79
2012:Q2	1.82	1.92	1.78
2012:Q3	1.81	1.92	1.78
2012:Q4	1.80	1.91	1.77

Table 1:
Alternative Language for the January 30, 2008 FOMC Announcement

Bluebook Version

[Note: In Appendix 5, Table 1, strong emphasis (bold) has been added to indicate red text in the original document.]

	Alternative A	Alternative B	Alternative C	Alternative D
Policy Decision	1. The Federal Open Market Committee decided today to lower its target for the federal funds rate 75 basis points to 2-¾ percent.	The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 3 percent.	The Federal Open Market Committee decided today to lower its target for the federal funds rate 25 basis points to 3-¼ percent.	The Federal Open Market Committee decided today to keep its target for the federal funds rate at 3-½ percent.
Rationale	2. Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress , and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.	Financial markets remain under considerable stress, and the tightening of credit and the deepening of the housing contraction could weigh further on economic growth. However, recent policy actions should promote moderate growth over time.
	3. The Committee expects inflation to moderate in coming quarters, reflecting well-anchored inflation expectations, a projected leveling out of energy prices, and easing pressures on resource utilization. However, further increases in energy and commodity prices, as well as other factors, could put upward pressure on inflation. Therefore, it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters. However, upward pressure on inflation could result from several factors, including further increases in energy, commodity, and other import prices. Therefore, it will be necessary to continue to monitor inflation developments carefully.	The Committee expects inflation to moderate in coming quarters. However, upward pressure on inflation could result from several factors, including further increases in energy, commodity, and other import prices. Therefore, it will be necessary to continue to monitor inflation developments carefully.

	Alternative A	Alternative B	Alternative C	Alternative D
Assessment of Risk	<p>4. Today's policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth may well remain. The Committee will continue to assess the effects of financial and other developments on economic prospects to determine whether further action is needed to address those risks.</p>	<p>Today's policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.</p>	<p>Today's policy action, combined with those taken earlier, should help promote moderate growth over time. However, appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.</p>	<p>Appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.</p>

Appendix 6: Materials used by Mr. Parkinson, Mr. Gibson, Ms. Hirtle, Mr. Greenlee, and Mr. Angulo

Material for FOMC Briefing on Analysis of Policy Issues Raised by Financial Market Developments

January 30, 2008

Class I FOMC - Restricted-Controlled FR

Exhibit 1 Background and Overview

Top panel Background

- In response to a request from the G-7, the Financial Stability Forum (FSF) created a Working Group on Market and Institutional Resilience.
- The President's Working Group on Financial Markets is conducting its own analysis and will ensure coordination among U.S. members of the FSF working group.
- The Staff Umbrella Group is supporting Federal Reserve participation in the FSF working group and PWG's effort.

Middle panel Issues being analyzed by the staff

- Credit rating agencies
- Investor practices
- Bank risk management
- Bank regulatory policy
- Counterparty risk management and hedge funds
- OTC derivatives market infrastructure
- Fed's liquidity tools
- Tri-party repos

- Supervisory and regulatory structure

Bottom panel

Overview of today's briefing

- Three presentations
 1. A diagnosis of underlying reasons why losses on U.S subprime mortgages triggered a global financial crisis.
 2. An analysis of issues relating to credit rating agencies and investor practices with respect to the use of credit ratings.
 3. An analysis of risk management weaknesses at large global financial services organizations and the extent to which bank regulatory policies contributed to, or failed to mitigate, those weaknesses.

Exhibit 2: Diagnosis

Subprime Mortgages and Securitization Markets

Top-left panel

Subprime mortgage delinquency rates

A line chart shows two series, delinquency rates for subprime fixed-rate and variable-rate mortgages, on a monthly basis from October 2000 through November 2007. The fixed-rate curve begins at about 6 percent, generally increases to about 9 percent by late 2002, generally decreases to nearly 5 percent by mid-2005, remains at about that level through mid-2007, then increases to about 7.5 percent by the end of the period. The variable-rate curve begins at about 8 percent, generally increases to about 11 percent by early 2002, generally decreases to about 6 percent by mid-2005, then generally increases to about 21 percent by the end of the period.

Note. Percent of loans 90 or more days past due or in foreclosure. Covers first liens only.

Source. First American LoanPerformance.

Top-right panel

ABX prices

A line chart shows two series, 2006:H2 vintage AAA and BBB-, on a daily basis from mid-January 2007 through late January 2008. Unit is percent of par.

The AAA curve begins near 100 percent, remains almost constant through early July 2007, generally decreases to about 87 percent by early August, and generally increases to about 94 percent by early September. It remains at about that level through mid-October, then with greater volatility decreases to about 70 percent by late November. The curves then fluctuates between about 68 and 80 percent through the remainder of the period, ending at about 75 percent.

The BBB- curve begins near 97 percent, generally decreases to almost 60 percent by late February 2007, fluctuates around 70 percent through late May, then generally decreases to about 13 percent by the end of the period.

Source. Markit.

Middle-left panel

ABS CDO issuance

A stacked bar chart. Approximate values and totals are as follows.

Monthly Rate

Billions of dollars

Period	High grade	Mezzanine	Total
2004	3.6	1.6	5.2
2005	4.4	2.7	7.1
2006	10.5	4.9	15.4
2007:H1	12.8	5.7	18.6
2007:Q3	2.9	1.7	4.7
2007:Q4	0.0	0.5	0.5

There was no issuance through January 26th [2008].

Source. JPMorgan.

Middle-right panel

Typical ABS CDO structure*

	High Grade	Mezzanine
	- percent -	
Super Senior	88	62
AAA	5	14
AA	3	8
A	2	6
BBB	1	6
Unrated	1	4

* At origination.

Percent of par value at origination. [Return to text](#)

Source. JPMorgan.

Bottom-left panel

ABS CDOs downgraded or placed on watch*

	High Grade	Mezzanine
	- percent -	
AAA	45	63
AA	87	81
A	77	87
BBB	77	91
BB	62	80

* Percent of total issued in 2007, as of January 22, 2008. [Return to text](#)

Source. JPMorgan.

Bottom-right panel

Gross issuance of non-agency RMBS

A stacked bar chart. Approximate values and totals are as follows.

Monthly rate

Billions of dollars

Period	Prime jumbo	Subprime	Alt-A	Total
2005	23	39	28	90
2006	17	37	31	86
2007:H1	19	27	33	80
2007:Q3	13	9	13	35
2007:Q4	6	4	5	14

Source. Inside Mortgage Finance MBS database, Deutsche Bank.

Exhibit 3: Diagnosis

Leveraged Loans and ABCP

Top-left panel

LCDS versus pipeline

A line chart plots two series, leveraged pipeline* (\$ billion) and LCDS** (basis points), on a weekly basis.

The leveraged pipeline curve begins in early January 2006 at about \$60 billion, fluctuates around 55 through July, declines to about 35 in August, then generally increases to about 160 by February 2007. It declines to less than 90 by the end of March, then rapidly increases to about 250 by mid-July. The curve stays near that level through the end of September, generally declines to a little more than 150 by the end of the year, and increases to about \$170 billion by late January 2008.

The LCDS curve begins in early August 2006 at about 135 basis points, generally decreases to nearly 70 by late February 2007, increases to about 110 by early April, and levels out around 100 by mid-June. It then increases sharply to about 260 by the beginning of August, decreases to about 185 by mid-October, then resumes its upward trend to about 280 by late November, and to about 335 basis points by late January 2008.

Although the two curves often move in opposition to one another, they share a marked general increase between August 2006 and August 2007.

* Amount of leveraged lending committed but unfunded. [Return to text](#)

** Average of spreads on liquid loan CDS. [Return to text](#)

Top-right panel

Funded CLO issuance

Bar chart. Approximate values are as follows.

Monthly Rate

\$ billions

Period Funded CLO issuance

Period	Funded CLO issuance
2001	1.1
2002	1.4
2003	1.9
2004	3.0
2005	5.3
2006	9.1
2007:H1	10.1
2007:Q3	7.6
2007:Q4	4.6

There was no issuance through January 26th [2008].

Source. JPMorgan.

Bottom-left panel

U.S. ABCP outstanding since 2004

A line chart shows two series, total U.S. ABCP outstanding since 2004, and multi-seller U.S. ABCP outstanding since 2004, on a monthly basis from January 2004 through January 2008. Unit is billions of dollars.

The total curve begins at about \$640 billion, and remains at about that level until late 2004. It then increases fairly steadily to about 1,160 by mid-2007, and decreases more rapidly to about \$815 billion by the end of the period.

The multi-seller curve has a similar shape, though at a lower level. It begins at about \$280 billion, and remains at about that level until late 2004. It then increases fairly steadily to about 525 by mid-2007, and generally decreases to about \$470 billion by the end of the period.

Note. Not seasonally adjusted.

Source. DTC.

Bottom-right panel

Growth of U.S. ABCP outstanding by program type

	Jan 05-Jul 07	Jul 07-Dec 07	<i>Memo:</i> <i>Dec 07 Level</i>
	- percent -		- \$ billions -
Total	70	-30	816
Multi-Seller	82	-10	469
Single Seller	84	-72	36
Securities Arbitrage & Hybrid	55	-29	167
SIVs & CDOs	167	-67	42
Others	19	-30	102

Note. Not seasonally adjusted.

Exhibit 4: Diagnosis Impact on the Banking System

Top-left panel

Principal sources of exposure to financial stress

- Leveraged loan commitments
- Sponsorship of ABCP programs
- Retention of exposures from underwriting ABS CDOs

Top-right panel

Leading arrangers of leveraged loans*

	Market share - percent -
1. JPMorgan	20.4
2. Bank of America	15.5
3. Citigroup	10.4
4. Credit Suisse	8.8
5. Deutsche Bank	7.1
6. Goldman Sachs	4.9
7. Wachovia	4.6
8. Lehman	3.8
9. Merrill Lynch	3.4
10. General Electric	2.8

Source. Reuters LPC.

* Market shares are an average over 2005, 2006 and 2007:H1 [Return to text](#)

Middle-left panel

Leading bank sponsors of global securities-related ABCP

	Total ABCP*	
	\$ bil	Pct of Total Assets
1. HBOS	42	4.3
2. HSBC	33	2.1
3. Fortis	26	2.9
4. Citigroup	26	1.6
Memo:		
20. State Street	4	4.2
23. Zions	4	9.2

* As of June 30, 2007 [Return to table](#)

Middle-right panel

Leading underwriters of U.S. ABS CDOs

Billions of Dollars

	Issuance* (2006-2007)	Losses** (H2:2007)	Exposures** (12/31/07)
1. Merrill Lynch	76	18	5
2. Citigroup	58	18	30
3. UBS	43	20	17
4. Barclays	29	2	8
Memo:			
10. BoA	17	7	8
12. Wachovia	10	1	1
18. JPMorgan	3	1	0

* Source. JPMorgan [Return to table](#)

** Staff estimates. [Return to table](#)

Bottom-left panel

Total risk-based capital ratios of largest U.S. BHCs

	Q2	Q3	Q4
- percent -			
Citigroup	11.2	10.6	10.9
JPMorgan	12.0	12.5	12.6
Bank of America	12.1	11.9	11.0
Wachovia	11.5	10.8	11.5

Bottom-right panel

Credit default swap spreads

A line chart shows four series, "bank index" credit default swap spreads, and credit default swap spreads for JPMorgan, Citigroup, and Bank of America, on a daily basis from January 2007 through January 2008. Unit is basis points.

The bank index series is nearly constant between January 2007 and July 2007, only varying ± 6 basis points from the average. The series increases by 15 basis points by early August 2007, and remains around this value until mid-November, where it climbs another 20 basis points. The series peaks in mid-January 2008 at 6 times its initial value, and falls by about 7 basis points before the meeting.

The JPMorgan series is nearly constant between January 2007 and July 2007, only varying ± 6 basis points from the average. The spread increases by 40 basis points by early August, then drops by 20 basis points by mid-October, and rises again by another 30 basis points by mid-November. The series hits a max in late January at over 5 times its initial value, but falls by 15 basis points in the 2 weeks before the meeting.

The Citigroup series is nearly constant between January 2007 and June 2007, only varying ± 5 basis

points from the average. The spread increases by 45 basis points by mid-August, then drops by 30 basis points by mid-October, and rises again by another 75 basis points by late November. The series hits a max in late January at over 11 times its initial value, but falls by 16 basis points in the 2 weeks before the meeting.

The Bank of America series is nearly constant between January 2007 and July 2007, only varying ± 5 basis points from the average. The spread increases by 35 basis points by mid-August, then drops by 20 basis points by mid-October, and rises again by another 45 basis points by late November. The series hits a max in late January at over 10 times its initial value.

Source. Markit.

Exhibit 5

Where did Credit Rating Agencies Play a Role in the Crisis?

Top-left panel

Key points

1. Credit rating agencies are one of the weak links (though not the only one).
2. The way that some investors use credit ratings for their own risk management has not kept up with financial innovations.

Top-right panel

Road map

1. Role of rating agencies in the financial crisis.
2. Make recommendations on rating agency practices.
3. Link up with investor issues.

Middle-top panel

Subprime RMBS

1. Rating agencies got it wrong.
2. Rating agencies relied too much on historical data to estimate:
 - how severe a housing downturn could become.
 - how poorly subprime loans would perform when house prices fell.
 - whether the originator mattered.
 - whether refinancing would dry up.
3. No evidence that conflicts of interest had an impact on ratings.

Middle-bottom panel

ABS CDOs

1. Rating agencies got it wrong.
2. Rating models were crude, because rating agencies:
 - used corporate CDO models to rate ABS CDOs.
 - had no data on correlation of defaults across ABS.
 - used ratings as the main measure of quality of subprime RMBS.
 - only did limited, ad hoc analysis of the timing of cash flows.
3. Investors did not understand that structured finance securities have more systematic risk and less idiosyncratic risk than corporate securities.

Bottom panel

SIVs

1. Rating agencies got it wrong.
2. Rating model for SIVs relied on a rapid liquidation of assets.
3. Even SIVs with no subprime exposures cannot roll over CP.

Exhibit 6

Recommendations on Rating Agency Practices

Top panel

Six recommendations aimed at structured finance ratings

1. Differentiate structured finance ratings from corporate ratings by providing additional measures of risk or leverage.
2. Convey a rating's uncertainty in an understandable way.
3. More transparency for structured finance ratings.
4. Be conservative when rating new or evolving asset classes.
5. Enhance the rating frameworks for structured products.
6. Regulators should differentiate better between corporate and structured finance ratings.

Exhibit 7

Investor Practices

Top panel

Approach

- Public pension funds are an informative example of how investors use credit ratings.
 - Limited financial expertise in some cases.
 - High portion of funds use credit ratings in investment guidelines.
 - Significant public information on their activities.
- We gathered information on investment practices and fund governance for 11 funds, ranging from \$250 billion in assets (CALPers) to 6 with \$6 to \$11 billion.

Middle panel

Key conclusions

- Funds have developed workable solutions to address inexperience or lack of financial sophistication, including hiring professional investment managers and investment consultants.
- The mandates guiding investment managers have not always kept pace with the growth of structured credit markets. These mandates:
 - Require managers to meet or exceed returns on a benchmark index or of a peer group of investment managers.
 - Constrain the risk the managers may assume.
- Credit ratings play an important role in these risk constraints.
 - However, few of the funds we profiled made significant distinctions between ratings on structured credit and on other securities.

- This provides scope for investment managers to move into structured credit to generate high returns, without raising warning signals about additional risk.
 - Not a "naive" use of credit ratings by the investment managers.
 - Instead, a previously effective mechanism used by fund boards falling out-of-date.

Bottom panel

Recommendations

1. The pension fund industry and other investors should re-evaluate the use of credit ratings in investment mandates.
 - Investment mandates should acknowledge differences in risk, return and correlation across instruments, rather than rely on generic credit ratings.
2. Investors should ensure that investment consultants have independent views of the quality and adequacy of the ratings for the types of positions in the investors' portfolios.

Exhibit 8

Observations on Risk Management Practices During the Recent Market Turbulence

Top-left panel

Senior supervisors group

- Commission Bancaire (France)
- Federal Financial Supervisory Authority (Germany)
- Swiss Federal Banking Commission (Switzerland)
- Financial Supervisory Authority (UK)
- Office of the Comptroller of the Currency
- Securities and Exchange Commission
- Federal Reserve System

Top-right panel

Firms interviewed

- Bank of America
- Citigroup
- JP Morgan Chase
- Merrill Lynch
- Goldman Sachs
- Barclays
- HSBC
- BNP Paribas
- Deutsche Bank
- Credit Suisse
- UBS

Bottom panel

Firms' overall performance

- Most firms, while affected by market developments, generally avoided significant losses.
- Most firms' risk management processes worked as intended.

- Some firms recognized the emerging additional risks and took deliberate actions to limit or mitigate them.
- Other firms recognized the additional risks and accepted them.
- Still other firms did not fully recognize the risks in time to mitigate them.
- Risk management practices varied by firm and by strategy, as did the range of outcomes.
- Primary risk management weaknesses observed are not new.

Exhibit 9

Observations on Risk Management Practices During the Recent Market Turbulence

Top panel

Four factors differentiated performance:

- The effectiveness of senior management oversight of balance sheet, liquidity, and capital positions;
- The effectiveness of communications among senior management, business lines, and risk management functions;
- The sophistication, diversity and adaptability of risk measures utilized;
- The attention devoted to valuation issues.

Bottom panel

Effectiveness of senior management oversight of balance sheet, liquidity, and capital positions

- More Effective
 - More disciplined in measuring and limiting risks in advance of the crisis.
 - More agile in reducing exposures or hedging.
 - Focused on maintaining a strong balance sheet.
 - Established capital and liquidity buffers that included lack of access to the market for funding for a period of time.
 - Created and enforced internal pricing mechanisms, capital allocation methodologies, and limits.
- Less Effective
 - Not as focused on the overall strength of their balance sheet.
 - Operated with less of a liquidity and capital buffer.
 - More focused on earnings growth or defense of market leadership position.
 - Did not have limit structures that were consistently or effectively enforced.
 - Did not properly aggregate or monitor off balance sheet exposures.

Exhibit 10

Observations on Risk Management Practices During the Recent Market Turbulence

Top panel

Effectiveness of communications among senior management, business lines, and risk management functions

- More Effective
 - Emphasized a comprehensive, firm-wide consolidated assessment of risk.

- Well established processes for routine discussion of current and emerging risks.
- Collectively made decisions about the firm's overall risk appetite, exposures, and risk mitigation strategies.
- Effectively leveraged the assessments of risks from one business line to consider how exposures may affect other businesses.
- More timely and well-informed perspective.
- Implemented plans for reducing exposures while it was still practical and more cost effective.
- Less Effective
 - Did not effectively share information across business lines on emerging risks.
 - Comparatively slower in taking actions to mitigate exposures.
 - Each business line had to assess and consider emerging risks on their own.

Bottom panel

The sophistication, diversity, and adaptability of risk measures utilized

- More Effective
 - Used a wide range of risk measures and analytical tools.
 - Used a combination of different risk measures and scenario analysis.
 - Committed more resources to risk management and management information systems.
 - More timely and scalable management information systems.
- Less Effective
 - Too dependent on a single quantitative measurement.
 - Did not utilize scenario analysis in their decision making.
 - Management information systems not as scalable.
 - Need to develop a number of ad hoc reports.

Exhibit 11

Observations on Risk Management Practices During the Recent Market Turbulence

Top panel

Attention devoted to valuation issues

- More Effective
 - More disciplined in how they valued the holdings of complex or potentially illiquid securities.
 - Invested in the development of pricing models and staff with specialized expertise.
 - Less reliant on external ratings.
 - Emphasized mark-to-market discipline.
- Less Effective
 - Did not have key valuation models in place prior to the market disruption.
 - Relied heavily on third-party views of risks.
 - More narrow view of the risks associated with their CDO business.
 - Did not actively seek market valuation information.

Bottom panel

Supervisory response

- Address risk management deficiencies at each company through the supervisory process.

- Re-emphasize the importance of strong independent risk management.
- Complete the work already underway within the Basel Committee on Bank Supervision to update liquidity risk management guidance.
- Review existing guidance.
- Develop on an interagency basis guidance related to the effective management of the originate-to-distribute model.

Exhibit 12

Regulatory Policy

Top panel

The question

- To what extent did regulatory incentives contribute to or fail to mitigate weaknesses exposed by the recent turmoil?
 - Regulatory capital requirements.
 - Financial reporting requirements.

Middle panel

Conclusions

- For banks, regulatory capital incentives are much more important than financial reporting incentives.
- The current regulatory capital framework is not neutral to how banks structure risk positions.
- Although not a significant driver of bank behavior, financial reporting issues, particularly disclosure practices, have been a factor in how the turmoil is unfolding.

Bottom panel

Basel 2 and related improvements

1. Capital charges for most unused short-term credit and liquidity facilities have been increased.
2. Standards for holding capital against the default risk of complex, less liquid products in the trading book are being finalized.
3. A more risk-sensitive capital treatment for securitization exposures has been established.

Exhibit 13

Regulatory Policy (continued)

Top panel

Recommendations - regulatory capital

1. Reassess the treatment of certain securitizations in the Basel 2 Capital Framework.
2. Exercise supervisory oversight to ensure that banks sufficiently consider "reputational" risk and its implications for capital and liquidity buffers.
3. Rigorously assess banks' implementation of the Advanced Internal Ratings Based approach to Basel 2, including the conservatism of estimates of losses from defaults during a downturn ("downturn LGDs") and stress tests.

4. Explore ways to encourage the inclusion in the regulatory capital base of debt instruments that mandatorily convert into equity when a banking organization is under stress.

Middle panel

Recommendations - disclosure practices

1. Continue to push market participants to make timely and detailed disclosures about the size and composition of subprime-related exposures.
2. Sponsors and/or liquidity/credit enhancement providers to ABCP programs should disclose the distribution of assets underlying the programs by type, industry, and credit rating.
3. Sponsors should improve disclosures to investors in ABCP programs.

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