



## Filing Receipt

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919 Congress Ave., Suite 701  
Austin, TX 78701  
Tel 281-719-7127  
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**Kristen F. Yates**  
Senior Legal Counsel

August 17, 2022

Public Utility Commission of Texas  
Central Records  
1701 N. Congress Avenue, 7<sup>th</sup> Floor  
Austin, Texas 78711-3326

Re: Re: PUC Docket No. 53719, SOAH Docket No. 473-22-04394; *Application of Entergy Texas, Inc. for Authority to Change Rates*; ETI's Response to TIEC 1-46

To Whom it May Concern,

Entergy Texas, Inc. ("ETI") submits this letter explaining an E-Filing mistake in the filing of ETI's Response to Texas Industrial Energy Consumers' Request for Information - 1-46. This response mistakenly included a highly sensitive attachment with the publicly filed response. If possible, this response should be removed from the interchange immediately, and any copies of highly sensitive attachment (TP-53917-00TIE001-X046-001 (Appendix A1)) should be destroyed. ETI is filing a corrected copy of the response with the highly sensitive information removed from the public filing. This information will instead be available on the secure ShareFile site provided to the parties that have executed protective order certifications in this proceeding as a highly sensitive attachment (TP-53917-00TIE001-X046-001\_HSPM (Appendix A1)).

Thank you for your assistance in this matter. If you have any questions, please contact me at 281-719-7127.

Sincerely,

A handwritten signature in cursive script that reads "Kristen F. Yates".

Kristen F. Yates  
Senior Counsel  
Entergy, Texas Inc.

cc: Parties of Record

**SOAH DOCKET NO. 473-22-04394  
PUC DOCKET NO. 53719**

<b>APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES</b>	<b>§ § §</b>	<b>STATE OFFICE OF ADMINISTRATIVE HEARINGS</b>
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**RESPONSE OF ENTERGY TEXAS, INC.  
TO TIEC’S FIRST REQUEST FOR INFORMATION:  
TIEC 1: 1 THROUGH 49**

Entergy Texas, Inc. (“ETI” or the “Company”) files its Response to TIEC’s First Request for Information. The response to such request is attached and is numbered as in the request. An additional copy is available for inspection at the Company’s office in Austin, Texas.

ETI believes the foregoing response is correct and complete as of the time of the response, but the Company will supplement, correct or complete the response if it becomes aware that the response is no longer true and complete, and the circumstance is such that failure to amend the answer is in substance misleading. The parties may treat this response as if it were filed under oath.

Respectfully submitted,

**Kristen Yates**  
Kristen Yates  
ENTERGY SERVICES, LLC  
919 Congress Avenue, Suite 701  
Austin, Texas 78701  
Office: (512) 487-3962  
Facsimile: (512) 487-3958

Attachments: **TIEC 1:1 THROUGH 49**

**CERTIFICATE OF SERVICE**

I certify that a copy of the foregoing Response of Entergy Texas, Inc. to TIEC’s First Request for Information has been sent by either hand delivery, electronic delivery, facsimile, overnight delivery, or U.S. Mail to the party that initiated this request in this docket on this the 15<sup>th</sup> day of August 2022.

**Kristen Yates**  
Kristen Yates

ENTERGY TEXAS, INC.  
PUBLIC UTILITY COMMISSION OF TEXAS  
DOCKET NO. 53719

Response of: Entergy Texas, Inc.

to the First Set of Data Requests

of Requesting Party: Texas Industrial Energy  
Consumers

Prepared By: Ann E. Bulkley, Jess K.  
Totten, Bobby R. Sperandeo, Allison P.  
Lofton

Sponsoring Witnesses: Ann E. Bulkley,  
Jess K. Totten, Bobby R. Sperandeo,  
Allison P. Lofton

Beginning Sequence No. LC65

Ending Sequence No. LC65

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Question No.: TIEC 1-1

Part No.:

Addendum:

Question:

To the extent not already provided, please provide all schedules, exhibits, tables, figures and supporting workpapers in electronic format with all formulas intact supporting the testimonies of ETI witnesses Ann E. Bulkley, Jess K. Totten, Bobby R. Sperandeo and Allison P. Lofton. This is an ongoing request for all subsequent testimonies.

---

Response:

All schedules, exhibits, tables, figures, and supporting workpapers supporting the Direct Testimonies of Ann E. Bulkley, Jess K. Totten, Bobby R. Sperandeo, Jr., and Allison P. Lofton have been provided with the Company's Application filing including in electronic format with formulas intact to the extent available.

ENTERGY TEXAS, INC.  
PUBLIC UTILITY COMMISSION OF TEXAS  
DOCKET NO. 53719

Response of: Entergy Texas, Inc.  
to the First Set of Data Requests  
of Requesting Party: Texas Industrial Energy  
Consumers

Prepared By: Counsel  
Sponsoring Witness: N/A  
Beginning Sequence No. LC50

Ending Sequence No. LC50

---

Question No.: TIEC 1-2

Part No.:

Addendum:

Question:

On an electronic spreadsheet with all formulas intact, please provide all Schedules of ETI's filing, where applicable.

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Response:

Please see the schedules that were provided in electronic format included on the ShareFile site provided to parties to this proceeding.

Entergy Texas, Inc.  
PUBLIC UTILITY COMMISSION OF TEXAS  
DOCKET NO. 53719

Response of: Entergy Texas, Inc.

to the First Set of Data Requests

of Requesting Party: Texas Industrial Energy  
Consumers

Prepared By: Natalia Hernandez, Bobby  
R. Sperandeo, Jr.

Sponsoring Witness: Bobby R. Sperandeo,  
Jr.

Beginning Sequence No. LC51

Ending Sequence No. LC52

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Question No.: TIEC 1-3

Part No.:

Addendum:

Question:

Referring to Schedule K-6 of ETI's filing, on an electronic spreadsheet with all formulas intact, please provide all workpapers and data used to calculate the ratios shown on that schedule during the historical, test year, and the projected periods.

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Response:

Information included in the response contains highly sensitive protected ("highly sensitive") materials. Specifically, the responsive materials are protected pursuant to Texas Government Code Sections 552.101 and/or 552.110. Highly sensitive materials will be provided pursuant to the terms of the Protective Order in this docket.

Please see highly sensitive attachment (TP-53719-00TIE001-X003-001\_HSPM) for the historical support and highly sensitive attachment (TP-53719-00TIE001-X003-002\_HSPM) for the projected support. Highly sensitive materials have been included on the secure ShareFile site provided to the parties that have executed protective order certifications in this proceeding.

**DESIGNATION OF PROTECTED MATERIALS PURSUANT TO  
PARAGRAPH 4 OF DOCKET NO. 52487 PROTECTIVE ORDER**

The Response to this Request for Information includes Protected Materials within the meaning of the Protective Order in force in this Docket. Public Information Act exemptions applicable to this information include Tex. Gov't Code Sections 552.101 and/or 552.110. ETI asserts that this information is exempt from public disclosure under the Public Information Act and subject to treatment as Protected Materials because it concerns competitively sensitive commercial and/or financial information and/or information designated confidential by law.

Counsel for ETI has reviewed this information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials Designation.

Kristen F. Yates  
Entergy Services, LLC.

ENTERGY TEXAS, INC.  
PUBLIC UTILITY COMMISSION OF TEXAS  
DOCKET NO. 53719

Response of: Entergy Texas, Inc.

to the First Set of Data Requests

of Requesting Party: Texas Industrial Energy  
Consumers

Prepared By: Jess K. Totten, Ann E.  
Bulkley, Bobby R. Sperandeo, Allison P.  
Lofton

Sponsoring Witnesses: Jess K. Totten,  
Ann E. Bulkley, Bobby R. Sperandeo,  
Allison P. Lofton

Beginning Sequence No. LC58

Ending Sequence No. LC58

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Question No.: TIEC 1-4

Part No.:

Addendum:

Question:

Please provide complete copies of all publications and credit reports referenced or considered in forming opinions to be expressed in the testimonies of ETI witnesses Ann E. Bulkley, Jess K. Totten, Bobby R. Sperandeo and Allison P. Lofton. This is an ongoing request for all subsequent testimonies filed by these witnesses.

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Response:

Please see the attachment (TP-53719-00TIE001-X004-001) which is a web page cited in the Direct Testimony of Jess K. Totten and attachments (TP-53719-00TIE001-X004-002 through TP-53719-00TIE001-X004-042) for publications referenced or considered by Ann E. Bulkley in forming the opinions expressed in her Direct Testimony. See also the exhibits and workpapers provided with the Direct Testimony of Ann E. Bulkley, Jess K. Totten, Bobby R. Sperandeo, and Allison P. Lofton.



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### Congratulations to the 22nd Annual Citizens Awards Winners

For more than 20 years, the Citizens Awards have recognized purpose-driven businesses for their leadership in solving the world's biggest challenges. This year's winners demonstrate how the private sector is accelerating momentum for a more equitable and sustainable future.

#### Best Corporate Steward: Large Business



From contributing more than \$155 million to support pediatric cancer to implementing sustainable practices and prioritizing diversity, equity, and inclusion (DE&I) in the workplace, Aflac is driving positive change in communities and remains committed to the mantra that doing good is good business. Aflac's culture of compassion guided the company through the tumultuous year of 2020 and sparked innovation that furthered the company's impact in the areas of philanthropy, DE&I, and sustainability.

#### Best Corporate Steward: Small- and Middle-Market Business



A 40-year-old company founded on a shared-value concept of helping nonprofits leverage technology, Blackbaud has grown to serve the broader ecosystem of social good organizations and today has enables customers to raise, grant, and invest more than \$100 billion each year. Ninety-two percent of Blackbaud's employees volunteer, serving a combined 100,000 hours annually and demonstrating their commitment to community service.

#### Best Community Improvement Program



Liberty Mutual invests its financial strength and employee expertise in helping youth and young adult (YYA) homelessness become rare, brief, and non-recurring. The company has helped 674 young people exit to stable housing and 152 young people find transitional housing between 2018 and 2020. Since 2018, Liberty Mutual has committed \$13.9 million to YYA homelessness efforts in Boston.

#### Best Disaster Response and Community Resilience Program



As the COVID-19 pandemic worsened, GM recognized its unique supply chain relationships and harnessed its ability to quickly scale manufacturing. The company partnered with Ventec Life Systems to build more than 30,000 ventilators at its manufacturing facility; additionally, more than 5,000 employees volunteered to make and distribute more than 7 million masks across the country.

#### Best Economic Opportunity and Empowerment Program



Ensuring that struggling customers receive bill payment assistance from the Low Income Home Energy Assistance Program (LIHEAP) is a long-standing component of Entergy's poverty-relief efforts that gained momentum during the pandemic. Entergy helped more than 250,000 bills get paid with \$65.4 million in assistance, exceeding the goal by almost \$20 million and increasing bill payments by 26 percent over 2019.

#### Best Commitment to Education Program



Mastercard's Girls4Tech program leverages the company's expertise in payment technologies and cybersecurity to inspire girls around the world to become the tech leaders of tomorrow. Since its launch in 2014, Girls4Tech has become the world's largest STEM program for girls, spanning 44 countries. More than 6,000 Mastercard mentors have shown 1.6 million girls how their skills and strengths can lead them toward a variety of careers in STEM.

#### Best Health and Wellness Program



Bayer was the first pharmaceutical company to successfully implement Kits4Life for its U.S. clinical trial sites, a first-of-its kind program to enable donations of unused clinical trial supplies for humanitarian aid. This collaboration is strengthening healthcare delivery efforts by expanding distribution of supplies to under-resourced settings, as well as closing the healthcare gap worldwide, impacting thousands of lives. As a result of Bayer's and other sponsor efforts, more than 14,000 people around the world have benefitted from receiving these supplies.

#### Best Sustainability Program



Biogen's Healthy Climate, Healthy Lives™ is a \$250 million, 20-year commitment to eliminate fossil fuel dependence, engage employees and suppliers around shared climate goals, and advance the science and action on climate, health, and equity. Biogen is collaborating with leading institutions, such as Harvard, MIT, and the World Business Council on Sustainable Development, to help address the impact of the climate crisis on the health of vulnerable communities and create a more sustainable, equitable future.

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# U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others

June 25, 2018

Regulatory risk, what S&P Global Ratings calls "regulatory advantage" is a heavily weighted factor in its analysis of a regulated utility's business risk profile. Some recent developments are influencing our view of regulation in certain jurisdictions and the specific factors that we can use to determine the initial regulatory advantage when we are completing our credit analysis of each U.S. and Canadian regulated utility. In addition, because the U.S. and Canada have so many regulatory jurisdictions and numerous companies may operate in a single jurisdiction, we create assessments of the regulatory jurisdictions in U.S. and Canadian provinces that regulate the electric, gas, and water utilities that we rate. These provide starting points from which an analyst can begin to develop the initial regulatory advantage of a regulated utility or holding company with more than one regulated utility. For both determining the initial regulatory advantage of a rated entity and developing the assessment of a regulatory jurisdiction, we base our analysis on quantitative and qualitative factors, focusing on regulatory stability, tariff-setting procedures and design, financial stability, and regulatory independence and insulation. (See "Assessing U.S. Investor-Owned Utility Regulatory Environments," published Aug. 10, 2016, for more details on each category.)

## PRIMARY CREDIT ANALYST

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## Key Takeaways

- Regulatory risk is a heavily weighted factor in S&P Global Ratings' analysis of a regulated utility's business risk.
- Our assessments of U.S. and Canadian utility regulatory jurisdictions only differ in degree of credit supportiveness rather than in kind.
- We have reassessed our view of certain U.S. jurisdictions based on recent developments.
- The presence of utility regulation, no matter where in the spectrum of our assessments, strengthens the business risk profile and generally supports utility ratings.

## U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others

### Sorting Through Regulatory Jurisdictions In The U.S. And Canada

Below we provide our snapshot view of each regulatory jurisdiction in the U.S. and Canada that has the presence of a rated utility, or operations of a rated utility. We group the jurisdictions based on the factors we've discussed above and the collective opinions expressed in the regulatory advantage determinations made in rating committees for approximately 225 U.S. and 30 Canadian utilities we rate. We've updated our assessments of regulatory jurisdictions (see the table listing the jurisdictions alphabetically within each category, and the maps of the U.S. and Canada indicating our updated assessments of regulatory jurisdictions). We designed the category titles to indicate one other important point regarding utility regulation and its effect on ratings. For the purposes of this commentary, we denote all categories as "credit supportive". To one degree or another, all utility regulation sustains credit quality when compared with the rest of corporate and infrastructure ratings at S&P Global Ratings. The presence of regulators, no matter where in the spectrum of our assessments, reduces business risk and generally supports utility ratings.

To one degree or another, all utility regulation sustains credit quality when compared with the rest of corporate and infrastructure ratings at S&P Global Ratings.

### Assessing Regulatory Jurisdictions For Credit-Quality Supportiveness

Although we consider some jurisdictions "most credit supportive" it does not indicate that we think a commission in this category is a good regulator. Likewise, those jurisdictions we assess as only "credit supportive" does not indicate that we believe a commission is a bad regulator. We describe all jurisdictions as "credit supportive" and the designations only differ in degree rather than in kind. Finally, we designed the assessments to portray utility regulation in terms of its effect on credit quality (see table below).

#### Assessments Of U.S. And Canadian Regulatory Jurisdictions

Credit supportive	More credit supportive	Very credit supportive	Highly credit supportive	Most credit supportive
Hawaii	Arizona*	Alaska	Arkansas	Alabama
Mississippi	California*	Delaware	Georgia	Alberta
New Mexico*	Connecticut	Idaho	Indiana	British Columbia
Prince Edward Island	District of Columbia	Illinois	Kansas	Colorado
	Maryland	Missouri	Louisiana	Florida
	Montana	Nebraska	Maine	Iowa
	New Jersey	New Orleans	Massachusetts	Kentucky
	Oklahoma*	New York	Minnesota	Michigan
	South Carolina*	Ohio	Nevada	North Carolina
	Washington	Rhode Island	New Hampshire	Nova Scotia§
		South Dakota	Newfoundland & Labrador	Ontario
		Texas	North Dakota	Quebec
		West Virginia	Oregon	Wisconsin
			Pennsylvania	
			Tennessee	
			Texas RRC	
			Utah	

U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others

Assessments Of U.S. And Canadian Regulatory Jurisdictions (cont.)

Credit supportive	More credit supportive	Very credit supportive	Highly credit supportive	Most credit supportive
			Vermont	
			Virginia	
			Wyoming	

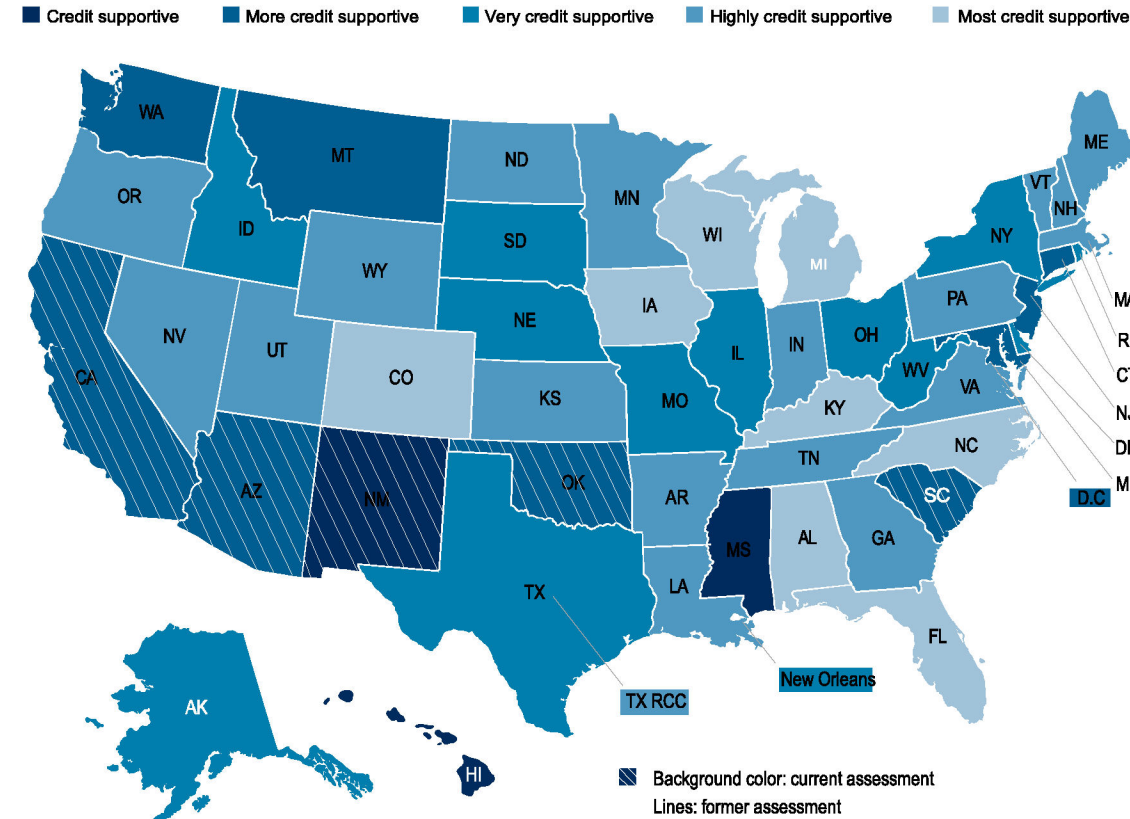
\*Assessment lowered §Assessment raised. Source: S&P Global Ratings.

Mapping the regulatory jurisdictions

For jurisdictions assessed in the maps below, we have delineated the degree of credit support using shades of blue indicating those we consider credit supportive to those we believe are the most credit supportive. (We currently don't have assessments on some of the Canadian provinces.) The different assessments offer some granularity in our thinking about these jurisdictions' approach to regulation. Sometimes it will be due to trends such as the troublesome trends in the regulatory jurisdictions of California and South Carolina. Often it simply designates a stable jurisdiction that is slightly better or worse than its closest peers from a credit-quality perspective. We will be publishing in-depth updates on selected jurisdictions to bring even more focus on how regulatory developments could affect credit quality across the North American regulatory landscape.

U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others

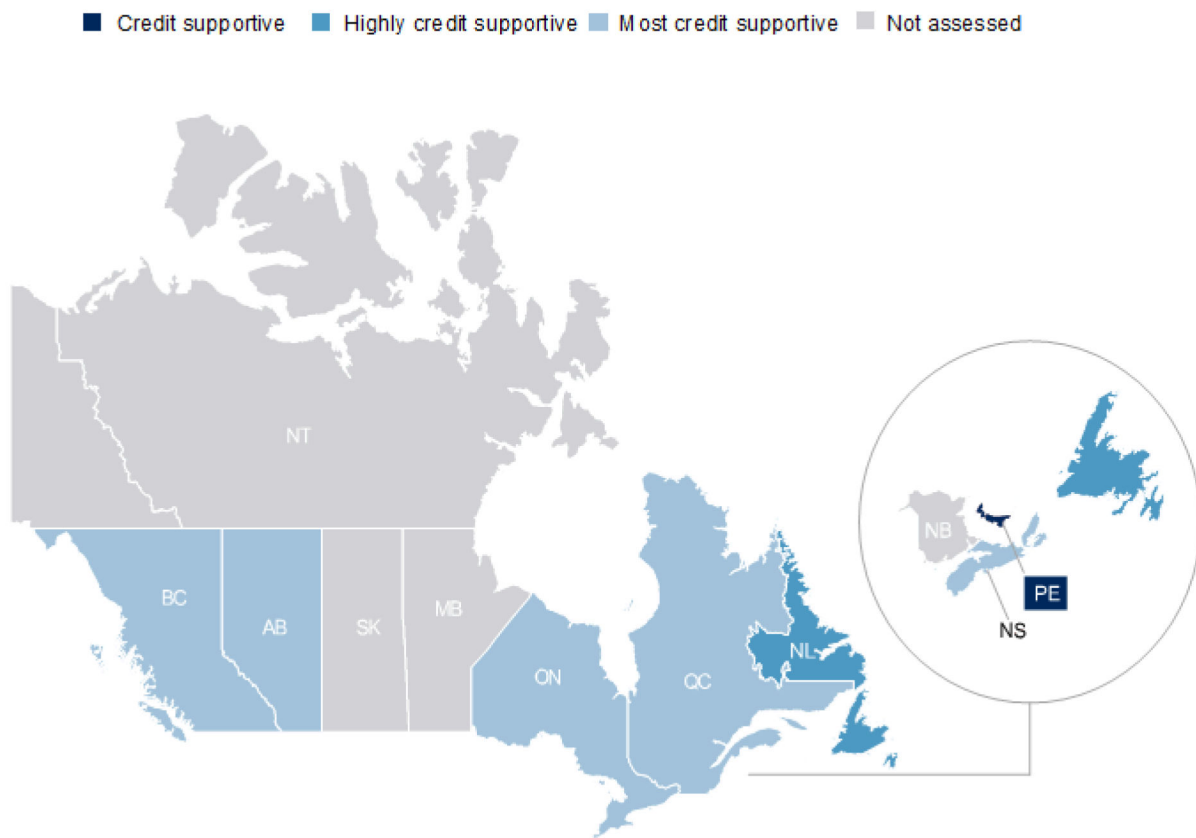
S&P Global Ratings U.S. Utility Regulatory Assessments



As of May 2018. Source: S&P Global Ratings.  
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## U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others

### S&P Global Ratings Canadian Utility Regulatory Assessments



As of May 2018. Note: Currently there are no jurisdictions considered in the "more credit supportive" or "very credit supportive" categories. Source: S&P Global Ratings. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

### Recent Regulatory Assessment Revisions

We periodically evaluate regulatory jurisdictions and may determine that there has been a shift in terms of support for credit quality. Based on recent developments, we have determined that the following jurisdictions have experienced shifts around credit supportiveness.

#### Arizona

We revised our regulatory jurisdiction assessment on Arizona to "more credit supportive" from "very credit supportive," reflecting our opinion that regulatory independence and insulation has weakened lately. The regulatory environment is politicized in part because the commissioners at the Arizona Corporation Commission are elected, diminishing, to some extent, the credit supportiveness. Lately there has been increased leadership turnover at the commission as

## **U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others**

recently evidenced when the chairman of the commission left for the U.S. Department of Energy. In addition, in our view outside groups have asserted significant political pressure in regulatory proceedings.

### **California**

We revised our regulatory jurisdiction assessment on California to "more credit supportive" from "highly credit supportive" because financial stability has weakened in the state. Over 20 wildfires in regulated utility Pacific Gas & Electric Co.'s (PG&E) Northern California service territory collectively spread over 245,000 acres. Regarding these wildfires, California's inverse condemnation rule could impose liability on California utilities for wildfire damages involving their equipment even without a determination of negligence. PG&E, and potentially other utilities in the future, could be held responsible for billions of dollars because of inverse condemnation with recovery of these costs not clarified. California regulators ruled in November 2017 in a Sempra Energy subsidiary San Diego Gas & Electric Co. case that it cannot permit rate recovery of costs that were the result of imprudence or negligence by the utility even though in legal proceedings an inverse condemnation determination had been found. The inability to recover through rates the wildfire costs in excess of insurance proceeds is not credit supportive.

### **New Mexico**

We revised our regulatory jurisdiction assessment on New Mexico to "credit supportive" from "more credit supportive" to reflect a reduction in overall regulatory stability because of inconsistency in the regulatory framework in the state. In 2017, the New Mexico Public Regulatory Commission did not approve rate cases based on future test years despite the 2009 state law permitting the use of fully forecast test years in base-rate proceedings. In addition, the tariff-setting procedures that evaluates the ability of utilities to recover costs, including operating costs, and the disallowance of several capital investments weakens the overall credit supportiveness of the jurisdiction.

### **Oklahoma**

We revised our regulatory jurisdiction assessment on Oklahoma to "more credit supportive" from "highly credit supportive," reflecting our opinion that there is reduced regulatory stability and less transparency of the regulatory framework. We've observed increased uncertainty in regulatory actions, which lowers the predictability of cash flow support of higher expenses, including depreciation expense, and a lag in processing rate cases. On the tax reform front, the state has been aggressive, including a request from the Oklahoma Attorney General for utilities to refund changes related to the tax reform.

### **South Carolina**

Finally, we revised our regulatory jurisdiction assessment on South Carolina to "more credit supportive" from "most credit-supportive," reflecting our opinion that the political and regulatory framework is less transparent, less predictable, and has not been consistent with regard to historical actions. The construction cancellation of V.C. Summer nuclear units 2 and 3 resulted in reduced regulatory stability and less consistency. Regulatory independence has been eroded in South Carolina since the state legislature introduced legislation that could jeopardize existing cost recovery around the cancelled Summer units and the governor has publicly supported a rate

**U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others**

reduction related to current cost recovery of already incurred Summer construction costs.

**Related Criteria And Research**

**Related Criteria**

- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013

**Related Research**

- Assessing U.S. Investor-Owned Utility Regulatory Environments, Aug. 10, 2016

Only a rating committee may determine a rating action and this report does not constitute a rating action.

**U.S. And Canadian Regulatory Jurisdictions Support Utilities' Credit Quality--But Some More So Than Others**

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## Markets

# Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks

By Justina Lee

March 11, 2021, 10:08 AM EST

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► Investors fear sector has morphed into a big bet on low rates

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► Yet history shows tech's link with bonds is far more complex

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Don't fear Treasury yields killing off the stock market's golden goose just yet.

As the Nasdaq 100 Index recovers from a \$1.5 trillion rout, there's good reason to think technology shares can defy machinations in U.S. bonds.

Studies from Deutsche Bank AG and Goldman Sachs Group Inc. show the world's biggest equity sector has a fickle relationship with Treasuries, if it has one at all. Quant powerhouse AQR Capital Management has found little evidence that yields drive how expensive megacaps trade relative to their cheaper counterparts.

And of course, secular economic trends have been powering the likes of Facebook Inc. and Amazon.com Inc. for years now -- when benchmark rates were far higher than current levels.

All that makes the Treasury-stock link more complex than it seems.

## Low-Rate Trade?

Higher yields have made tech large-caps an underperformer lately



4.2.

Mar

Jun

Sep

Dec

Mar

Jun

Sep

Dec

Mar

2019

2020

2021

Source: Bloomberg

Put another way, while the recent Treasury selloff has pummeled Big Tech, that doesn't mean bonds are a natural foe for a sector hitched to secular trends from 5G to automation.

"Many tech companies will continue to benefit for many years from very strong themes that will result in outsized earnings growth," said Terry Ewing, head of equities at Mediolanum International Funds, which oversees about \$54 billion. "The dilemma for portfolio managers running a balanced mandate is that actually the de-rating we've seen in growth stocks has put them at a much more attractive level."

Ewing's funds began offloading a handful of tech stocks for cyclical names from the third quarter, just as rising expectations for an economic re-opening pushed yields higher in the world's biggest bond market.

As the U.S. yield curve steepened last month, \$1.5 trillion of value was wiped off tech shares, while assets deemed less sensitive to duration risk like value stocks -- banks, oil drillers and commodity producers -- surged.

The Nasdaq 100 jumped nearly 2% on Thursday morning in New York, as 10-year Treasury yields traded little changed around 1.5%.

## Quant Perspective

From the perspective of quants who dissect equities by their factors, there are a few ways to explain the last month's rotation.

Technology companies are typically dubbed growth stocks thanks to their strong expected profit expansion, often far into the future. That's in contrast to value shares, which trade with lower multiples due to their riskier businesses.

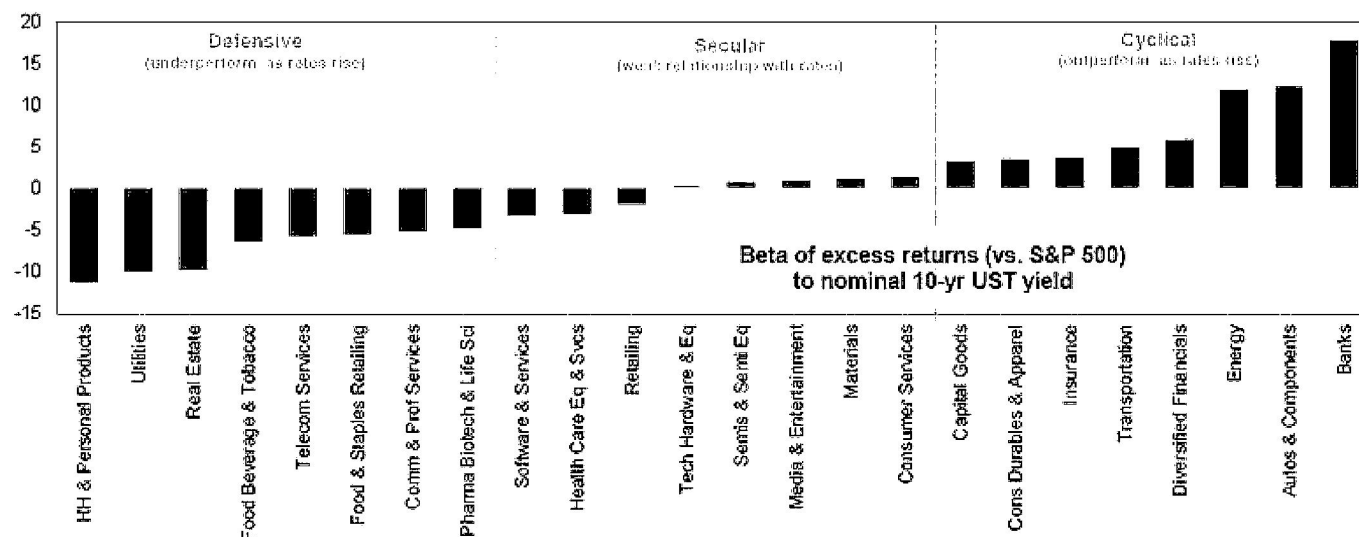
When rates fall, economic growth is typically muted. That makes a company like Netflix Inc. look like a safer bet since it's riding the secular trend of streaming rather than ups and downs of the business cycle. Meanwhile the likes of Exxon Mobil Corp., tied to oil demand, look riskier.

In the post-crisis era of monetary easing, that's how the valuation dynamic played out: Netflix's long-term earnings were discounted at lower rates -- making it more expensive.

Now, opposing forces are in play. Rising yields are making the near-term cash flows of cheaper equities like Exxon Mobil more attractive.

"Sooner or later we will see pretty decent economic growth," said Georg Elsaesser, a quant portfolio manager at Invesco. "I would be more than surprised if that wouldn't be favorable for high-risk factors like value."

**Exhibit 12: Sensitivity of industry group relative returns to nominal 10-year UST yield**  
beta calculated using monthly changes during last 5 years



Source: FactSet, Goldman Sachs Global Investment Research

Source: Goldman Sachs

Yet all these relationships are volatile -- and have far less explanatory power than commonly asserted.

Interest-rate changes only explain 19% of the returns posted by the growth factor versus value since 2018, Goldman Sachs strategists wrote in a note last month. That compares with 54% for cyclicals versus defensive.

In other words, industry-specific trends, not bonds, seem to be driving this tech-heavy part of the market.

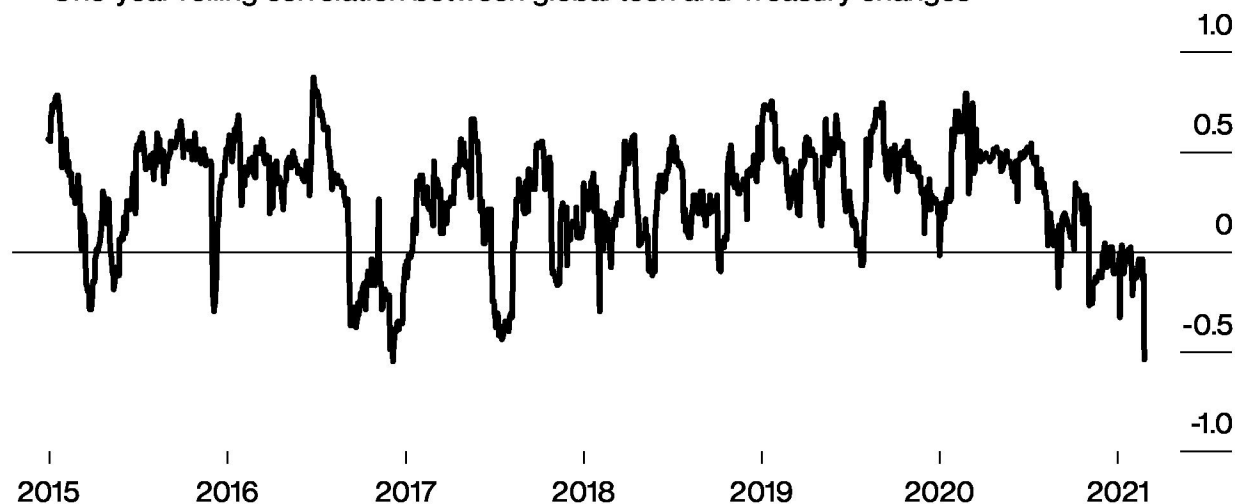
Similarly Deutsche Bank's quants find a zero beta, or sensitivity, between bonds and tech since 2015. In contrast, financials and energy had the most positive links with yields, and utilities and real estate the most negative.

According to Andreas Farmakas, a quantitative strategist at Deutsche Bank, this shows how the tech sector and Treasuries lack a direct and consistent link. In fact, these stocks in the past often rose with rates, with the latter seen as a sign of economic strength that could benefit corporate earnings.

### It's Complicated

Tech stocks' relationship with Treasuries has been volatile in the short run

One-year rolling correlation between global tech and Treasury changes

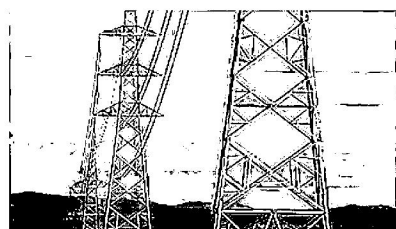


Source: Deutsche Bank

Data show one-year rolling correlation between daily moves in global tech and in 10-year Treasury yields

That's not to say there isn't reason to fret recent co-movements.

"Given the ties between technology, the overbought Covid trade and ultimately equity indices -- they take up a large chunk -- the correlation flipped," Farmakas said.



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In other words, bonds have lately turned from friend to foe -- and that's why quants like Invesco's Elsaesser are so reluctant to time markets.

For its part, AQR last year called the link between interest rates and value -- which involves a bet against growth -- “suspect” since it varies greatly depending on the period, the markets and measurements studied.

All this suggests that once the initial reflation frenzy settles, there’s no reason to fear bond yields will necessarily doom the tech trade. In fact Ewing at Mediolanum is eyeing some bargains in the months ahead.

“Somewhere along the second-half of this year going into next year it’ll be prudent for investors to start considering moving to higher-quality names rather than cyclical recovery,” he said.

---

## In this article

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**GOLDMAN SACHS GP**343.12 USD  $\Delta$  +1.10 +0.32%

DBK

**DEUTSCHE BANK-RG**10.52 EUR  $\nabla$  -0.20 -1.88%

CL1

**WTI Crude**65.45 USD/bbl.  $\Delta$  +1.01 +1.57%

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**EXXON MOBIL CORP**62.46 USD  $\Delta$  +0.69 +1.11%

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**FEDERAL RESERVE** press release

For release at 2 p.m. EDT

March 16, 2022

Indicators of economic activity and employment have continued to strengthen. Job gains have been strong in recent months, and the unemployment rate has declined substantially. Inflation remains elevated, reflecting supply and demand imbalances related to the pandemic, higher energy prices, and broader price pressures.

The invasion of Ukraine by Russia is causing tremendous human and economic hardship. The implications for the U.S. economy are highly uncertain, but in the near term the invasion and related events are likely to create additional upward pressure on inflation and weigh on economic activity.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. With appropriate firming in the stance of monetary policy, the Committee expects inflation to return to its 2 percent objective and the labor market to remain strong. In support of these goals, the Committee decided to raise the target range for the federal funds rate to 1/4 to 1/2 percent and anticipates that ongoing increases in the target range will be appropriate. In addition, the Committee expects to begin reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities at a coming meeting.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will take into account a wide range of information, including readings on public health, labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

(more)

For release at 2 p.m. EDT

March 16, 2022

-2-

Voting for the monetary policy action were Jerome H. Powell, Chair; John C. Williams, Vice Chair; Michelle W. Bowman; Lael Brainard; Esther L. George; Patrick Harker; Loretta J. Mester; and Christopher J. Waller. Voting against this action was James Bullard, who preferred at this meeting to raise the target range for the federal funds rate by 0.5 percentage point to 1/2 to 3/4 percent. Patrick Harker voted as an alternate member at this meeting.

-0-

For release at 2 p.m. EDT

March 16, 2022

### **Decisions Regarding Monetary Policy Implementation**

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its statement on March 16, 2022:

- The Board of Governors of the Federal Reserve System voted unanimously to raise the interest rate paid on reserve balances to 0.4 percent, effective March 17, 2022.
- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

“Effective March 17, 2022, the Federal Open Market Committee directs the Desk to:

- Undertake open market operations as necessary to maintain the federal funds rate in a target range of 1/4 to 1/2 percent.
  - Conduct overnight repurchase agreement operations with a minimum bid rate of 0.5 percent and with an aggregate operation limit of \$500 billion; the aggregate operation limit can be temporarily increased at the discretion of the Chair.
  - Conduct overnight reverse repurchase agreement operations at an offering rate of 0.3 percent and with a per-counterparty limit of \$160 billion per day; the per-counterparty limit can be temporarily increased at the discretion of the Chair.
  - Roll over at auction all principal payments from the Federal Reserve's holdings of Treasury securities and reinvest all principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities (MBS) in agency MBS.
  - Allow modest deviations from stated amounts for reinvestments, if needed for operational reasons.
  - Engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions.”
- In a related action, the Board of Governors of the Federal Reserve System voted unanimously to approve a 1/4 percentage point increase in the primary credit rate to 0.5 percent, effective March 17, 2022. In taking this action, the Board approved requests to establish that rate submitted by the Boards of Directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, and San Francisco.

(more)

For release at 2 p.m. EDT

March 16, 2022

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This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve's operational tools and approach used to implement monetary policy.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's [website](#).

**FEDERAL RESERVE** press release

For release at 2 p.m. EDT

May 4, 2022

Although overall economic activity edged down in the first quarter, household spending and business fixed investment remained strong. Job gains have been robust in recent months, and the unemployment rate has declined substantially. Inflation remains elevated, reflecting supply and demand imbalances related to the pandemic, higher energy prices, and broader price pressures.

The invasion of Ukraine by Russia is causing tremendous human and economic hardship. The implications for the U.S. economy are highly uncertain. The invasion and related events are creating additional upward pressure on inflation and are likely to weigh on economic activity. In addition, COVID-related lockdowns in China are likely to exacerbate supply chain disruptions. The Committee is highly attentive to inflation risks.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. With appropriate firming in the stance of monetary policy, the Committee expects inflation to return to its 2 percent objective and the labor market to remain strong. In support of these goals, the Committee decided to raise the target range for the federal funds rate to 3/4 to 1 percent and anticipates that ongoing increases in the target range will be appropriate. In addition, the Committee decided to begin reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities on June 1, as described in the Plans for Reducing the Size of the Federal Reserve's Balance Sheet that were issued in conjunction with this statement.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic

(more)

For release at 2 p.m. EDT

May 4, 2022

-2-

outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will take into account a wide range of information, including readings on public health, labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

Voting for the monetary policy action were Jerome H. Powell, Chair; John C. Williams, Vice Chair; Michelle W. Bowman; Lael Brainard; James Bullard; Esther L. George; Patrick Harker; Loretta J. Mester; and Christopher J. Waller. Patrick Harker voted as an alternate member at this meeting.

-0-

For release at 2 p.m. EDT

May 4, 2022

### **Decisions Regarding Monetary Policy Implementation**

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its statement on May 4, 2022:

- The Board of Governors of the Federal Reserve System voted unanimously to raise the interest rate paid on reserve balances to 0.9 percent, effective May 5, 2022.
- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

“Effective May 5, 2022, the Federal Open Market Committee directs the Desk to:

- Undertake open market operations as necessary to maintain the federal funds rate in a target range of 3/4 to 1 percent.
- Conduct overnight repurchase agreement operations with a minimum bid rate of 1.0 percent and with an aggregate operation limit of \$500 billion; the aggregate operation limit can be temporarily increased at the discretion of the Chair.
- Conduct overnight reverse repurchase agreement operations at an offering rate of 0.8 percent and with a per-counterparty limit of \$160 billion per day; the per-counterparty limit can be temporarily increased at the discretion of the Chair.
- Roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing in the calendar month of June that exceeds a monthly cap of \$30 billion. Redeem Treasury coupon securities up to this monthly cap and Treasury bills to the extent that coupon principal payments are less than the monthly cap.
- Reinvest into agency mortgage-backed securities (MBS) the amount of principal payments from the Federal Reserve's holdings of agency debt and agency MBS received in the calendar month of June that exceeds a monthly cap of \$17.5 billion.
- Allow modest deviations from stated amounts for reinvestments, if needed for operational reasons.
- Engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions.”

(more)

For release at 2 p.m. EDT

May 4, 2022

-2-

- In a related action, the Board of Governors of the Federal Reserve System voted unanimously to approve a 1/2 percentage point increase in the primary credit rate to 1 percent, effective May 5, 2022. In taking this action, the Board approved requests to establish that rate submitted by the Boards of Directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco.

This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve's operational tools and approach used to implement monetary policy.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's [website](#).

# Press Release

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May 04, 2022

## Plans for Reducing the Size of the Federal Reserve's Balance Sheet

For release at 2:00 p.m. EDT

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Consistent with the Principles for Reducing the Size of the Federal Reserve's Balance Sheet that were issued in January 2022, all Committee participants agreed to the following plans for significantly reducing the Federal Reserve's securities holdings.

- The Committee intends to reduce the Federal Reserve's securities holdings over time in a predictable manner primarily by adjusting the amounts reinvested of principal payments received from securities held in the System Open Market Account (SOMA). Beginning on June 1, principal payments from securities held in the SOMA will be reinvested to the extent that they exceed monthly caps.
  - For Treasury securities, the cap will initially be set at \$30 billion per month and after three months will increase to \$60 billion per month. The decline in holdings of Treasury securities under this monthly cap will include Treasury coupon securities and, to the extent that coupon maturities are less than the monthly cap, Treasury bills.
  - For agency debt and agency mortgage-backed securities, the cap will initially be set at \$17.5 billion per month and after three months will increase to \$35 billion per month.
- Over time, the Committee intends to maintain securities holdings in amounts needed to implement monetary policy efficiently and effectively in its ample reserves regime.
  - To ensure a smooth transition, the Committee intends to slow and then stop the decline in the size of the balance sheet when reserve balances are somewhat above the level it judges to be consistent with ample reserves.
  - Once balance sheet runoff has ceased, reserve balances will likely continue to decline for a time, reflecting growth in other Federal Reserve liabilities, until the Committee judges that reserve balances are at an ample level.
  - Thereafter, the Committee will manage securities holdings as needed to maintain ample reserves over time.
- The Committee is prepared to adjust any of the details of its approach to reducing the size of the balance sheet in light of economic and financial developments.

For media inquiries, e-mail [media@frb.gov](mailto:media@frb.gov) or call 202-452-2955

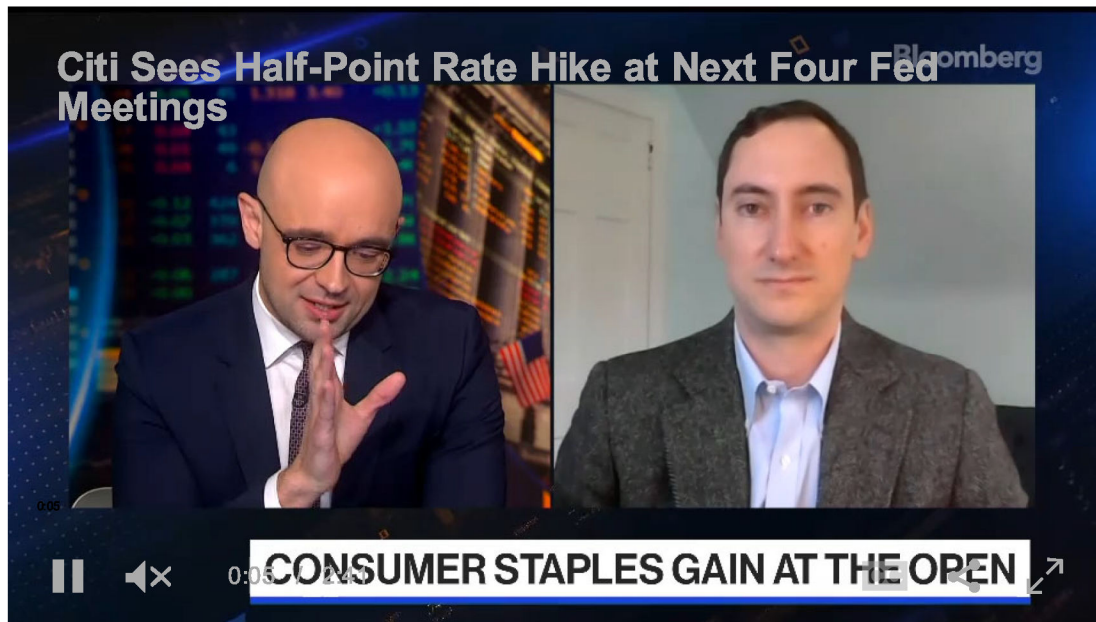
**Last Update: May 04, 2022**

## Markets

### Economics

# Wall Street Lifts Fed Forecasts; Citi Sees Four Half-Point Hikes

- Higher inflation could push Fed to act even more aggressively
- Citi expects benchmark rate to reach as high as 3.75% in 2023



Citi Sees Half-Point Rate Hike at Next Four Fed Meetings

By Scott Lanman

March 25, 2022 at 9:10 AM EDT *Updated on March 25, 2022 at 11:09 AM EDT*

Wall Street banks increasingly expect the Federal Reserve to raise interest rates more aggressively than policy makers are projecting, with Citigroup Inc. economists now seeing four straight half-point moves amid persistent inflation.

Citigroup now expects 2.75 percentage points of increases this year and more in 2023, taking the benchmark rate to a range of 3.5% to 3.75%, analysts led by Andrew Hollenhorst said in a research note Friday. That's well beyond the 2.8% level that central bankers expect to reach, based on the median of projections released last week.

"Risks to the terminal policy rate remain to the upside given the upside risk to inflation," the economists said. Citigroup's forecast was previously for 2 percentage points of hikes in 2022 and 31

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Fed's Williams Says a Half-Point Hike on the Table If Needed

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A Powell-Backed Yield Curve Gives Fed Cover to Go Max Hawkish

U.S. Consumer Sentiment Remains at Decade-Low on Inflation, War

Treasury yields surged on Friday after Citigroup's forecast, as traders increased bets on Fed rate hikes this year. They're now fully pricing in an additional 200 basis points by December.

New York Fed President John Williams said Friday that if the central bank needs to raise rates by a half point, it should -- reinforcing comments by Fed Chair Jerome Powell and other officials over the past week.

Bank of America Corp. economists also raised their Fed rate forecasts on Friday, saying they expect a quarter-point hike in May followed by two half-point moves, then quarter-point increases through May 2023 to reach a range of 3% to 3.25%.

The Fed's own projections showed quarter-point hikes at each of the remaining six meetings this year. Last week the central bank raised its benchmark by 25 basis points, after keeping it near zero for two years.

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"This is really a Fed now that is in inflation-fighting mode, and when you're in inflation-fighting mode, you need to get rates to a level that actually provides some restraint on the economy," Citi's <sup>037</sup>Hollenhorst

said in an interview on Bloomberg Television. “Once you’ve gone 50 in May, I don’t see what the argument is to not go 50 again in June” and at the subsequent gatherings in July and September, he said.

While Citigroup economists now expect half-point moves at the next four meetings followed by two quarter-point hikes in October and December, those final two could also be half-point increases should inflation remain above 5%, according to the note.

The Fed could opt for a larger 75 basis-point hike “if inflation unexpectedly accelerates or long-term inflation expectations rise rapidly” -- for example, if consumers surveyed by the University of Michigan anticipate price gains above 3.5% -- the analysts said.

Goldman Sachs Group Inc. economists have said they expect the Fed to raise interest rates by a half point at the next two meetings in May and June. That would be followed by a quarter point at the four remaining meetings in 2022, with three quarterly hikes in the first nine months of 2023.

– *With assistance by Rich Miller, and Jonathan Ferro*

**ECONOMIC FORECASTS**

# Inflation Will Ease, But Only Gradually This Year

Kiplinger's latest forecast on inflation

by: **David Payne** - May 11, 2022

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*Kiplinger's Economic Outlooks are written by the staff of our weekly Kiplinger Letter and are unavailable elsewhere. **Click here for a free issue** of The Kiplinger Letter or for more information.*

**Inflation eased a tad in April, edging down to an 8.3% rate over the past 12 months.** A moderate decline in gasoline prices helped, though these have since rebounded so far in May. Food price increases remain strong. Chicken and egg prices have been surging because a renewed bout of avian flu in the U.S. is causing flocks to be culled. As consumers travel more this year, hotel rates and airfares have jumped from depressed levels during the pandemic. Airfares have also been affected by the rise in jet fuel prices. The shipping crunch is pushing up home delivery costs. A glimmer of good news is the gradual decline of used car prices from their peak back in February.

**The inflation rate is expected to ease further over the rest of this year, but will likely end 2022 at a still-high rate of about 6.3%. In 2023 the rate should fall faster, down to 3.0% by the end of the year.** The higher cost of housing will keep inflation rates elevated for some time to come. Gasoline prices and heating costs are likely to stay high for a good while because of the war in Ukraine, but they may plateau instead of climbing more. The price of cars and trucks will also stay at a high level until the semiconductor shortage ends sometime next year. Continued spot shortages of various items will drive their price up, adding to the overall inflation rate. The latest is a shortage of baby formula.

**Continued inflationary pressures will likely spur the Federal Reserve to keep hiking short-term interest rates.** Short rates will likely reach 2.5% by the end of the year. 10-year Treasury note rates have already risen to 3.0% in anticipation of the Fed's hikes, but may edge up further.

**Print-ready Consumer Price Index chart**

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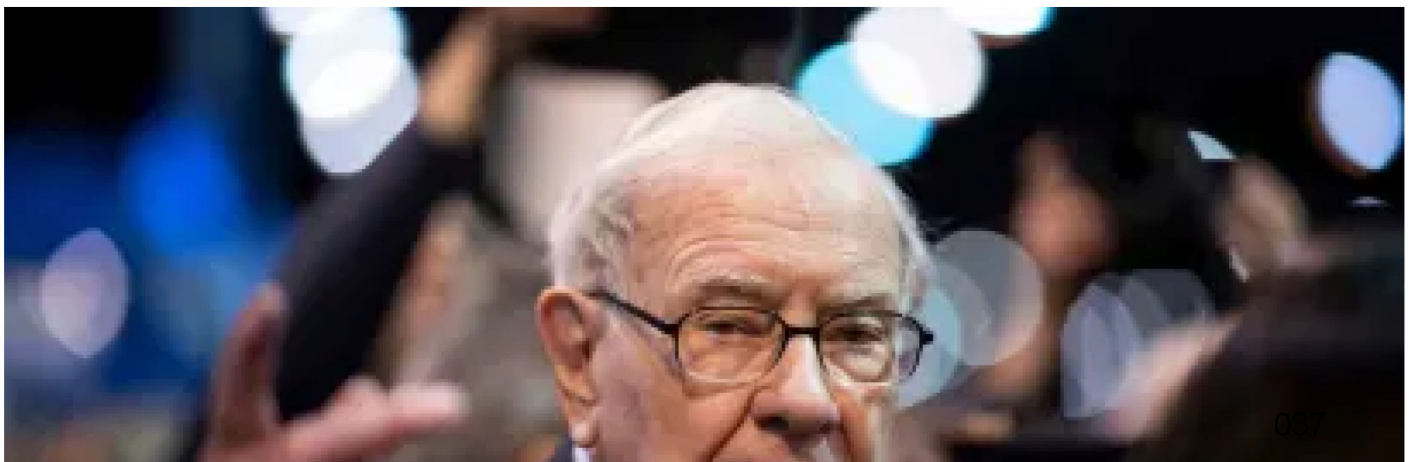
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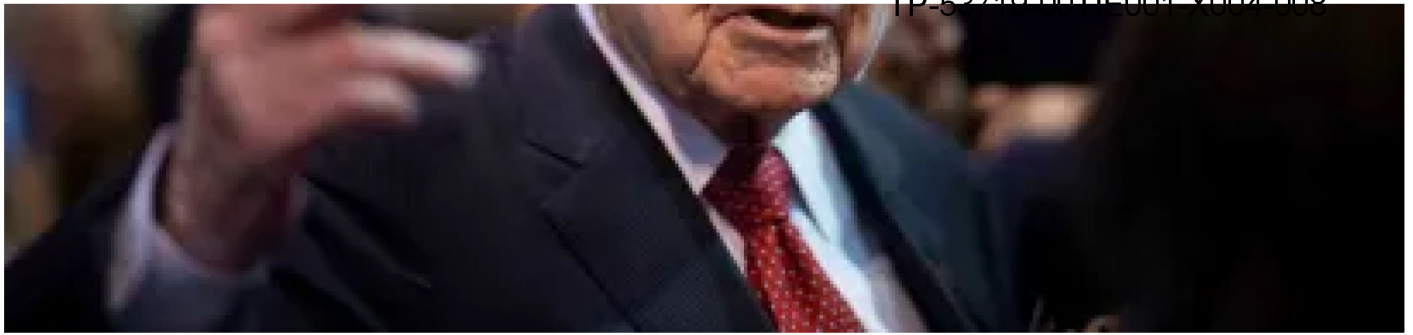
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# MOODY'S ANALYTICS

## WEEKLY MARKET OUTLOOK APRIL 14, 2022

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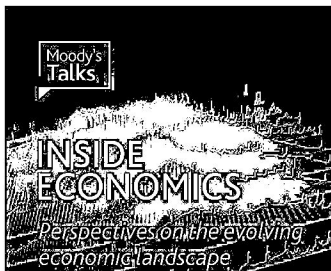
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# Fed Girds for Stagflation

The Federal Reserve's seat is red-hot with the labor market tight and inflation extremely high. The central bank is going to respond aggressively, and the March CPI increases the odds of a 50-basis point rate hike in the target range for the fed funds rate at the May meeting of the Federal Open Market Committee. Financial markets are close to fully pricing in three 50-basis point rate hikes this year.

### The state of affairs

The U.S. economy is barreling toward full employment, and unless job growth cools, trouble is brewing. Fed Chair Jerome Powell, before the March employment report, described the labor market as tight to an unhealthy level. His assessment likely didn't improve with the new data, as the unemployment rate continues to decline quickly and labor supply is only gradually increasing.

We assume a full-employment economy is one with a 3.5% unemployment rate, around a 62.5% labor force participation rate, and a prime-age employment-to-population ratio a little north of 80%. All of these conditions will be met by late this summer. The issue is the economy likely won't slow sufficiently enough to prevent the economy from overshooting full employment.

The labor market is only one of the Fed's problems; the other is alarmingly high inflation. The CPI increased 1.2% in March, leaving it up 8.5% on a year-ago basis. Energy provided a significant boost to inflation in March, adding 2.4 percentage points to year-over-year growth in the CPI, up from the 1.9-percentage point contribution in February.

Higher energy prices normally have a temporary effect on measures of U.S. inflation, and the Fed typically looks through it. This time is different for a couple of reasons. First, inflation is already running at its hottest since the early 1980s. Second, higher energy and food prices could boost inflation expectations even more.

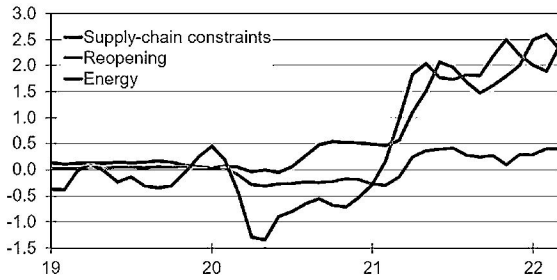
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## Supply Chains and Energy Boosting CPI

Contribution to y/y growth in U.S. CPI, ppt



Sources: BLS, Moody's Analytics

Arguably more important, at least for the conduct of monetary policy, is the increase in inflation expectations. Investors in Treasury Inflation-Protected Securities, or TIPS, who put their money where their mouth is when forecasting inflation, are anticipating CPI inflation of 3.25% per annum over the next five years, up about half a percentage point since the Russian invasion. Using TIPS and inflation swaps, the derivatives exchange ICE has also calculated investors' forecast of inflation a year from now over the subsequent five-year period, and it too has risen to a high 2.8%. The upper end of the Fed's target for CPI inflation is 2.5%. Oil and gasoline prices have historically played an outsized role in people's thinking about inflation and where it is headed, because it is such a visible price.

### Narrow path to soft landing

The odds of the Fed engineering a soft landing are declining. The Fed is behind the curve on inflation and the labor market is extremely tight. Therefore, tightening monetary policy to tame inflation without causing the unemployment rate to increase will be extremely difficult. There has never been an increase in the unemployment rate of more than 30 basis points, on a three-month moving average basis, that wasn't associated with a recession. Once the labor market overshoots full employment, it is extremely difficult for the Fed to pull off a soft landing.

Also, inflation expectations are climbing; inflation at 8.5% on a year-ago basis, compared with the 2.1% average growth in 2018 and 2019, is costing the average household an extra \$327 per month to purchase the same basket of goods and services as they did last year. The Fed could face a situation where higher consumer prices begin to weigh on consumer spending, reducing GDP growth. The pandemic has not repealed the law of demand, which states that, all else equal, a higher price of a good or service reduces the quantity demanded.

The Fed needs financial market conditions to tighten. If they don't, the Fed will have to shock and awe markets to achieve a desired level of tightening. A hint of what the Fed could do came in the minutes of the Federal Open Market

Committee's meeting, which signaled an aggressive amount of quantitative tightening.

We learned in past rounds of quantitative tightening that the Fed's balance sheet can be more powerful than increases in the target range for the fed funds rate in causing financial market conditions to tighten. The Fed may need to lean more on its balance sheet to calibrate the degree of quantitative tightening that is needed to tighten financial market conditions. This increases the risk of a policy error.

It is clear that this tightening cycle is going to be fast and furious, but will it work in taming inflation?

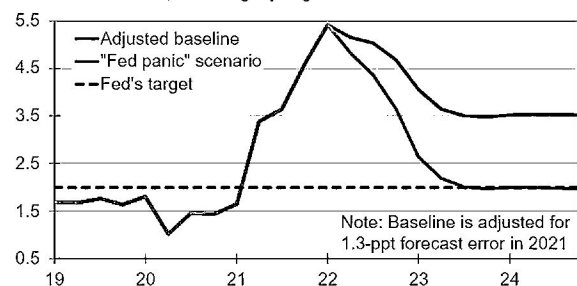
### Scenario description

To answer, we constructed a scenario in which the Fed hikes interest rates even higher than markets are pricing in for the next year. In this scenario, the Fed panics and does whatever it takes to bring year-over-year growth in the core personal consumption expenditure deflator back down to the central bank's 2% target by the end of 2023. The core PCE deflator is the Fed's preferred measure of inflation. If we adjust our baseline outlook for core PCE inflation by the average forecast error for the series in 2021, then the core PCE deflator will decelerate from a peak of 5.4% in the first quarter of 2022 to 3.5% by this time next year. The rationale for adding the forecast error to the baseline to create an alternative baseline forecast was that the forecast was consistently low for inflation and risks are heavily weighted that this occurs again.

While this moderation provides a modicum of relief to U.S. households, core PCE inflation would still be uncomfortably above target. We therefore pulled various levers in the Moody's Analytics U.S. macro model to simulate a scenario of a Fed panic that ultimately paves the way for on-target inflation by the end of 2023.

### Getting Inflation Back to Target Requires...

Core PCE deflator, % change yr ago

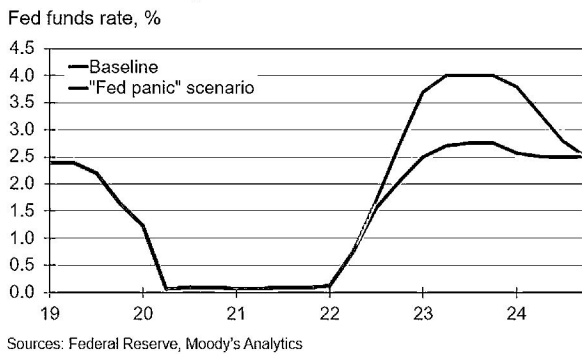


Sources: BEA, Moody's Analytics

Note: Baseline is adjusted for 1.3-ppt forecast error in 2021

The Fed is assumed to increase the target range for the fed funds rate by 50 basis points at each FOMC meeting, starting in May 2022 and wrapping up by the end of the first quarter of 2023. In such a way, the terminal rate—or the peak in the fed funds rate during this tightening cycle—would be 4%, significantly higher than the 2.75% terminal rate penciled into the current baseline. The Fed keeps the fed funds rate at 4% through 2023 before cutting rates. By the end of 2024, the fed funds rate returns to its long-run equilibrium rate, which we estimate to be 2.5%.

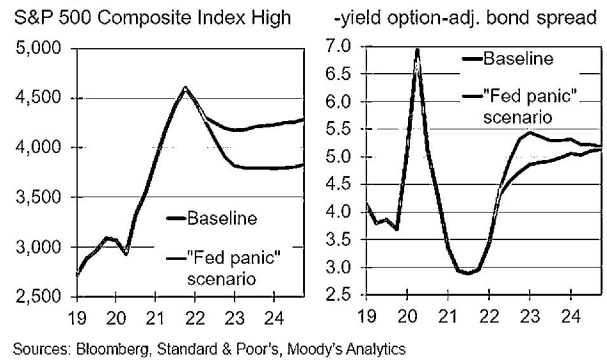
### ...An Even Higher Fed Funds Rate...



Monetary policy's impact on the economy occurs via the cost and availability of credit, which is provided by financial markets and the financial system. Stock prices, corporate bond yields, mortgage rates, the value of the U.S. dollar, and the lending standards of banks and other financial institutions are important barometers of financial conditions. As the central bank raises the fed funds rate and begins quantitative tightening later this year, borrowing costs and the cost of capital will increase, slowing growth and inflation in the real economy. Besides setting the path of the fed funds rate, we made two additional overlays to the U.S. macro model to capture tighter financial conditions. We assume that the Standard and Poor's 500 stock price index corrects by 15% over the course of 2022. In addition, the nominal broad U.S. dollar index returns to the highs witnessed in the teeth of the pandemic-induced recession of 2020, as the Fed normalizes monetary policy faster than other global central banks.

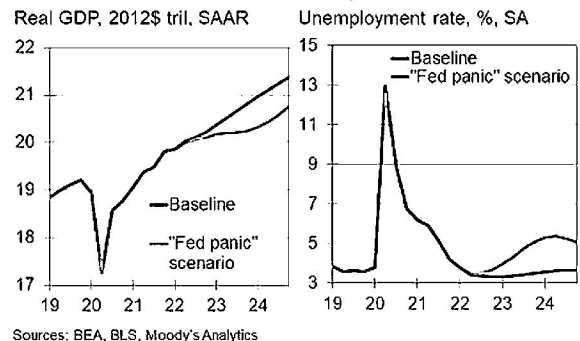
All told, financial conditions are meaningfully tighter than in the baseline forecast. Besides lower stock prices and a stronger greenback, mortgage rates, which track the U.S. 10-year Treasury yield, are as much as a half-percentage point higher and crimp consumer demand for housing. The high-yield option-adjusted corporate bond spread widens by an additional 60 basis points and bodes ill for high-yield and leveraged loan issuance. Finally, the net percentage of banks tightening lending standards for commercial and industrial loans to large and middle-market firms is four times as high.

### ...Tighter Financial Conditions...



Such tightening in financial conditions takes a significant toll on the economy, sufficient to break the back of above-2% inflation by the end of 2023. While there is no outright decline in real GDP, the economy suffers a so-called growth recession in 2023, as annualized real GDP growth grounds to a near halt. More important, the labor market goes from red-hot to lukewarm, and the unemployment rate rises from as low as 3.5% in the current quarter to more than 5% by the end of next year. In 2023, the jobless rate rises as much as 0.4 percentage point higher in a given quarter.

### ...And a Weaker Economy



Our scenario allows us to monitor the broader economic impact of a panicked effort by the Fed to tame inflation by the end of 2023. More interest rate-sensitive corners of the economy—the housing market and vehicle and durable goods sales—take the shock on the chin.

Mortgage rates are more closely linked to the 10-year Treasury yield, not the fed funds rate. However, the central bank's monetary policy stance affects long-term rates via the expected path of the real fed funds rate. Therefore, a more aggressive tightening cycle will put some upward pressure on long-term rates.

In our scenario, mortgage rates follow changes in the 10-year Treasury yield. The 50-basis point rise in the 30-year fixed mortgage rate weighs on housing affordability,

weakening demand and house price growth. Our official April baseline calls for a swift moderation in single-family house price growth in 2023 and 2024, easing toward neutral after two years of double-digit gains. The scenario we created where the Fed does what is needed to bring inflation back to target by the end of next year would subsequently cause a more than 1% reduction in house prices in both 2023 and 2024. Mortgage rates would converge with our baseline forecast by early 2026. In the interim, rising borrowing costs and softened demand would result in 400,000 fewer housing starts.

Elsewhere, softening demand for durable goods—particularly big-ticket, discretionary items where borrowing is key for consumption—results in weaker output growth and curtailed hiring. Relative to our baseline, the shortfall in employment in 2023 and 2024 in our panic scenario is disproportionately concentrated in goods-producing industries. In the U.S. recession of 1981-1982, the consequence of Fed Chair Paul Volcker's uncompromising and ultimately effective mission to stamp out double-digit inflation, construction and durable goods manufacturing accounted for roughly a quarter of employment but almost all of the lost jobs.

Today's economy is far removed from that of the early 1980s, and the Fed's more sophisticated array of tools will allow Powell a more targeted approach that was unavailable to Volcker.

### Hobson's choice

The Fed could be faced with a Hobson's choice: Push the economy into a mild recession, similar to our scenario, to tame inflation or wait and cause a more significant recession, since a stagflation scenario is possible next year if the Fed isn't aggressive enough.

Some define stagflation as weaker growth and accelerating inflation. However, we believe this definition is too loose. Periods of stagflation occur when there is high unemployment and high inflation. This is clearly not the case today with the unemployment rate near its pre-pandemic low. However, if hiring moderates more quickly than anticipated and solid nominal wage growth pulls more people back into the labor force, the unemployment rate will increase. Though the unemployment rate would be rising for the right reason—more people entering the labor force—it could create the perception that the economy is experiencing stagflation.

No matter how stagflation occurs, the Fed would likely need to push the economy into a deeper recession than in our alternative scenario to address it. However, stagflation would be a nightmare for the Fed. To address high inflation, the central bank would need to tighten monetary policy, which would drive the unemployment rate higher. On the other hand, if it tries to address high unemployment by cutting interest rates, that would juice inflation. Therefore, the Fed may opt to have a minor recession to avoid stagflation..

## TOP OF MIND

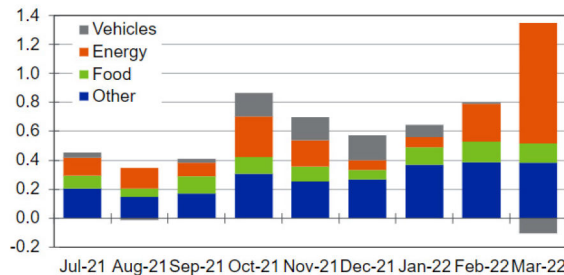
# Energy Policy in a Global Context

BY EVAN KARSON

Higher energy prices put a jolt into March's U.S. consumer price index report, but inflation dynamics saw few changes otherwise. The headline CPI jumped ahead 1.2% m/m, matching our expectation and accelerating from February's 0.8% m/m increase. The blistering top-line number is only slightly deceiving; energy prices accounted for more than half the CPI's total gain, adding 80 basis points in March. Price pressures from food and beverages held steady despite turbulence in global commodity markets tied to the Ukraine-Russia military conflict. Russia's invasion poses a critical threat to international food supplies, in particular wheat and cooking oil. Food prices in the U.S. will heat up over the next few months.

## Putting a Charge Into Inflation

Consumer price index, %



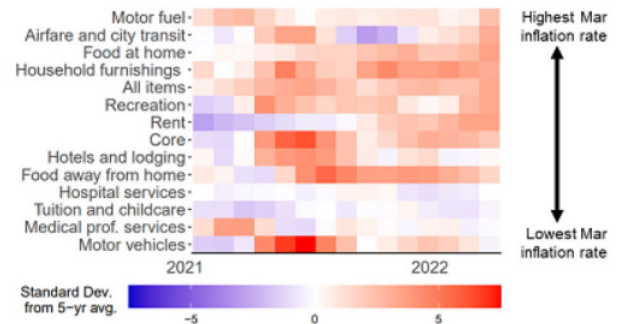
Sources: BLS, Moody's Analytics

Prices for new and used vehicles declined outright in March as auto sales dropped for the second month in a row. Vehicle prices in the U.S. are still up 21.5% on a year-ago basis, and dealer inventories remain thin. In March, vehicle prices shaved roughly 10 basis points off the headline inflation rate.

Our CPI heat map, which looks at three-month-ago inflation rates, shows that price pressures were broadly stable in March. Inflation for most goods and services remains stronger than their averages over the past 10 years. For instance, prices for groceries rose 3.9% from December to March, nearly nine times faster than the 10-year average of 0.44%. On the flip side, inflation for motor vehicles dipped below trend for the first time since March 2021.

## Inflation Still Running Hot

Standard deviations from 10-yr MA



Sources: BLS, Moody's Analytics

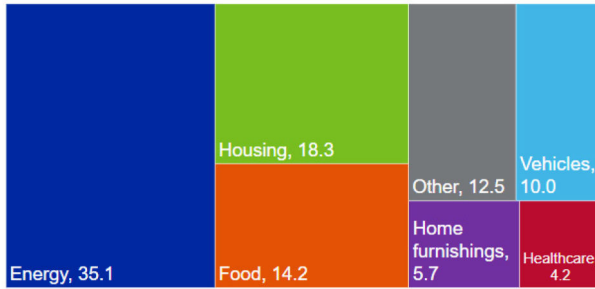
Energy continues to dominate inflation's month-to-month fluctuations. Over the last six months, energy accounted for more than 35% of the CPI's total increase. The sharp rise in prices will carry important knock-on effects for energy-intensive industries. For example, oil commodities and electricity account for over 12.5% of total costs in the production of aluminum and cement and intermediate goods, which are in high demand from U.S. builders and manufacturers.

## Outlook

Energy prices can advance further in 2022, but March's 11% m/m rise will mark the sharpest monthly increase unless the Ukraine-Russia military conflict escalates qualitatively. This could happen if Russia launches a nuclear weapon or begins using chemical weapons openly, among other possibilities. In such a scenario, at least a handful of European countries would seriously consider stopping oil imports from Russia. More private companies would self-sanction against purchasing Russian oil as well. It is encouraging that global oil price benchmarks have declined so far in April, and retail gasoline prices in the U.S. have fallen in tandem.

## Inside Inflation

Contribution to CPI over the last six mo, %



Sources: BLS, Moody's Analytics

Headline inflation likely peaked in March, but the Federal Reserve's position will only get more difficult in the months ahead. Core inflation may well accelerate through the second half of 2022 as energy market spillovers hit consumer goods prices and shortages of key industrial commodities such as nickel intensify. The Fed will have to thread a tight needle as it seeks to tamp down inflation without sending the economy into recession. Market expectations of three 50-basis point hikes later this year rose following the CPI release. Our April baseline forecast projects 225 basis points of tightening over the next four quarters.

### Policy

Broadly speaking, fiscal policymakers in the U.S. have sought to address energy price pressures with supply-side tactics. Stockpiles from the Strategic Petroleum Reserve have been tapped to help compensate for lost Russian supply. The U.S. is working diplomatic relations with oil exporters in the Middle East and Latin America to encourage new production. And the Biden administration announced plans to ease fuel standards, allowing gasoline with higher ethanol content to be sold this summer.

In contrast, some European governments have pursued demand-side measures. Last month, Germany announced a raft of energy relief policies estimated to be worth €16 billion. These measures include one-off tax allowances for households alongside fuel tax reductions that will reduce gasoline prices by 10 to 30 cents per liter depending on fuel grade.

The difference in policy approaches reflects structural differences in U.S. and European energy consumption. For the U.S., energy price pressures have hit consumers largely through gasoline prices and other petroleum-related products. The relative ease with which oil can be sourced from alternative producers has allowed the U.S. to pursue a supply-focused energy strategy.

Conversely, Europe relies on Russia not just for oil but for natural gas as well. While oil shipments can be arranged with a tanker ship and two willing partners, natural gas deliveries come almost exclusively through heavy infrastructure pipelines, which require years of preparation and construction. As a result, Europe has few alternative supply options in terms of natural gas. Liquefied natural gas offers one possible substitute, but the regassification process can be complicated and requires infrastructure, equipment and expertise that is difficult to scale quickly. Germany, for example, does not have any operational LNG terminals, instead leaning on Belgian, Dutch and French facilities to take in LNG shipments. With limited supply alternatives, Germany has sought to cushion the blow for consumers with demand-side support.

It remains to be seen which approach will prove more effective. Germany's demand-side strategy poses more upside risk to inflation. That is, the boost to income and spending may keep inflation higher for longer. Germany's reliance on Russia natural gas leaves Europe's largest economy with little room to maneuver, and consumers are paying a price for the decision to transition away from nuclear power over the last half-decade.

# The Week Ahead in the Global Economy

## U.S.

The focus will be on the housing market in an otherwise light week. The expected key housing-related data are housing starts and existing-home sales. We will keep an eye on weekly initial claims for unemployment insurance benefits; the new data will include the April payroll reference period and will provide a clue on how the labor market is faring in the month.

We will get another look at manufacturing conditions in April, with the release of the Philadelphia Fed manufacturing survey. On the monetary policy front, there are a handful of Fed speeches. Odds are that policymakers will remain hawkish.

## Europe

The final estimate of the euro zone's HICP is due. We are not expecting changes from the preliminary release. The inflation rate likely rose to 7.5% y/y in March from 5.9% in February on the back of price shocks to global oil, gas and wheat prices. Core pressures have picked up as well though, with the rate likely rising to 3% from 2.7%.

Industrial production, meanwhile, likely rebounded 0.8% m/m in the euro zone. Output picked up strongly in Italy, helping to outweigh the contraction in France. Production also rose in Spain and Germany, which will buoy the aggregate.

The euro zone external trade balance likely registered a deficit of €20 billion in February, improving only slightly on the January deficit. We expect exports grew with a bit more force during the month as industrial production picked up. The presumed increase in industrial production pointed to relatively better supply conditions, which would have allowed for better export-order fulfillment. That said, imports will continue to grow significantly above year-ago levels.

Finally, we expect U.K. retail sales remained weak in March, inching down 0.1% m/m after a 0.3% contraction in February. While the abatement of the pandemic is helping consumption, we expect most of the demand still was channeled into services. This will sap some spending on goods. For example, with more people going back to the office, people will eat out at restaurants and cafes more often and purchase less at supermarkets. Rising prices will also weigh on consumer demand.

## Asia-Pacific

China's first quarter growth will be the highlight of the economic calendar. We expect the economy to have expanded 4.1% year-on-year in the March quarter following 4% growth in the prior quarter. China's manufacturing growth picked up in the early months of the year and bolstered industrial production. Spending also gained momentum over this period, aided by Lunar New Year festive sentiment. But movement restrictions imposed across important cities in response to a wave of COVID-19 cases and a narrowing trade surplus were downsides, dragging on domestic consumption and output toward the end of the quarter. These factors, together with easing base effects, will moderate year-on year GDP growth over the March quarter.

Disruptions caused by local mobility restrictions and higher energy prices will also likely translate into weaker year-on-year growth in China's industrial production and retail sales in March.

Bank Indonesia is expected to leave the benchmark policy rate unchanged at 3.5%. Indonesia's inflation has increased at a more moderate pace relative to other Asian economies. At 2.64% y/y in March, it remained well within the central bank's tolerance limits of 2% to 4%. The upside risks from higher inflation are increasing for Indonesia too, but the central bank is expected to delay the start of its rate hike cycle to June, allowing room for the domestic recovery to strengthen.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
8-May	Hong Kong	Chief executive election	Low	Low
9-May	Philippines	Presidential election	Low	Low
29-May	Colombia	Presidential election	Medium	Low
Jun	Switzerland	World Economic Forum annual meeting	Medium	Low
29-30-Jun	NATO	NATO Summit, hosted by Madrid	Medium	Medium
Jun/Jul	PNG	National general election	Low	Low
2-Oct	Brazil	Presidential and congressional elections	High	Medium
Oct/Nov	China	National Party Congress	High	Medium
7-Nov	U.N.	U.N. Climate Change Conference 2022 (COP 27)	Medium	Low

THE LONG VIEW: U.S.

# We See 2022 Job Growth at 376,000 a Month

BY RYAN SWEET

## CREDIT SPREADS

Moody's long-term average corporate bond spread is 139 basis points, 6 bps wider than the 133 bps at this time last week and narrower than the 175 bps average in March. The long-term average industrial corporate bond spread widened 4 bps to 124. It averaged 161 bps in March.

The recent ICE BofA U.S. high-yield option adjusted bond spread is off its recent peak of 420 basis points but widened 27 bps over the past week to 375. The Bloomberg Barclays high-yield option adjusted spread has bounced around recently and is currently 354 bps compared with 327 bps at this time last week. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and narrower than implied by a VIX of 21.

## Defaults

The trailing 12-month global speculative-grade default rate rose to 2% at the end of February from 1.8% in January. In Europe, the default rate jumped to 2.1% from 1.2%. Under our baseline scenario, Moody's Credit Transition Model predicts that the global speculative-grade corporate default rate will decline to 1.7% in the second quarter before rising to 2.8% at the end of February 2023. That rate would still be well below the long-term average of 4.1%.

Our baseline forecasts assume that the U.S. high-yield spread will widen from about 400 basis points currently to 548 bps over the next four quarters. This widening would be partially offset by improvement in the U.S. unemployment rate, which we assume will decline to 3.5% by the end of February 2023 from the current rate of 3.8%. Our baseline forecasts are underpinned by positive factors such as good corporate fundamentals, low refinancing risk in the near term, and the transition of the global economy from a tentative recovery toward more stable growth, bolstered by improvement in the COVID-19 health situation. However, risks have grown following the invasion of Ukraine and the subsequent sanctions on Russia. Although we expect the Fed to raise interest rates at a pace that will not severely disrupt the U.S. economic recovery and financing conditions, the Russia-Ukraine conflict could add substantial risk to the default outlook through multiple channels, especially in Europe.

## U.S. Corporate Bond Issuance

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 14% for IG and 19% for high-

yield, wherein US\$-denominated offerings increased 45% for IG and grew 12% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 32% for high-yield, wherein US\$-denominated offerings increased 142% for IG and grew 45% for high yield.

Third-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 6% for IG and an annual advance of 44% for high-yield, wherein US\$-denominated offerings increased 12% for IG and soared upward 56% for high yield.

Fourth-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 3% for IG and an annual advance of 8% for high-yield, wherein US\$-denominated offerings increased 16% for IG and 11% for high yield.

First-quarter 2021's worldwide offerings of corporate bonds revealed an annual decline of 4% for IG and an annual advance of 57% for high-yield, wherein US\$-denominated offerings sank 9% for IG and advanced 64% for high yield.

Issuance weakened in the second quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 35% for investment grade. High-yield issuance fared noticeably better in the second quarter.

Issuance softened in the third quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 5% for investment grade. U.S. denominated corporate bond issuance also fell, dropping 16% on a year-ago basis. High-yield issuance fared noticeably better in the third quarter.

Fourth-quarter 2021's worldwide offerings of corporate bonds fell 9.4% for investment grade. High-yield US\$ denominated high-yield corporate bond issuance fell from \$133 billion in the third quarter to \$92 billion in the final three months of 2021. December was a disappointment for high-yield corporate bond issuance, since it was 33% below its prior five-year average for the month.

In the week ended April 8, US\$-denominated high-yield issuance totaled \$5.2 billion, slightly more than in the prior

week. This brings the year-to-date total to \$64.7 billion. Investment-grade bond issuance rose \$30.9 billion in the same week, bringing its year-to-date total to \$539.9 billion. Total US\$-denominated issuance is currently tracking that seen in 2018 and 2019.

#### U.S. ECONOMIC OUTLOOK

Adjustments to our forecast in April were more significant than in prior months. The larger downward revision to the baseline forecast for U.S. GDP growth this year is mostly attributed to the larger adverse impact of the military conflict between Russia and Ukraine on the European economy, global energy prices, and U.S. financial market conditions.

One link between the Russian invasion and the global economy is through financial market conditions. To gauge the effect of geopolitical risk on U.S. financial markets, we leaned on a vector autoregression model that allowed us to estimate the response of equity prices, oil prices, the VIX, and high-yield corporate bond spreads. We also included some measures of economic activity. A sudden increase in geopolitical risk had a greater impact on financial markets than the economy. However, the tighter financial market conditions, with a lag, weigh on the economy.

Some other variables included in our VAR were the Federal Reserve's geopolitical risk index and economic policy uncertainty. There are two periods where both geopolitical risk and U.S. policy uncertainty increased, including the Gulf War and 9/11. The VAR used monthly data since January 1995 and included a few lags.

Our VAR results revealed that financial market conditions have tightened in line with that implied by the rise in geopolitical risk. However, the increase in volatility and widening high-yield corporate bond spreads are sticky and will have a larger drag on growth than previously thought. Also, oil prices have been a little higher than we anticipated in the prior baseline.

#### Window is closing

There is still a window of opportunity for Democrats to pass a reconciliation bill, but it is closing. The new baseline forecast assumes Democrats pass a \$560 billion package that is solely focused on clean-energy tax credits and climate resilience investments. Previously, we assumed Democrats would also modestly expand the Child Tax Credit by making it fully refundable on a permanent basis, but this assumption was removed in April, reducing the size of spending under reconciliation by about \$50 billion over 10 years. There were no changes to our assumptions on the pay-for side. The package is still assumed to feature more than \$700 billion in higher taxes on well-to-do households and prescription drug savings. As a result, the reconciliation

bill would lead to a net reduction of more than \$150 billion in cumulative deficits over the next decade.

For now, we are setting Memorial Day as a deadline for Democrats to arrive at some agreement over a reconciliation framework. Otherwise, we will remove this reconciliation package from the June baseline. By that time, it will be very tough for Democrats to negotiate a reconciliation package from scratch with the midterms rapidly approaching. Therefore, April and May will be crucial months in determining whether Democrats can rally around a reconciliation bill. Though the confirmation of Judge Ketanji Brown Jackson for the Supreme Court is over, there will be other priorities such as a \$10 billion COVID-19 funding bill and legislation to boost U.S. economic competitiveness with China that could distract from negotiations on a reconciliation bill. Further, getting all Democrats to agree on a reconciliation bill, no matter how slimmed down it is, could prove tricky. To get Senator Joe Manchin on board, any Democratic reconciliation bill would likely need to include investments in fossil fuel infrastructure, something that would be anathema to progressives.

#### COVID-19 assumptions

Changes to our epidemiological assumptions were minor in April. Total confirmed COVID-19 cases in the U.S. will be 81.35 million, compared with the 81 million in the March baseline. The number of assumed cases is still well above that assumed before the Omicron variant. The seven-day moving average of daily confirmed cases has stabilized around 30,000 for the past several weeks.

We have replaced the concept of herd immunity with "effective immunity," which is a rolling number of infections plus vaccinations to account for the fact that immunity is not permanent. The forecast still assumes that COVID-19 will be endemic and seasonal. However, each passing wave is assumed to have a diminishing economic effect.

#### Energy price assumptions

Our assumption is that the oil supply disruption from Russia's military conflict with Ukraine will be between 2 million and 3 million barrels per day. The anticipated loss in Russian supply will be largely offset by increasing OPEC and non-OPEC output, demand destruction due to higher prices, and the flexibilization of sanctions on Iran and Venezuela. Our baseline forecast assumes that the global oil market remains mostly balanced throughout the year, allowing oil prices to gradually drop. The price of West Texas Intermediate crude oil averages \$85 per barrel in the year's final quarter, down from \$105 in the second quarter. Prices continue to fall in 2023 as Russia's oil supply starts to recover. Assumptions around oil prices are becoming crucial to the evolution of the baseline forecast.

### Nudging GDP lower

The April baseline factors in increasing costs of higher global energy prices and tighter financial market conditions. We now expect real GDP to rise 3.2% this year, compared with the 3.5% in the March baseline. Over the past three months we have shaved 0.5 of a percentage point off our forecast for GDP growth for this year. We cut the forecast for GDP growth in 2023 from 3.1% to 2.7%. The economy is still expected to grow above its potential, which is likely between 2% and 2.5%.

The forecast for first-quarter GDP growth was nudged higher from 0.7% to 0.9% at an annualized rate, not a significant deviation from our high-frequency GDP model's estimate. For the second consecutive month, the bulk of the downward revision for this year was in the second quarter, as real GDP is now expected to increase 3.4% at an annualized rate, compared with the 4.8% annualized gain in the March baseline. Growth in the third quarter was also cut from 2.5% to 1.6% at an annualized rate. The forecast for GDP growth in the final three months of this year was revised lower by 0.5 of a percentage point to 2.3% at an annualized rate.

A good chunk of the downward revision to GDP growth this year is because of softer real consumer spending than in the March baseline. Our rule of thumb is that every \$10 increase in the price of oil increases U.S. retail gasoline prices by 30 cents a gallon. Every penny increase in retail gasoline prices reduces consumer spending by about \$1.5 billion over the course of a year.

Our baseline forecast for real GDP growth this year is close to the Bloomberg consensus of 3.3%. The forecast for next year is 0.5 percentage point stronger than the Bloomberg consensus of 2.2%.

### Business investment and housing

Heightened geopolitical uncertainty and tighter financial market conditions are weighing on real business investment in equipment. We have real business equipment spending rising 6% this year, compared with 7.3% in the March baseline. The forecast is for real business equipment spending to increase 4.6% in 2023, a percentage point weaker than in the March baseline. Other parts of business investment will do better, including nonresidential structures, now forecast to rise 14.7% this year (14.4% in the March baseline) and 11.6% in 2023 (10.9% in the March baseline). A good chunk of this is attributable to mining exploration, shafts and wells. The Bureau of Economic Analysis uses the American Petroleum Institute's weighted average of footage drilled along with rotary rig counts from Baker Hughes in its current-quarter estimate of private fixed investment in mining exploration, shafts and wells. This segment now accounts for more than 10% of nominal

private fixed investment in nonresidential structures.

Therefore, a rise in energy prices would lead to an increase in the number of active rotary rigs. Rig counts have risen but are still lower than pre-pandemic and less than implied by global oil prices.

Revisions to housing starts were small. Housing starts are expected to be 1.818 million, compared with 1.811 million in the March baseline. There were no revisions to housing starts next year. There are likely only so many homes that can be built each year because of labor-supply constraints and a lack of buildable lots. Some of the labor-supply issues will ease as the pandemic winds down, but the reduction in immigration is particularly problematic for homebuilders' ability to find workers. We cut the forecasts for new- and existing-home sales this year because of higher mortgage rates.

We nudged up the forecast for the FHFA All-Transactions House Price Index this year, with it rising 12%, compared with 11.5% in the March baseline. House price growth moderates noticeably in 2023, as prices are forecast to be little changed. This is attributable to rebalancing of supply and demand, which increases the risk of an outright decline in house prices.

### Labor market

We have job growth averaging 376,000 per month this year, compared with the March baseline forecast of 367,000. Job growth has averaged around 600,000 per month over the past six months. If sustained, it would take nine months to close the employment gap, or the difference between the actual level of employment and where it would have been if the recession hadn't occurred and prerecession job growth was maintained. Job growth was broad-based in March, as the only major industries notching a decline in employment were transportation/warehousing and utilities. However, labor supply is key to our near-term forecast for monthly job growth.

There was a modest change to the forecast for the unemployment rate this year; it is expected to average 3.2% in the final three months of 2022 and 3.5% in the fourth quarter of next year. We assume a full-employment economy is one with a 3.5% unemployment rate, around a 62.5% labor force participation rate, and a prime-age employment-to-population ratio a little north of 80%. All of these conditions will be met by late this summer.

### Fast and furious

Because of the rise in global energy prices, there was a noticeably upward revision to year-over-year growth in the headline CPI. The forecast is for year-over-year growth to be around a full percentage point higher over the next few quarters than in the March baseline. There was also an

upward revision to the forecast for growth in the PCE deflator, the Fed's preferred measure of inflation.

With the new inflation forecast and the Fed's hawkish rhetoric, we noticeably altered our forecast for the fed funds rate. The effective fed funds rate is now forecast to average 2.1% in the fourth quarter of this year, compared with 0.9% in the March baseline. We have a 50-basis point rate hike penciled into the forecast for May, as the Fed has clearly signaled that this is likely to occur. Fed Chair Jerome Powell described the labor market as unhealthily tight. Add inflation that hasn't peaked yet, and that is going to lead to an aggressive tightening cycle. The terminal fed funds rate, or where rates peak this cycle, is now 2.75%, 30 basis points higher than in the March baseline. Also, the terminal rate has been hit nearly a year earlier than in the March baseline. The Fed is expected to start cutting rates in late 2024, as it will need to return the fed funds rate to its long-run equilibrium rate, which we estimate to be 2.5%, close to the central bank's estimate of 2.4%.

On the balance sheet, the minutes from the March Federal Open Market Committee meeting provided some color around the central bank's plan to reduce the size of its balance sheet. The minutes noted that the balance sheet reduction could start as early as May with a cap on Treasuries of \$60 billion and \$35 billion for mortgage-backed securities. This is almost double the peak rate of \$50 billion a month the last time the Fed reduced its balance sheet, from 2017 to 2019.

A more aggressive Fed and higher inflation led to an upward revision to our forecast for the 10-year Treasury yield, now expected to end this year around 3%, 60 basis points higher than in the March baseline. It is forecast to average 3.3% in the final three months of next year, compared with 3.1% in the March baseline. The 10-year yield converges with the March baseline in 2024. Changes to the forecast for the Dow Jones Industrial Average were modest. We incorporate the first-quarter actual data into the April baseline.

## THE LONG VIEW: EUROPE

# Austria on a Tightrope

BY ILIR HYSA and ROSS CIOFFI

Austria remains among a very few European countries to claim neutrality in the Russia-Ukraine military conflict. That's understandable when considering that countries like Austria have no comprehensive near-term alternative solution to their energy dependency and have a significant stake in maintaining normal relations with Russia. Austria is walking a fine line between keeping up with its EU obligations and pursuing its best economic interests, which is why Austria has reportedly opposed any EU sanctions on Russian oil and gas and has been questioning the EU's move to blacklist some Russian oligarchs, while sending humanitarian aid to Ukraine. Sanctions on Russian gas would have a devastating effect on the Austrian economy, which imports some 80% of its gas from Russia. It is among the top Russia-reliant countries in Europe. Such imports are essential to Austria's industry and its power plants.

Further, Austria's OMV is Gazprom's partner in Nord Stream 2, and Austria owns nearly one-third of OMV. Equally important, Austria's hesitancy to cut business ties with Russia is also understandable when considering that there are other reasons to maintain the status quo. Russia is also the biggest market for Vienna-based Raiffeisen Bank International, the largest Austrian corporate and investment bank.

The leverage afforded to Austria as a neutral party was the reason for Austria's recent attempt to bring both sides in the conflict to the negotiating table, though to no avail. A recent visit by Austria's chancellor to Russia—the first face-to-face meeting a western leader has had with Russian President Vladimir Putin since the invasion of Ukraine—was skeptically viewed as a long-shot attempt to stop the hostilities. All the skepticism was justified. Chancellor Karl Nehammer's meeting with Putin, after meeting earlier with Ukrainian President Volodymyr Zelenskyy, was characterized as “not a friendly meeting” and didn't yield any results. Nehammer is reported to have brought up the devastation and alleged war crimes in Bucha, Ukraine, but received no reaction from Putin. Nehammer's confrontation of Putin could cause Austria to lose its neutral position in the eyes of the Kremlin and be listed among “unfriendly” nations. Such nations have been asked to pay in Russian rubles for their gas and oil imports, though Austrian officials have stated that they plan to honor the contract and pay in euros.

Moreover, the Austrian government is preparing for the eventuality of gas interruptions over a potential payment

standoff with Russia, signaling to its population potential gas rationing. In fact, if embraced more broadly in Europe, such a move could help end the energy crisis. The impact of high prices on the demand side would be the first measure to limit energy consumption and counter the earlier energy subsidy move, which aimed to ease the pain among Austrians but served as a demand booster, highlighting the difficult nature of the current situation and exacerbating Europe's dependence on Russian energy.

## ECB makes no move for now

The European Central Bank made no changes to its monetary policy at its meeting Thursday. The main refinancing operations rate target remains at 0% and its Asset Purchase Program will continue with net purchases of €40 billion in April, €30 billion in May, and €20 billion in June. The ECB did strike a more hawkish tone, however, by stating in its press release that the APP “should” conclude in the third quarter. The ECB still says that interest rate hikes will only come “some time after” the end of net purchases, making a July hike unlikely. In our April baseline, we now expect 25-basis point hikes at the September and December meetings.

Since there were no new macroeconomic projections, the ECB is still operating based on its March projections. These, however, were already outdated when they were published, which was confirmed by the preliminary CPI data for March. As a result, the projections that will be prepared for the June meeting will bring another large upward revision, and we believe that this will prompt an announcement of the end to purchases. The last month with purchases will be either June or July.

## U.K. sees record inflation

The U.K. CPI jumped to another record high of 7% y/y in March from 6.2% in February. Soaring transportation and energy costs were the main culprits, as petrol and diesel pump prices surged in March in line with the increase in global oil prices. But rises were recorded across almost all other sectors as well, attesting to the fact that inflation pressures are becoming increasingly more broad-based. Indeed, core inflation, which excludes energy, food, alcoholic beverages and tobacco, rose to 5.7% y/y from 5.2% previously. The core basket was energized by stronger demand for certain goods and services, now with the pandemic abating. Prices for clothing and footwear and restaurant and hotel services picked up pace in March.

THE LONG VIEW: ASIA-PACIFIC

# Singapore Manufacturing Declines

BY DENISE CHEOK and SHAHANA MUKHERJEE

Singapore's first quarter GDP opened the year with a whimper, coming in below market expectations. The economy grew 0.4% q/q, moderating from 2.3% in the prior quarter. This translated into year-on year growth of 3.4% after a stronger 6.1% expansion in the prior quarter. The key manufacturing sector declined in quarterly terms (down 1.2% q/q) after robust growth in the previous stanzas. Within manufacturing, output from the pharmaceutical, marine and offshore engineering sectors contracted in the first two months of the year. However, electronics and precision engineering continued to rally on strong global demand for semiconductors.

Construction remained below pre-pandemic levels, weighed down by labour shortages. The sector is heavily reliant on migrant workers. Travel restrictions and vaccination requirements have kept many migrant workers abroad. However, with international borders reopening, the labour squeeze should ease in coming quarters.

Services industries were a mixed bag. Wholesale and retail trade benefited from an easing of COVID-19 measures at the start of the year that boosted domestic demand. However, finance and IT saw some pullback from the robust growth of preceding quarters.

## Downside risk builds

Although Singapore's economy is still expected to record above-trend growth for the year, downside risks have built since the last release. Russia's invasion of Ukraine has thrown a wrench in the economy's rebound, putting supply chains under additional stress. Singapore has little direct trade with Russia or Ukraine, but the disruptions to supply chains will reverberate through global trade lines, upon

which Singapore is highly dependent. Increasing uncertainty will also weigh on consumer and business sentiment, dampening growth in professional services.

Immediate risks from the COVID-19 pandemic have largely receded, but supply-chain bottlenecks persist. China's strict zero-COVID stance stands in stark contrast with most of the world, which has largely transited to living with the virus. Key ports in Shanghai and Jilin have been affected by lockdowns, which are causing lengthy delays in delivery times.

## Monetary policy

Separately, the Monetary Authority of Singapore tightened monetary policy as expected. The central bank pulled a one-two punch on Thursday, simultaneously raising the slope of the policy band and recentering the mid-point upwards. This will allow the Singapore dollar to appreciate against a trade-weighted basket of goods and mitigate rising imported inflation. The central bank seldom adjusts more than one policy parameter at a time—the last time it did so was March 2020 at the peak of the COVID-19 pandemic. MAS also sharply raised its inflation outlook for the year. Headline inflation is now forecast to rise by 4.5% to 5.5%, up from an earlier projection of 2.5% to 3.5%. Core inflation is expected to come in at 2.5% to 3.5%, up from an earlier forecast of 2% to 3%.

Singapore's GDP growth will likely moderate from last year, with external shocks weighing on the highly trade-reliant economy. The domestic sector, however, will pick up as the country eases COVID-19 measures and transitions to treating the virus as endemic. This should boost the long-dormant hospitality and tourism sectors.

## RATINGS ROUNDUP

# U.S. Energy Firms See Upgrades

BY MICHAEL FERLEZ

## U.S.

U.S. rating change activity was credit positive for the week ended April 12. Upgrades accounted for 67% of rating changes and the same share of affected debt. Rating change activity was split across an array of industries, with energy-related firms accounting for three of the six upgrades.

The most notable change in terms of affected debt was made to a U.S.-based data center REIT, Equinix Inc. Moody's Investors Service upgraded Equinix's senior unsecured debt ratings to Baa2 impacting \$13.5 billion in debt. In the rating action, Moody's Investors Service cited Equinix's strong market position and fixed charge coverage ratio as well as prudent capital and liquidity management and the strong demand for data center space as rationales for the upgrade.

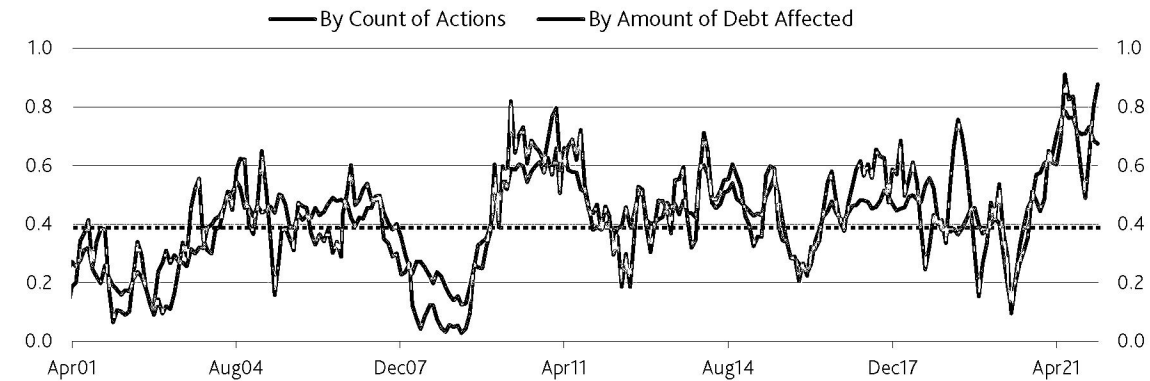
## Europe

Western European rating change activity was mixed last week. Upgrades represented only one quarter of total rating changes but 79% of the affected debt. The week's rating activity was split evenly across countries with firms in Germany, Italy, Jersey and the U.K. each accounting for one rating action. Weekly rating change activity was headlined by Atlantia S.p.A. The Italian-based firm saw its long-term Corporate Family Rating and senior unsecured ratings raised to Ba1 and Ba2, respectively. Other actions included Moody's Investors Service's upgrade of Atlantia's senior unsecured EMTN program ratings to (P)Ba2 as well as an upgrade of the firm's senior unsecured and backed senior unsecured ratings to Ba1.

## RATINGS ROUND-UP

FIGURE 1

Rating Changes - US Corporate &amp; Financial Institutions: Favorable as a % of Total Actions



\* Trailing 3-month average

Source: Moody's

FIGURE 2

## Rating Key

<b>BCF</b>	Bank Credit Facility Rating	<b>MM</b>	Money-Market
<b>CFR</b>	Corporate Family Rating	<b>MTN</b>	MTN Program Rating
<b>CP</b>	Commercial Paper Rating	<b>Notes</b>	Notes
<b>FSR</b>	Bank Financial Strength Rating	<b>PDR</b>	Probability of Default Rating
<b>IFS</b>	Insurance Financial Strength Rating	<b>PS</b>	Preferred Stock Rating
<b>IR</b>	Issuer Rating	<b>SGLR</b>	Speculative-Grade Liquidity Rating
<b>JrSub</b>	Junior Subordinated Rating	<b>SLTD</b>	Short- and Long-Term Deposit Rating
<b>LGD</b>	Loss Given Default Rating	<b>SrSec</b>	Senior Secured Rating
<b>LTCF</b>	Long-Term Corporate Family Rating	<b>SrUnsec</b>	Senior Unsecured Rating
<b>LTD</b>	Long-Term Deposit Rating	<b>SrSub</b>	Senior Subordinated
<b>LTIR</b>	Long-Term Issuer Rating	<b>STD</b>	Short-Term Deposit Rating

FIGURE 3

## Rating Changes: Corporate &amp; Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
4/6/2022	SM ENERGY COMPANY	Industrial	SrSec/SrUnsec/LTCFR/PDR	2502.15	U	B1	Ba3	SG
4/6/2022	RODAN & FIELDS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
4/6/2022	HF SINCLAIR CORPORATION-HOLLY ENERGY PARTNERS, L.P.	Industrial	SrUnsec	600.00	U	B1	Ba3	SG
4/7/2022	EQUINIX, INC.	Industrial	SrUnsec	13495.76	U	Baa3	Baa2	IG
4/7/2022	TC ENERGY CORPORATION-TC PIPELINES, LP	Industrial	SrUnsec	850.00	U	Baa2	Baa1	IG
4/8/2022	SIRVA, INC.-SIRVA WORLDWIDE, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
4/11/2022	BIOGEN INC.	Industrial	SrUnsec	8613.09	D	Baa1	Baa2	IG
4/12/2022	PLAYPOWER, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
4/12/2022	CONSTELLATION CLUB HOLDINGS, INC.-CLUBCORP HOLDINGS, INC.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	425.00	U	Caa3	Caa2	SG

Source: Moody's

FIGURE 4

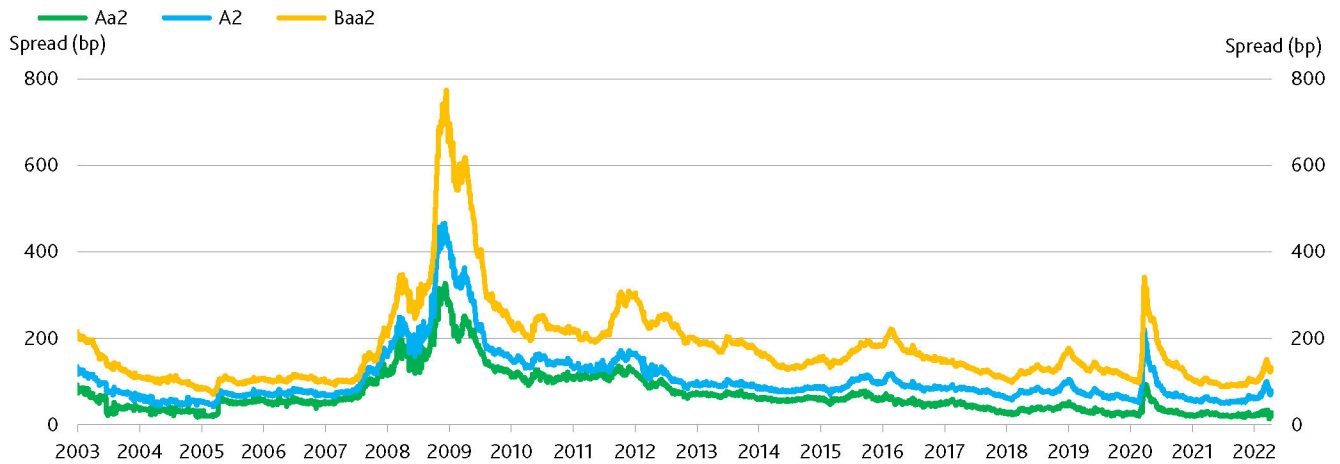
## Rating Changes: Corporate &amp; Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
4/6/2022	ATLANTIA S.P.A.	Industrial	SrUnsec/LTCFR/MTN	13599.06	U	Ba2	Ba1	SG	ITALY
4/6/2022	GAZIT - GLOBE LTD.-ATRIUM EUROPEAN REAL ESTATE LIMITED	Industrial	SrUnsec/Sub	1746.97	D	Baa3	Ba2	IG	JERSEY
4/8/2022	WITTUR INTERNATIONAL HOLDING GMBH	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	GERMANY
4/11/2022	MARKET HOLDCO 3 LIMITED-WM MORRISON SUPERMARKETS LIMITED	Industrial	SrUnsec/MTN	1926.32	D	Ba1	B1	SG	UNITED KINGDOM

Source: Moody's

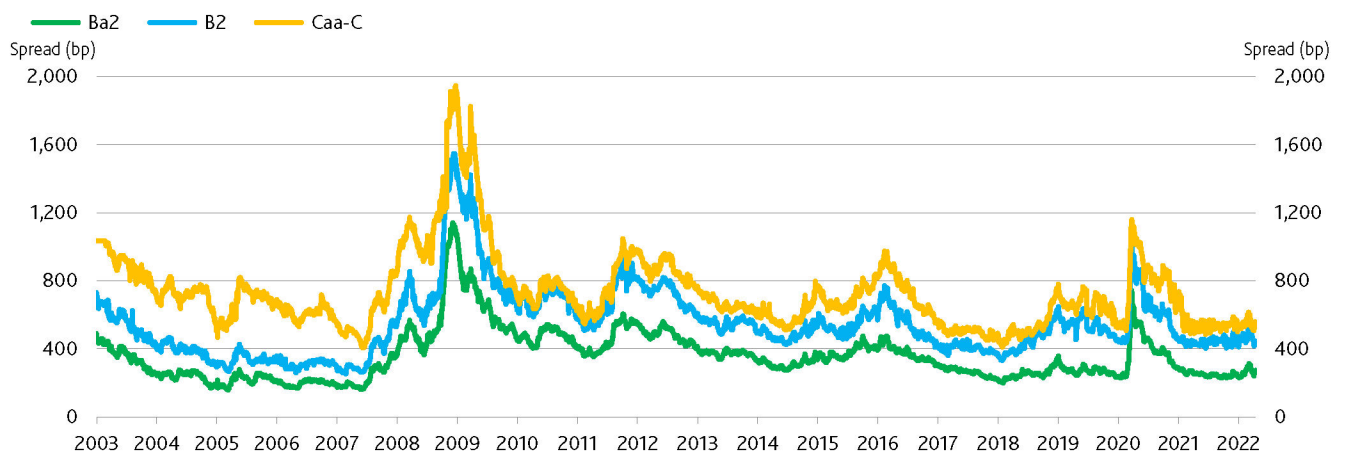
## MARKET DATA

Figure 1: 5-Year Median Spreads-Global Data (High Grade)



Source: Moody's

Figure 2: 5-Year Median Spreads-Global Data (High Yield)



Source: Moody's

## CDS MOVERS

Figure 3. CDS Movers - US (April 6, 2022 – April 13, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		Senior Ratings
	Apr. 13	Apr. 6	
Issuer			
Caterpillar Financial Services Corporation	Aa3	A1	A2
Southern Company (The)	A2	A3	Baa2
Crown Castle International Corp.	Baa2	Baa3	Baa3
Sempra Energy	A2	A3	Baa2
Kinder Morgan, Inc.	Baa1	Baa2	Baa2
Welltower OP Inc.	Baa1	Baa2	Baa1
Conagra Brands, Inc.	Baa2	Baa3	Baa3
Kinder Morgan Energy Partners, L.P.	A1	A2	Baa2
HP Inc.	Baa2	Baa3	Baa2
ONEOK, Inc.	Baa2	Baa3	Baa3

CDS Implied Rating Declines	CDS Implied Ratings		Senior Ratings
	Apr. 13	Apr. 6	
Issuer			
CenterPoint Energy, Inc.	Baa2	A3	Baa2
PepsiCo, Inc.	A2	A1	A1
Philip Morris International Inc.	A2	A1	A2
General Electric Company	Baa3	Baa2	Baa1
Eli Lilly and Company	Aa2	Aa1	A2
FirstEnergy Corp.	Baa3	Baa2	Ba1
Emerson Electric Company	Baa1	A3	A2
Danaher Corporation	A3	A2	Baa1
Archer-Daniels-Midland Company	A2	A1	A2
United Rentals (North America), Inc.	Ba2	Ba1	Ba2

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Apr. 13	Apr. 6	Spread Diff
Issuer				
Talen Energy Supply, LLC	C	8,346	8,103	242
American Axle & Manufacturing, Inc.	B2	597	530	67
Realogy Group LLC	B2	509	467	41
Gap, Inc. (The)	Ba3	389	350	39
Pitney Bowes Inc.	B3	711	676	36
Brandywine Operating Partnership, L.P.	Baa3	105	69	35
United Airlines, Inc.	Ba3	672	637	34
KB Home	Ba2	331	297	34
OneMain Finance Corporation	Ba2	375	345	30
Ryder System, Inc.	Baa2	135	105	30

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Apr. 13	Apr. 6	Spread Diff
Issuer				
American Airlines Group Inc.	Caa1	982	1,115	-133
United Airlines Holdings, Inc.	Ba3	622	685	-63
Rite Aid Corporation	Caa2	1,670	1,716	-46
Delta Air Lines, Inc.	Baa3	308	350	-42
Staples, Inc.	Caa2	1,138	1,172	-34
Encompass Health Corp.	B1	171	189	-18
Olin Corporation	Ba2	221	236	-15
Ashland LLC	Ba1	178	191	-13
Xcel Energy Inc.	Baa1	83	96	-12
Brunswick Corporation	Baa2	139	149	-10

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (April 6, 2022 – April 13, 2022)

CDS Implied Rating Rises		CDS Implied Ratings	
Issuer	Apr. 13	Apr. 6	Senior Ratings
Italy, Government of	Baa2	Baa3	Baa3
BNP Paribas	A2	A3	Aa3
CaixaBank, S.A.	A2	A3	Baa1
Credit Agricole Corporate and Investment Bank	A1	A2	Aa3
Natixis	A2	A3	A1
NatWest Markets Plc	A3	Baa1	A2
Standard Chartered Bank	Aa3	A1	A1
Standard Chartered PLC	Baa1	Baa2	A3
Nationwide Building Society	A2	A3	A1
BNP Paribas Fortis SA/NV	A2	A3	A2

CDS Implied Rating Declines		CDS Implied Ratings	
Issuer	Apr. 13	Apr. 6	Senior Ratings
Santander UK plc	A2	Aa2	A1
Santander Financial Services plc	A2	Aa2	A1
Banque Federative du Credit Mutuel	Aa3	Aa2	Aa3
Norddeutsche Landesbank GZ	Baa2	Baa1	A3
Vodafone Group Plc	Baa1	A3	Baa2
Bayerische Motoren Werke Aktiengesellschaft	Baa1	A3	A2
Mercedes-Benz Group AG	Baa2	Baa1	A3
Piraeus Financial Holdings S.A.	Caa2	Caa1	Caa1
Sanofi	Aa2	Aa1	A1
Casino Guichard-Perrachon SA	Ca	Caa3	Caa1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Apr. 13	Apr. 6	Spread Diff
Boparan Finance plc	Caa1	1,767	1,478	289
Casino Guichard-Perrachon SA	Caa1	1,144	998	147
Vue International Bidco plc	Ca	1,049	950	100
Atlantia S.p.A.	Ba2	208	138	70
Vedanta Resources Limited	B3	819	765	54
CMA CGM S.A.	B2	416	376	40
Jaguar Land Rover Automotive Plc	B1	554	527	27
UPC Holding B.V.	B3	258	234	24
Rexel SA	Ba3	211	188	23
Novafives S.A.S.	Caa2	909	887	22

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Apr. 13	Apr. 6	Spread Diff
Wienerberger AG	Ba1	99	114	-15
Stena AB	B2	495	499	-5
Italy, Government of	Baa3	94	98	-4
Societe Generale	A1	58	62	-4
BAWAG P.S.K. AG	A2	63	67	-4
United Kingdom, Government of	Aa3	11	14	-3
France, Government of	Aa2	24	28	-3
Ireland, Government of	A2	16	19	-3
Banca Monte dei Paschi di Siena S.p.A.	Caa1	397	399	-3
Greece, Government of	Ba3	119	121	-2

Source: Moody's, CMA

## CDS Movers

Figure 5. CDS Movers - APAC (April 6, 2022 – April 13, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		Senior Ratings
	Apr. 13	Apr. 6	
Issuer			
Mitsubishi Corporation	Aaa	Aa1	A2
DBS Bank Ltd.	Aa3	A1	Aa1
Macquarie Group Limited	Baa1	Baa2	A3
Macquarie Bank Limited	A1	A2	A2
Nomura Holdings, Inc.	Baa1	Baa2	Baa1
Tokyo Electric Power Company Holdings, Inc.	A2	A3	Ba1
East Japan Railway Company	Aa1	Aa2	A1
Woolworths Group Limited	A3	Baa1	Baa2
Nomura Securities Co., Ltd.	Baa1	Baa2	A3
GPT RE Limited	A1	A2	A2

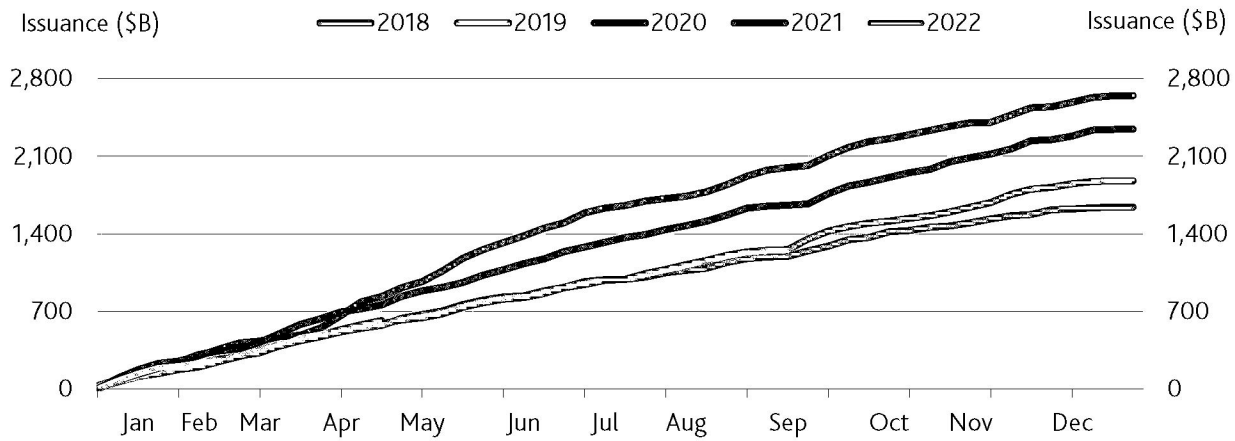
CDS Implied Rating Declines	CDS Implied Ratings		Senior Ratings
	Apr. 13	Apr. 6	
Issuer			
Korea, Government of	Aa2	Aa1	Aa2
Export-Import Bank of Korea (The)	Aa2	Aa1	Aa2
Korea Development Bank	Aa2	Aa1	Aa2
MUFG Bank, Ltd.	Aa3	Aa2	A1
Suncorp-Metway Limited	Baa1	A3	A1
China Development Bank	Baa2	Baa1	A1
Kookmin Bank	Aa2	Aa1	Aa3
Industrial & Commercial Bank of China Ltd	Baa2	Baa1	A1
Pakistan, Government of	Ca	Caa3	B3
Bank of East Asia, Limited	Baa2	Baa1	A3

CDS Spread Increases	CDS Spreads			
	Senior Ratings	Apr. 13	Apr. 6	Spread Diff
Issuer				
Pakistan, Government of	B3	1,017	894	123
Halyk Savings Bank of Kazakhstan	Ba2	432	406	26
SoftBank Group Corp.	Ba3	332	313	19
Suncorp-Metway Limited	A1	73	61	12
Vietnam, Government of	Ba3	117	106	11
Malayan Banking Berhad	A3	89	78	10
Tenaga Nasional Berhad	A3	69	59	10
Tata Motors Limited	B1	297	287	10
Telekom Malaysia Berhad	A3	68	58	10
Indonesia, Government of	Baa2	94	85	9

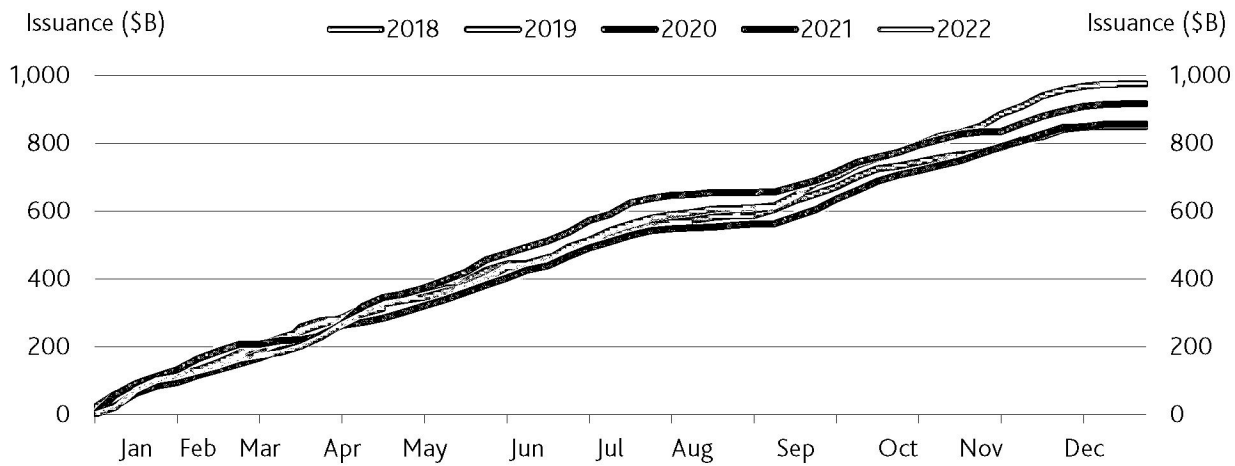
CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Apr. 13	Apr. 6	Spread Diff
Issuer				
Development Bank of Kazakhstan	Baa2	204	211	-7
Nomura Securities Co., Ltd.	A3	72	75	-3
Australia and New Zealand Banking Grp. Ltd.	Aa3	39	40	-1
Mitsubishi Corporation	A2	21	22	-1
Macquarie Group Limited	A3	74	74	-1
Hong Kong SAR, China, Government of	Aa3	33	34	-1
Mitsubishi Estate Co., Ltd.	A2	17	18	-1
Tokyo Electric Power Company Holdings, Inc.	Ba1	55	56	-1
East Japan Railway Company	A1	29	30	-1
Qantas Airways Ltd.	Baa2	158	159	-1

Source: Moody's, CMA

## ISSUANCE

**Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated**

Source: Moody's / Dealogic

**Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated**

Source: Moody's / Dealogic

## ISSUANCE

**Figure 8. Issuance: Corporate & Financial Institutions**

USD Denominated			
	Investment-Grade Amount \$B	High-Yield Amount \$B	Total* Amount \$B
Weekly	30.900	5.235	36.291
Year-to-Date	539.933	64.741	622.577
Euro Denominated			
	Investment-Grade Amount \$B	High-Yield Amount \$B	Total* Amount \$B
Weekly	15.677	0.330	16.041
Year-to-Date	284.211	20.956	311.600

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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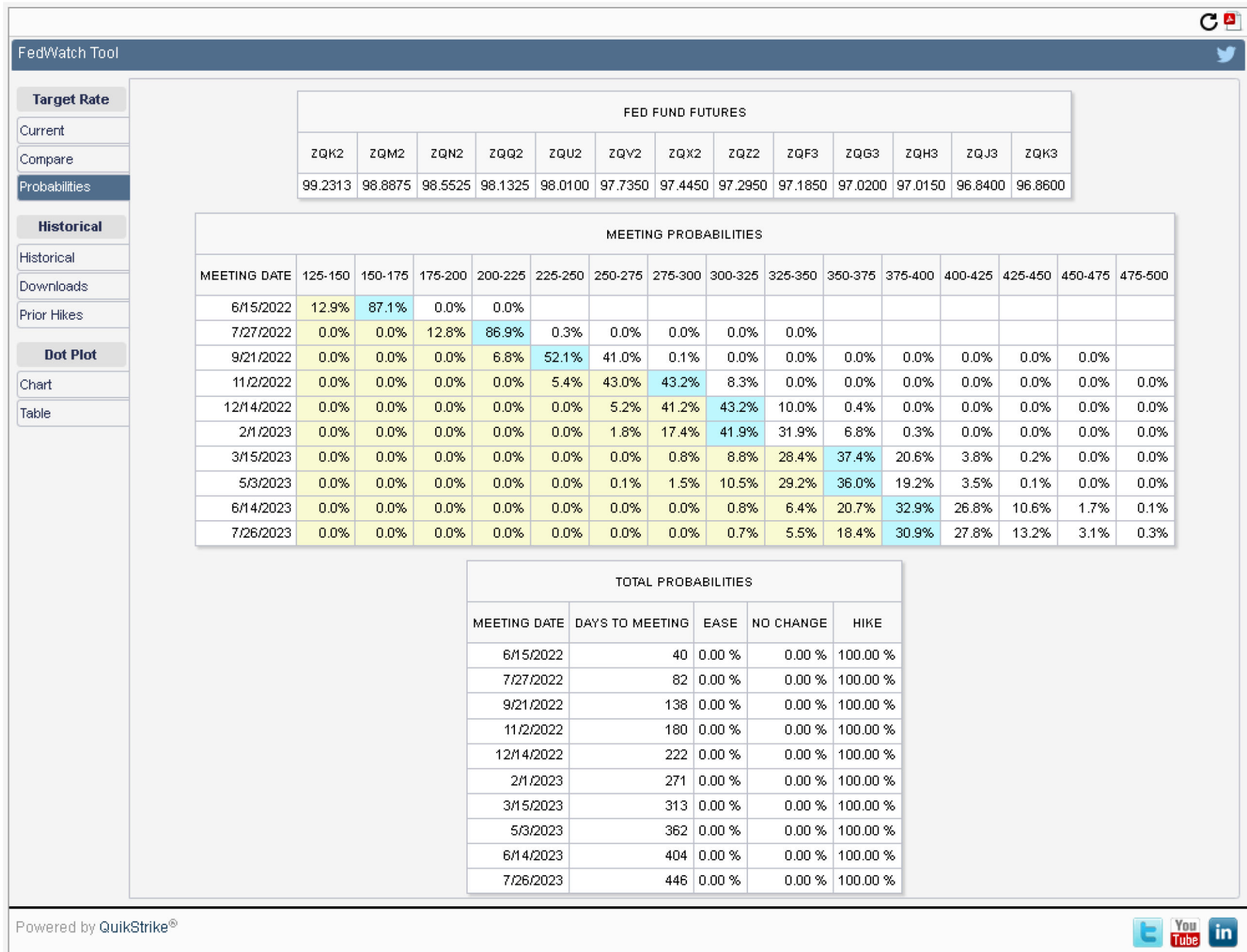
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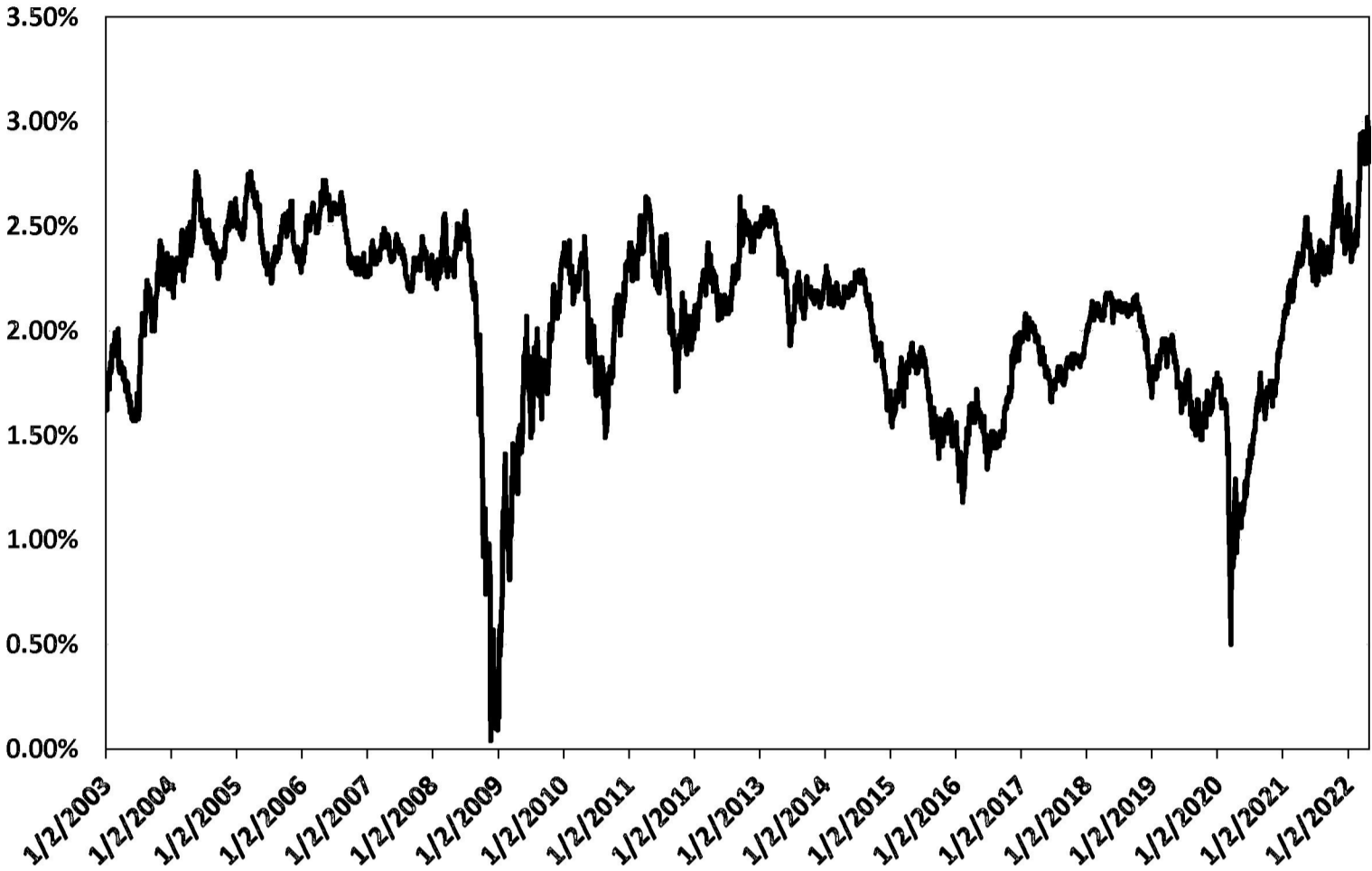


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Economic Research Division  
Federal Reserve Bank of St. Louis

T10YIE 10-Year Breakeven Inflation Rate, Percent, Daily, Not Seasonally Adjusted

Frequency: Daily

observation_date	T10YIE		
1/2/2003	1.64		1.64%
1/3/2003	1.62		1.62%
1/6/2003	1.63		1.63%
1/7/2003	1.62		1.62%
1/8/2003	1.71		1.71%
1/9/2003	1.78		1.78%
1/10/2003	1.75		1.75%
1/13/2003	1.77		1.77%
1/14/2003	1.76		1.76%
1/15/2003	1.80		1.80%
1/16/2003	1.79		1.79%
1/17/2003	1.80		1.80%
1/20/2003	#N/A	#N/A	
1/21/2003	1.78		1.78%
1/22/2003	1.72		1.72%
1/23/2003	1.78		1.78%
1/24/2003	1.80		1.80%
1/27/2003	1.82		1.82%
1/28/2003	1.81		1.81%
1/29/2003	1.85		1.85%
1/30/2003	1.80		1.80%
1/31/2003	1.81		1.81%
2/3/2003	1.81		1.81%
2/4/2003	1.84		1.84%
2/5/2003	1.90		1.90%
2/6/2003	1.88		1.88%
2/7/2003	1.89		1.89%
2/10/2003	1.93		1.93%
2/11/2003	1.93		1.93%
2/12/2003	1.89		1.89%
2/13/2003	1.88		1.88%
2/14/2003	1.92		1.92%
2/17/2003	#N/A	#N/A	
2/18/2003	1.89		1.89%
2/19/2003	1.89		1.89%
2/20/2003	1.94		1.94%
2/21/2003	1.97		1.97%
2/24/2003	1.99		1.99%
2/25/2003	1.97		1.97%
2/26/2003	1.94		1.94%
2/27/2003	1.94		1.94%
2/28/2003	1.94		1.94%
3/3/2003	1.91		1.91%
3/4/2003	1.88		1.88%
3/5/2003	1.88		1.88%
3/6/2003	1.93		1.93%
3/7/2003	1.91		1.91%
3/10/2003	1.90		1.90%
3/11/2003	1.92		1.92%
3/12/2003	1.92		1.92%
3/13/2003	2.01		2.01%
3/14/2003	1.83		1.83%
3/17/2003	1.85		1.85%
3/18/2003	1.83		1.83%
3/19/2003	1.83		1.83%
3/20/2003	1.81		1.81%
3/21/2003	1.82		1.82%
3/24/2003	1.80		1.80%
3/25/2003	1.80		1.80%
3/26/2003	1.81		1.81%
3/27/2003	1.85		1.85%
3/28/2003	1.83		1.83%
3/31/2003	1.80		1.80%
4/1/2003	1.82		1.82%
4/2/2003	1.83		1.83%
4/3/2003	1.81		1.81%
4/4/2003	1.80		1.80%
4/7/2003	1.82		1.82%
4/8/2003	1.77		1.77%
4/9/2003	1.80		1.80%
4/10/2003	1.79		1.79%
4/11/2003	1.77		1.77%
4/14/2003	1.82		1.82%
4/15/2003	1.80		1.80%
4/16/2003	1.76		1.76%
4/17/2003	1.76		1.76%
4/18/2003	#N/A	#N/A	
4/21/2003	1.75		1.75%
4/22/2003	1.74		1.74%
4/23/2003	1.76		1.76%
4/24/2003	1.71		1.71%
4/25/2003	1.73		1.73%
4/28/2003	1.76		1.76%
4/29/2003	1.74		1.74%
4/30/2003	1.73		1.73%
5/1/2003	1.75		1.75%
5/2/2003	1.75		1.75%
5/5/2003	1.73		1.73%
5/6/2003	1.67		1.67%
5/7/2003	1.70		1.70%
5/8/2003	1.70		1.70%
5/9/2003	1.69		1.69%
5/12/2003	1.68		1.68%
5/13/2003	1.69		1.69%
5/14/2003	1.66		1.66%
5/15/2003	1.67		1.67%
5/16/2003	1.62		1.62%
5/19/2003	1.61		1.61%
5/20/2003	1.65		1.65%
5/21/2003	1.66		1.66%
5/22/2003	1.63		1.63%
5/23/2003	1.62		1.62%
5/26/2003	#N/A	#N/A	



5/27/2003	1.61	1.61%
5/28/2003	1.61	1.61%
5/29/2003	1.58	1.58%
5/30/2003	1.60	1.60%
6/2/2003	1.60	1.60%
6/3/2003	1.58	1.58%
6/4/2003	1.57	1.57%
6/5/2003	1.59	1.59%
6/6/2003	1.61	1.61%
6/9/2003	1.61	1.61%
6/10/2003	1.59	1.59%
6/11/2003	1.59	1.59%
6/12/2003	1.61	1.61%
6/13/2003	1.62	1.62%
6/16/2003	1.59	1.59%
6/17/2003	1.57	1.57%
6/18/2003	1.58	1.58%
6/19/2003	1.61	1.61%
6/20/2003	1.63	1.63%
6/23/2003	1.61	1.61%
6/24/2003	1.61	1.61%
6/25/2003	1.67	1.67%
6/26/2003	1.70	1.70%
6/27/2003	1.68	1.68%
6/30/2003	1.64	1.64%
7/1/2003	1.64	1.64%
7/2/2003	1.60	1.60%
7/3/2003	1.58	1.58%
7/4/2003	#N/A	#N/A
7/7/2003	1.60	1.60%
7/8/2003	1.63	1.63%
7/9/2003	1.73	1.73%
7/10/2003	1.76	1.76%
7/11/2003	1.78	1.78%
7/14/2003	1.82	1.82%
7/15/2003	1.88	1.88%
7/16/2003	1.89	1.89%
7/17/2003	1.93	1.93%
7/18/2003	1.96	1.96%
7/21/2003	1.98	1.98%
7/22/2003	1.98	1.98%
7/23/2003	2.01	2.01%
7/24/2003	2.02	2.02%
7/25/2003	2.08	2.08%
7/28/2003	2.04	2.04%
7/29/2003	2.04	2.04%
7/30/2003	2.02	2.02%
7/31/2003	2.08	2.08%
8/1/2003	2.04	2.04%
8/4/2003	2.01	2.01%
8/5/2003	2.04	2.04%
8/6/2003	1.98	1.98%
8/7/2003	2.01	2.01%
8/8/2003	2.00	2.00%
8/11/2003	2.07	2.07%
8/12/2003	2.08	2.08%
8/13/2003	2.17	2.17%
8/14/2003	2.17	2.17%
8/15/2003	2.19	2.19%
8/18/2003	2.16	2.16%
8/19/2003	2.14	2.14%
8/20/2003	2.19	2.19%
8/21/2003	2.24	2.24%
8/22/2003	2.22	2.22%
8/25/2003	2.22	2.22%
8/26/2003	2.22	2.22%
8/27/2003	2.18	2.18%
8/28/2003	2.13	2.13%
8/29/2003	2.16	2.16%
9/1/2003	#N/A	#N/A
9/2/2003	2.18	2.18%
9/3/2003	2.20	2.20%
9/4/2003	2.20	2.20%
9/5/2003	2.18	2.18%
9/8/2003	2.17	2.17%
9/9/2003	2.16	2.16%
9/10/2003	2.10	2.10%
9/11/2003	2.13	2.13%
9/12/2003	2.09	2.09%
9/15/2003	2.10	2.10%
9/16/2003	2.03	2.03%
9/17/2003	2.00	2.00%
9/18/2003	2.01	2.01%
9/19/2003	2.00	2.00%
9/22/2003	2.05	2.05%
9/23/2003	2.05	2.05%
9/24/2003	2.03	2.03%
9/25/2003	2.05	2.05%
9/26/2003	2.05	2.05%
9/29/2003	2.06	2.06%
9/30/2003	2.01	2.01%
10/1/2003	2.00	2.00%
10/2/2003	2.02	2.02%
10/3/2003	2.05	2.05%
10/6/2003	2.06	2.06%
10/7/2003	2.10	2.10%
10/8/2003	2.09	2.09%
10/9/2003	2.12	2.12%
10/10/2003	2.15	2.15%
10/13/2003	#N/A	#N/A
10/14/2003	2.19	2.19%
10/15/2003	2.23	2.23%
10/16/2003	2.26	2.26%
10/17/2003	2.27	2.27%
10/20/2003	2.28	2.28%
10/21/2003	2.26	2.26%
10/22/2003	2.22	2.22%
10/23/2003	2.31	2.31%
10/24/2003	2.32	2.32%
10/27/2003	2.34	2.34%
10/28/2003	2.32	2.32%
10/29/2003	2.33	2.33%
10/30/2003	2.39	2.39%
10/31/2003	2.40	2.40%

11/3/2003	2.43		2.43%
11/4/2003	2.40		2.40%
11/5/2003	2.36		2.36%
11/6/2003	2.37		2.37%
11/7/2003	2.38		2.38%
11/10/2003	2.40		2.40%
11/11/2003	#N/A	#N/A	
11/12/2003	2.40		2.40%
11/13/2003	2.36		2.36%
11/14/2003	2.35		2.35%
11/17/2003	2.36		2.36%
11/18/2003	2.34		2.34%
11/19/2003	2.33		2.33%
11/20/2003	2.24		2.24%
11/21/2003	2.22		2.22%
11/24/2003	2.24		2.24%
11/25/2003	2.27		2.27%
11/26/2003	2.29		2.29%
11/27/2003	#N/A	#N/A	
11/28/2003	2.31		2.31%
12/1/2003	2.32		2.32%
12/2/2003	2.33		2.33%
12/3/2003	2.33		2.33%
12/4/2003	2.34		2.34%
12/5/2003	2.31		2.31%
12/8/2003	2.33		2.33%
12/9/2003	2.32		2.32%
12/10/2003	2.33		2.33%
12/11/2003	2.37		2.37%
12/12/2003	2.35		2.35%
12/15/2003	2.30		2.30%
12/16/2003	2.25		2.25%
12/17/2003	2.23		2.23%
12/18/2003	2.22		2.22%
12/19/2003	2.20		2.20%
12/22/2003	2.20		2.20%
12/23/2003	2.25		2.25%
12/24/2003	2.24		2.24%
12/25/2003	#N/A	#N/A	
12/26/2003	2.23		2.23%
12/29/2003	2.25		2.25%
12/30/2003	2.28		2.28%
12/31/2003	2.27		2.27%
1/1/2004	#N/A	#N/A	
1/2/2004	2.32		2.32%
1/5/2004	2.35		2.35%
1/6/2004	2.32		2.32%
1/7/2004	2.33		2.33%
1/8/2004	2.28		2.28%
1/9/2004	2.22		2.22%
1/12/2004	2.22		2.22%
1/13/2004	2.22		2.22%
1/14/2004	2.16		2.16%
1/15/2004	2.17		2.17%
1/16/2004	2.21		2.21%
1/19/2004	#N/A	#N/A	
1/20/2004	2.24		2.24%
1/21/2004	2.26		2.26%
1/22/2004	2.23		2.23%
1/23/2004	2.27		2.27%
1/26/2004	2.27		2.27%
1/27/2004	2.27		2.27%
1/28/2004	2.30		2.30%
1/29/2004	2.31		2.31%
1/30/2004	2.31		2.31%
2/2/2004	2.34		2.34%
2/3/2004	2.32		2.32%
2/4/2004	2.33		2.33%
2/5/2004	2.35		2.35%
2/6/2004	2.33		2.33%
2/9/2004	2.33		2.33%
2/10/2004	2.34		2.34%
2/11/2004	2.30		2.30%
2/12/2004	2.33		2.33%
2/13/2004	2.31		2.31%
2/16/2004	#N/A	#N/A	
2/17/2004	2.30		2.30%
2/18/2004	2.30		2.30%
2/19/2004	2.29		2.29%
2/20/2004	2.31		2.31%
2/23/2004	2.29		2.29%
2/24/2004	2.30		2.30%
2/25/2004	2.31		2.31%
2/26/2004	2.36		2.36%
2/27/2004	2.38		2.38%
3/1/2004	2.45		2.45%
3/2/2004	2.47		2.47%
3/3/2004	2.48		2.48%
3/4/2004	2.44		2.44%
3/5/2004	2.39		2.39%
3/8/2004	2.35		2.35%
3/9/2004	2.33		2.33%
3/10/2004	2.29		2.29%
3/11/2004	2.24		2.24%
3/12/2004	2.26		2.26%
3/15/2004	2.31		2.31%
3/16/2004	2.30		2.30%
3/17/2004	2.35		2.35%
3/18/2004	2.39		2.39%
3/19/2004	2.36		2.36%
3/22/2004	2.32		2.32%
3/23/2004	2.32		2.32%
3/24/2004	2.35		2.35%
3/25/2004	2.35		2.35%
3/26/2004	2.38		2.38%
3/29/2004	2.41		2.41%
3/30/2004	2.39		2.39%
3/31/2004	2.38		2.38%
4/1/2004	2.43		2.43%
4/2/2004	2.46		2.46%
4/5/2004	2.49		2.49%
4/6/2004	2.46		2.46%
4/7/2004	2.37		2.37%
4/8/2004	2.41		2.41%

4/9/2004	#N/A	#N/A
4/12/2004	2.44	2.44%
4/13/2004	2.47	2.47%
4/14/2004	2.49	2.49%
4/15/2004	2.49	2.49%
4/16/2004	2.50	2.50%
4/19/2004	2.52	2.52%
4/20/2004	2.46	2.46%
4/21/2004	2.49	2.49%
4/22/2004	2.42	2.42%
4/23/2004	2.36	2.36%
4/26/2004	2.43	2.43%
4/27/2004	2.43	2.43%
4/28/2004	2.40	2.40%
4/29/2004	2.40	2.40%
4/30/2004	2.42	2.42%
5/3/2004	2.44	2.44%
5/4/2004	2.46	2.46%
5/5/2004	2.51	2.51%
5/6/2004	2.48	2.48%
5/7/2004	2.55	2.55%
5/10/2004	2.56	2.56%
5/11/2004	2.58	2.58%
5/12/2004	2.66	2.66%
5/13/2004	2.67	2.67%
5/14/2004	2.63	2.63%
5/17/2004	2.63	2.63%
5/18/2004	2.69	2.69%
5/19/2004	2.76	2.76%
5/20/2004	2.76	2.76%
5/21/2004	2.72	2.72%
5/24/2004	2.74	2.74%
5/25/2004	2.70	2.70%
5/26/2004	2.68	2.68%
5/27/2004	2.63	2.63%
5/28/2004	2.66	2.66%
5/31/2004	#N/A	#N/A
6/1/2004	2.74	2.74%
6/2/2004	2.70	2.70%
6/3/2004	2.66	2.66%
6/4/2004	2.67	2.67%
6/7/2004	2.67	2.67%
6/8/2004	2.63	2.63%
6/9/2004	2.62	2.62%
6/10/2004	2.63	2.63%
6/11/2004	#N/A	#N/A
6/14/2004	2.63	2.63%
6/15/2004	2.53	2.53%
6/16/2004	2.56	2.56%
6/17/2004	2.55	2.55%
6/18/2004	2.57	2.57%
6/21/2004	2.54	2.54%
6/22/2004	2.55	2.55%
6/23/2004	2.53	2.53%
6/24/2004	2.51	2.51%
6/25/2004	2.50	2.50%
6/28/2004	2.53	2.53%
6/29/2004	2.50	2.50%
6/30/2004	2.52	2.52%
7/1/2004	2.53	2.53%
7/2/2004	2.52	2.52%
7/5/2004	#N/A	#N/A
7/6/2004	2.52	2.52%
7/7/2004	2.50	2.50%
7/8/2004	2.47	2.47%
7/9/2004	2.47	2.47%
7/12/2004	2.44	2.44%
7/13/2004	2.47	2.47%
7/14/2004	2.48	2.48%
7/15/2004	2.49	2.49%
7/16/2004	2.44	2.44%
7/19/2004	2.42	2.42%
7/20/2004	2.42	2.42%
7/21/2004	2.45	2.45%
7/22/2004	2.45	2.45%
7/23/2004	2.45	2.45%
7/26/2004	2.44	2.44%
7/27/2004	2.47	2.47%
7/28/2004	2.50	2.50%
7/29/2004	2.53	2.53%
7/30/2004	2.49	2.49%
8/2/2004	2.48	2.48%
8/3/2004	2.47	2.47%
8/4/2004	2.45	2.45%
8/5/2004	2.47	2.47%
8/6/2004	2.42	2.42%
8/9/2004	2.43	2.43%
8/10/2004	2.42	2.42%
8/11/2004	2.44	2.44%
8/12/2004	2.46	2.46%
8/13/2004	2.45	2.45%
8/16/2004	2.44	2.44%
8/17/2004	2.39	2.39%
8/18/2004	2.40	2.40%
8/19/2004	2.46	2.46%
8/20/2004	2.45	2.45%
8/23/2004	2.42	2.42%
8/24/2004	2.41	2.41%
8/25/2004	2.38	2.38%
8/26/2004	2.36	2.36%
8/27/2004	2.37	2.37%
8/30/2004	2.36	2.36%
8/31/2004	2.35	2.35%
9/1/2004	2.36	2.36%
9/2/2004	2.37	2.37%
9/3/2004	2.42	2.42%
9/6/2004	#N/A	#N/A
9/7/2004	2.40	2.40%
9/8/2004	2.36	2.36%
9/9/2004	2.39	2.39%
9/10/2004	2.36	2.36%
9/13/2004	2.35	2.35%
9/14/2004	2.34	2.34%
9/15/2004	2.32	2.32%

9/16/2004	2.27		2.27%
9/17/2004	2.29		2.29%
9/20/2004	2.27		2.27%
9/21/2004	2.25		2.25%
9/22/2004	2.27		2.27%
9/23/2004	2.26		2.26%
9/24/2004	2.26		2.26%
9/27/2004	2.29		2.29%
9/28/2004	2.32		2.32%
9/29/2004	2.34		2.34%
9/30/2004	2.37		2.37%
10/1/2004	2.38		2.38%
10/4/2004	2.33		2.33%
10/5/2004	2.34		2.34%
10/6/2004	2.33		2.33%
10/7/2004	2.37		2.37%
10/8/2004	2.37		2.37%
10/11/2004	#N/A	#N/A	
10/12/2004	2.37		2.37%
10/13/2004	2.37		2.37%
10/14/2004	2.35		2.35%
10/15/2004	2.37		2.37%
10/18/2004	2.36		2.36%
10/19/2004	2.37		2.37%
10/20/2004	2.35		2.35%
10/21/2004	2.39		2.39%
10/22/2004	2.36		2.36%
10/25/2004	2.36		2.36%
10/26/2004	2.38		2.38%
10/27/2004	2.38		2.38%
10/28/2004	2.41		2.41%
10/29/2004	2.42		2.42%
11/1/2004	2.44		2.44%
11/2/2004	2.49		2.49%
11/3/2004	2.48		2.48%
11/4/2004	2.45		2.45%
11/5/2004	2.50		2.50%
11/8/2004	2.50		2.50%
11/9/2004	2.48		2.48%
11/10/2004	2.50		2.50%
11/11/2004	#N/A	#N/A	
11/12/2004	2.49		2.49%
11/15/2004	2.53		2.53%
11/16/2004	2.53		2.53%
11/17/2004	2.51		2.51%
11/18/2004	2.48		2.48%
11/19/2004	2.53		2.53%
11/22/2004	2.56		2.56%
11/23/2004	2.54		2.54%
11/24/2004	2.56		2.56%
11/25/2004	#N/A	#N/A	
11/26/2004	2.58		2.58%
11/29/2004	2.60		2.60%
11/30/2004	2.61		2.61%
12/1/2004	2.59		2.59%
12/2/2004	2.57		2.57%
12/3/2004	2.54		2.54%
12/6/2004	2.54		2.54%
12/7/2004	2.54		2.54%
12/8/2004	2.52		2.52%
12/9/2004	2.55		2.55%
12/10/2004	2.50		2.50%
12/13/2004	2.51		2.51%
12/14/2004	2.52		2.52%
12/15/2004	2.52		2.52%
12/16/2004	2.55		2.55%
12/17/2004	2.57		2.57%
12/20/2004	2.59		2.59%
12/21/2004	2.59		2.59%
12/22/2004	2.58		2.58%
12/23/2004	2.61		2.61%
12/24/2004	#N/A	#N/A	
12/27/2004	2.63		2.63%
12/28/2004	2.62		2.62%
12/29/2004	2.60		2.60%
12/30/2004	2.57		2.57%
12/31/2004	2.56		2.56%
1/3/2005	2.53		2.53%
1/4/2005	2.51		2.51%
1/5/2005	2.50		2.50%
1/6/2005	2.53		2.53%
1/7/2005	2.49		2.49%
1/10/2005	2.52		2.52%
1/11/2005	2.50		2.50%
1/12/2005	2.52		2.52%
1/13/2005	2.50		2.50%
1/14/2005	2.51		2.51%
1/17/2005	#N/A	#N/A	
1/18/2005	2.50		2.50%
1/19/2005	2.50		2.50%
1/20/2005	2.47		2.47%
1/21/2005	2.47		2.47%
1/24/2005	2.46		2.46%
1/25/2005	2.46		2.46%
1/26/2005	2.49		2.49%
1/27/2005	2.50		2.50%
1/28/2005	2.51		2.51%
1/31/2005	2.49		2.49%
2/1/2005	2.48		2.48%
2/2/2005	2.45		2.45%
2/3/2005	2.45		2.45%
2/4/2005	2.44		2.44%
2/7/2005	2.45		2.45%
2/8/2005	2.48		2.48%
2/9/2005	2.51		2.51%
2/10/2005	2.50		2.50%
2/11/2005	2.53		2.53%
2/14/2005	2.54		2.54%
2/15/2005	2.49		2.49%
2/16/2005	2.51		2.51%
2/17/2005	2.54		2.54%
2/18/2005	2.60		2.60%
2/21/2005	#N/A	#N/A	
2/22/2005	2.62		2.62%

2/23/2005	2.63	2.63%
2/24/2005	2.64	2.64%
2/25/2005	2.63	2.63%
2/28/2005	2.66	2.66%
3/1/2005	2.69	2.69%
3/2/2005	2.69	2.69%
3/3/2005	2.70	2.70%
3/4/2005	2.67	2.67%
3/7/2005	2.68	2.68%
3/8/2005	2.71	2.71%
3/9/2005	2.75	2.75%
3/10/2005	2.72	2.72%
3/11/2005	2.74	2.74%
3/14/2005	2.70	2.70%
3/15/2005	2.72	2.72%
3/16/2005	2.73	2.73%
3/17/2005	2.74	2.74%
3/18/2005	2.74	2.74%
3/21/2005	2.73	2.73%
3/22/2005	2.76	2.76%
3/23/2005	2.69	2.69%
3/24/2005	2.70	2.70%
3/25/2005	#N/A	#N/A
3/28/2005	2.70	2.70%
3/29/2005	2.69	2.69%
3/30/2005	2.67	2.67%
3/31/2005	2.71	2.71%
4/1/2005	2.69	2.69%
4/4/2005	2.68	2.68%
4/5/2005	2.67	2.67%
4/6/2005	2.64	2.64%
4/7/2005	2.64	2.64%
4/8/2005	2.66	2.66%
4/11/2005	2.63	2.63%
4/12/2005	2.65	2.65%
4/13/2005	2.64	2.64%
4/14/2005	2.65	2.65%
4/15/2005	2.60	2.60%
4/18/2005	2.61	2.61%
4/19/2005	2.59	2.59%
4/20/2005	2.62	2.62%
4/21/2005	2.66	2.66%
4/22/2005	2.65	2.65%
4/25/2005	2.63	2.63%
4/26/2005	2.62	2.62%
4/27/2005	2.60	2.60%
4/28/2005	2.61	2.61%
4/29/2005	2.60	2.60%
5/2/2005	2.60	2.60%
5/3/2005	2.57	2.57%
5/4/2005	2.57	2.57%
5/5/2005	2.57	2.57%
5/6/2005	2.59	2.59%
5/9/2005	2.60	2.60%
5/10/2005	2.58	2.58%
5/11/2005	2.57	2.57%
5/12/2005	2.52	2.52%
5/13/2005	2.46	2.46%
5/16/2005	2.47	2.47%
5/17/2005	2.48	2.48%
5/18/2005	2.42	2.42%
5/19/2005	2.42	2.42%
5/20/2005	2.46	2.46%
5/23/2005	2.42	2.42%
5/24/2005	2.42	2.42%
5/25/2005	2.42	2.42%
5/26/2005	2.39	2.39%
5/27/2005	2.41	2.41%
5/30/2005	#N/A	#N/A
5/31/2005	2.37	2.37%
6/1/2005	2.37	2.37%
6/2/2005	2.34	2.34%
6/3/2005	2.37	2.37%
6/6/2005	2.36	2.36%
6/7/2005	2.32	2.32%
6/8/2005	2.32	2.32%
6/9/2005	2.34	2.34%
6/10/2005	2.31	2.31%
6/13/2005	2.33	2.33%
6/14/2005	2.34	2.34%
6/15/2005	2.33	2.33%
6/16/2005	2.34	2.34%
6/17/2005	2.37	2.37%
6/20/2005	2.37	2.37%
6/21/2005	2.34	2.34%
6/22/2005	2.27	2.27%
6/23/2005	2.28	2.28%
6/24/2005	2.27	2.27%
6/27/2005	2.28	2.28%
6/28/2005	2.30	2.30%
6/29/2005	2.30	2.30%
6/30/2005	2.27	2.27%
7/1/2005	2.31	2.31%
7/4/2005	#N/A	#N/A
7/5/2005	2.31	2.31%
7/6/2005	2.30	2.30%
7/7/2005	2.28	2.28%
7/8/2005	2.28	2.28%
7/11/2005	2.30	2.30%
7/12/2005	2.32	2.32%
7/13/2005	2.30	2.30%
7/14/2005	2.25	2.25%
7/15/2005	2.23	2.23%
7/18/2005	2.24	2.24%
7/19/2005	2.28	2.28%
7/20/2005	2.27	2.27%
7/21/2005	2.33	2.33%
7/22/2005	2.34	2.34%
7/25/2005	2.31	2.31%
7/26/2005	2.32	2.32%
7/27/2005	2.35	2.35%
7/28/2005	2.34	2.34%
7/29/2005	2.36	2.36%
8/1/2005	2.37	2.37%

8/2/2005	2.35	2.35%
8/3/2005	2.37	2.37%
8/4/2005	2.38	2.38%
8/5/2005	2.40	2.40%
8/8/2005	2.40	2.40%
8/9/2005	2.39	2.39%
8/10/2005	2.39	2.39%
8/11/2005	2.35	2.35%
8/12/2005	2.33	2.33%
8/15/2005	2.35	2.35%
8/16/2005	2.36	2.36%
8/17/2005	2.37	2.37%
8/18/2005	2.35	2.35%
8/19/2005	2.36	2.36%
8/22/2005	2.36	2.36%
8/23/2005	2.35	2.35%
8/24/2005	2.36	2.36%
8/25/2005	2.38	2.38%
8/26/2005	2.39	2.39%
8/29/2005	2.41	2.41%
8/30/2005	2.45	2.45%
8/31/2005	2.37	2.37%
9/1/2005	2.41	2.41%
9/2/2005	2.44	2.44%
9/5/2005	#N/A	#N/A
9/6/2005	2.44	2.44%
9/7/2005	2.46	2.46%
9/8/2005	2.47	2.47%
9/9/2005	2.50	2.50%
9/12/2005	2.49	2.49%
9/13/2005	2.47	2.47%
9/14/2005	2.49	2.49%
9/15/2005	2.51	2.51%
9/16/2005	2.53	2.53%
9/19/2005	2.55	2.55%
9/20/2005	2.52	2.52%
9/21/2005	2.51	2.51%
9/22/2005	2.52	2.52%
9/23/2005	2.51	2.51%
9/26/2005	2.52	2.52%
9/27/2005	2.53	2.53%
9/28/2005	2.53	2.53%
9/29/2005	2.54	2.54%
9/30/2005	2.56	2.56%
10/3/2005	2.55	2.55%
10/4/2005	2.51	2.51%
10/5/2005	2.50	2.50%
10/6/2005	2.46	2.46%
10/7/2005	2.45	2.45%
10/10/2005	#N/A	#N/A
10/11/2005	2.47	2.47%
10/12/2005	2.49	2.49%
10/13/2005	2.52	2.52%
10/14/2005	2.50	2.50%
10/17/2005	2.56	2.56%
10/18/2005	2.57	2.57%
10/19/2005	2.55	2.55%
10/20/2005	2.54	2.54%
10/21/2005	2.50	2.50%
10/24/2005	2.52	2.52%
10/25/2005	2.49	2.49%
10/26/2005	2.54	2.54%
10/27/2005	2.56	2.56%
10/28/2005	2.57	2.57%
10/31/2005	2.57	2.57%
11/1/2005	2.58	2.58%
11/2/2005	2.59	2.59%
11/3/2005	2.62	2.62%
11/4/2005	2.60	2.60%
11/7/2005	2.62	2.62%
11/8/2005	2.56	2.56%
11/9/2005	2.56	2.56%
11/10/2005	2.48	2.48%
11/11/2005	#N/A	#N/A
11/14/2005	2.47	2.47%
11/15/2005	2.44	2.44%
11/16/2005	2.42	2.42%
11/17/2005	2.42	2.42%
11/18/2005	2.41	2.41%
11/21/2005	2.38	2.38%
11/22/2005	2.40	2.40%
11/23/2005	2.39	2.39%
11/24/2005	#N/A	#N/A
11/25/2005	2.38	2.38%
11/28/2005	2.37	2.37%
11/29/2005	2.37	2.37%
11/30/2005	2.37	2.37%
12/1/2005	2.37	2.37%
12/2/2005	2.36	2.36%
12/5/2005	2.40	2.40%
12/6/2005	2.37	2.37%
12/7/2005	2.34	2.34%
12/8/2005	2.33	2.33%
12/9/2005	2.36	2.36%
12/12/2005	2.39	2.39%
12/13/2005	2.38	2.38%
12/14/2005	2.35	2.35%
12/15/2005	2.35	2.35%
12/16/2005	2.34	2.34%
12/19/2005	2.34	2.34%
12/20/2005	2.35	2.35%
12/21/2005	2.35	2.35%
12/22/2005	2.33	2.33%
12/23/2005	2.31	2.31%
12/26/2005	#N/A	#N/A
12/27/2005	2.29	2.29%
12/28/2005	2.28	2.28%
12/29/2005	2.30	2.30%
12/30/2005	2.33	2.33%
1/2/2006	#N/A	#N/A
1/3/2006	2.34	2.34%
1/4/2006	2.35	2.35%
1/5/2006	2.32	2.32%
1/6/2006	2.33	2.33%

1/9/2006	2.33		2.33%
1/10/2006	2.37		2.37%
1/11/2006	2.39		2.39%
1/12/2006	2.41		2.41%
1/13/2006	2.39		2.39%
1/16/2006	#N/A	#N/A	
1/17/2006	2.39		2.39%
1/18/2006	2.37		2.37%
1/19/2006	2.41		2.41%
1/20/2006	2.43		2.43%
1/23/2006	2.42		2.42%
1/24/2006	2.43		2.43%
1/25/2006	2.46		2.46%
1/26/2006	2.52		2.52%
1/27/2006	2.50		2.50%
1/30/2006	2.51		2.51%
1/31/2006	2.53		2.53%
2/1/2006	2.55		2.55%
2/2/2006	2.53		2.53%
2/3/2006	2.54		2.54%
2/6/2006	2.55		2.55%
2/7/2006	2.55		2.55%
2/8/2006	2.49		2.49%
2/9/2006	2.49		2.49%
2/10/2006	2.50		2.50%
2/13/2006	2.50		2.50%
2/14/2006	2.48		2.48%
2/15/2006	2.48		2.48%
2/16/2006	2.49		2.49%
2/17/2006	2.51		2.51%
2/20/2006	#N/A	#N/A	
2/21/2006	2.53		2.53%
2/22/2006	2.52		2.52%
2/23/2006	2.53		2.53%
2/24/2006	2.56		2.56%
2/27/2006	2.55		2.55%
2/28/2006	2.53		2.53%
3/1/2006	2.57		2.57%
3/2/2006	2.59		2.59%
3/3/2006	2.61		2.61%
3/6/2006	2.60		2.60%
3/7/2006	2.58		2.58%
3/8/2006	2.53		2.53%
3/9/2006	2.54		2.54%
3/10/2006	2.53		2.53%
3/13/2006	2.53		2.53%
3/14/2006	2.54		2.54%
3/15/2006	2.55		2.55%
3/16/2006	2.53		2.53%
3/17/2006	2.52		2.52%
3/20/2006	2.51		2.51%
3/21/2006	2.48		2.48%
3/22/2006	2.47		2.47%
3/23/2006	2.49		2.49%
3/24/2006	2.47		2.47%
3/27/2006	2.47		2.47%
3/28/2006	2.49		2.49%
3/29/2006	2.49		2.49%
3/30/2006	2.51		2.51%
3/31/2006	2.51		2.51%
4/3/2006	2.52		2.52%
4/4/2006	2.49		2.49%
4/5/2006	2.50		2.50%
4/6/2006	2.52		2.52%
4/7/2006	2.54		2.54%
4/10/2006	2.56		2.56%
4/11/2006	2.56		2.56%
4/12/2006	2.57		2.57%
4/13/2006	2.57		2.57%
4/14/2006	#N/A	#N/A	
4/17/2006	2.58		2.58%
4/18/2006	2.61		2.61%
4/19/2006	2.66		2.66%
4/20/2006	2.62		2.62%
4/21/2006	2.62		2.62%
4/24/2006	2.60		2.60%
4/25/2006	2.60		2.60%
4/26/2006	2.61		2.61%
4/27/2006	2.64		2.64%
4/28/2006	2.68		2.68%
5/1/2006	2.72		2.72%
5/2/2006	2.69		2.69%
5/3/2006	2.68		2.68%
5/4/2006	2.67		2.67%
5/5/2006	2.67		2.67%
5/8/2006	2.67		2.67%
5/9/2006	2.70		2.70%
5/10/2006	2.70		2.70%
5/11/2006	2.71		2.71%
5/12/2006	2.72		2.72%
5/15/2006	2.68		2.68%
5/16/2006	2.66		2.66%
5/17/2006	2.69		2.69%
5/18/2006	2.67		2.67%
5/19/2006	2.62		2.62%
5/22/2006	2.61		2.61%
5/23/2006	2.63		2.63%
5/24/2006	2.61		2.61%
5/25/2006	2.61		2.61%
5/26/2006	2.62		2.62%
5/29/2006	#N/A	#N/A	
5/30/2006	2.64		2.64%
5/31/2006	2.64		2.64%
6/1/2006	2.65		2.65%
6/2/2006	2.63		2.63%
6/5/2006	2.62		2.62%
6/6/2006	2.57		2.57%
6/7/2006	2.54		2.54%
6/8/2006	2.53		2.53%
6/9/2006	2.53		2.53%
6/12/2006	2.54		2.54%
6/13/2006	2.53		2.53%
6/14/2006	2.55		2.55%
6/15/2006	2.58		2.58%

6/16/2006	2.59		2.59%
6/19/2006	2.56		2.56%
6/20/2006	2.57		2.57%
6/21/2006	2.57		2.57%
6/22/2006	2.59		2.59%
6/23/2006	2.59		2.59%
6/26/2006	2.58		2.58%
6/27/2006	2.58		2.58%
6/28/2006	2.57		2.57%
6/29/2006	2.61		2.61%
6/30/2006	2.61		2.61%
7/3/2006	2.59		2.59%
7/4/2006	#N/A	#N/A	
7/5/2006	2.60		2.60%
7/6/2006	2.60		2.60%
7/7/2006	2.59		2.59%
7/10/2006	2.57		2.57%
7/11/2006	2.57		2.57%
7/12/2006	2.56		2.56%
7/13/2006	2.57		2.57%
7/14/2006	2.57		2.57%
7/17/2006	2.58		2.58%
7/18/2006	2.58		2.58%
7/19/2006	2.57		2.57%
7/20/2006	2.58		2.58%
7/21/2006	2.56		2.56%
7/24/2006	2.56		2.56%
7/25/2006	2.59		2.59%
7/26/2006	2.60		2.60%
7/27/2006	2.60		2.60%
7/28/2006	2.59		2.59%
7/31/2006	2.58		2.58%
8/1/2006	2.59		2.59%
8/2/2006	2.60		2.60%
8/3/2006	2.61		2.61%
8/4/2006	2.61		2.61%
8/7/2006	2.64		2.64%
8/8/2006	2.66		2.66%
8/9/2006	2.64		2.64%
8/10/2006	2.63		2.63%
8/11/2006	2.64		2.64%
8/14/2006	2.64		2.64%
8/15/2006	2.61		2.61%
8/16/2006	2.59		2.59%
8/17/2006	2.59		2.59%
8/18/2006	2.58		2.58%
8/21/2006	2.59		2.59%
8/22/2006	2.60		2.60%
8/23/2006	2.57		2.57%
8/24/2006	2.53		2.53%
8/25/2006	2.55		2.55%
8/28/2006	2.52		2.52%
8/29/2006	2.50		2.50%
8/30/2006	2.48		2.48%
8/31/2006	2.50		2.50%
9/1/2006	2.48		2.48%
9/4/2006	#N/A	#N/A	
9/5/2006	2.47		2.47%
9/6/2006	2.48		2.48%
9/7/2006	2.46		2.46%
9/8/2006	2.43		2.43%
9/11/2006	2.42		2.42%
9/12/2006	2.42		2.42%
9/13/2006	2.42		2.42%
9/14/2006	2.44		2.44%
9/15/2006	2.42		2.42%
9/18/2006	2.42		2.42%
9/19/2006	2.39		2.39%
9/20/2006	2.34		2.34%
9/21/2006	2.34		2.34%
9/22/2006	2.33		2.33%
9/25/2006	2.32		2.32%
9/26/2006	2.34		2.34%
9/27/2006	2.34		2.34%
9/28/2006	2.36		2.36%
9/29/2006	2.37		2.37%
10/2/2006	2.35		2.35%
10/3/2006	2.33		2.33%
10/4/2006	2.30		2.30%
10/5/2006	2.30		2.30%
10/6/2006	2.33		2.33%
10/9/2006	#N/A	#N/A	
10/10/2006	2.33		2.33%
10/11/2006	2.33		2.33%
10/12/2006	2.35		2.35%
10/13/2006	2.34		2.34%
10/16/2006	2.34		2.34%
10/17/2006	2.32		2.32%
10/18/2006	2.31		2.31%
10/19/2006	2.30		2.30%
10/20/2006	2.30		2.30%
10/23/2006	2.30		2.30%
10/24/2006	2.31		2.31%
10/25/2006	2.34		2.34%
10/26/2006	2.32		2.32%
10/27/2006	2.31		2.31%
10/30/2006	2.29		2.29%
10/31/2006	2.27		2.27%
11/1/2006	2.28		2.28%
11/2/2006	2.28		2.28%
11/3/2006	2.32		2.32%
11/6/2006	2.35		2.35%
11/7/2006	2.34		2.34%
11/8/2006	2.35		2.35%
11/9/2006	2.34		2.34%
11/10/2006	2.34		2.34%
11/13/2006	2.32		2.32%
11/14/2006	2.29		2.29%
11/15/2006	2.31		2.31%
11/16/2006	2.28		2.28%
11/17/2006	2.28		2.28%
11/20/2006	2.27		2.27%
11/21/2006	2.27		2.27%
11/22/2006	2.27		2.27%

11/23/2006	#N/A	#N/A
11/24/2006	2.28	2.28%
11/27/2006	2.30	2.30%
11/28/2006	2.30	2.30%
11/29/2006	2.30	2.30%
11/30/2006	2.30	2.30%
12/1/2006	2.33	2.33%
12/4/2006	2.32	2.32%
12/5/2006	2.34	2.34%
12/6/2006	2.34	2.34%
12/7/2006	2.34	2.34%
12/8/2006	2.35	2.35%
12/11/2006	2.35	2.35%
12/12/2006	2.34	2.34%
12/13/2006	2.36	2.36%
12/14/2006	2.37	2.37%
12/15/2006	2.31	2.31%
12/18/2006	2.29	2.29%
12/19/2006	2.29	2.29%
12/20/2006	2.28	2.28%
12/21/2006	2.26	2.26%
12/22/2006	2.28	2.28%
12/25/2006	#N/A	#N/A
12/26/2006	2.27	2.27%
12/27/2006	2.27	2.27%
12/28/2006	2.29	2.29%
12/29/2006	2.30	2.30%
1/1/2007	#N/A	#N/A
1/2/2007	2.30	2.30%
1/3/2007	2.31	2.31%
1/4/2007	2.26	2.26%
1/5/2007	2.27	2.27%
1/8/2007	2.28	2.28%
1/9/2007	2.27	2.27%
1/10/2007	2.27	2.27%
1/11/2007	2.31	2.31%
1/12/2007	2.28	2.28%
1/15/2007	#N/A	#N/A
1/16/2007	2.27	2.27%
1/17/2007	2.29	2.29%
1/18/2007	2.28	2.28%
1/19/2007	2.31	2.31%
1/22/2007	2.32	2.32%
1/23/2007	2.35	2.35%
1/24/2007	2.37	2.37%
1/25/2007	2.39	2.39%
1/26/2007	2.40	2.40%
1/29/2007	2.40	2.40%
1/30/2007	2.42	2.42%
1/31/2007	2.43	2.43%
2/1/2007	2.42	2.42%
2/2/2007	2.41	2.41%
2/5/2007	2.40	2.40%
2/6/2007	2.37	2.37%
2/7/2007	2.34	2.34%
2/8/2007	2.34	2.34%
2/9/2007	2.36	2.36%
2/12/2007	2.34	2.34%
2/13/2007	2.36	2.36%
2/14/2007	2.36	2.36%
2/15/2007	2.32	2.32%
2/16/2007	2.33	2.33%
2/19/2007	#N/A	#N/A
2/20/2007	2.32	2.32%
2/21/2007	2.36	2.36%
2/22/2007	2.38	2.38%
2/23/2007	2.38	2.38%
2/26/2007	2.37	2.37%
2/27/2007	2.36	2.36%
2/28/2007	2.36	2.36%
3/1/2007	2.37	2.37%
3/2/2007	2.37	2.37%
3/5/2007	2.34	2.34%
3/6/2007	2.34	2.34%
3/7/2007	2.34	2.34%
3/8/2007	2.34	2.34%
3/9/2007	2.34	2.34%
3/12/2007	2.34	2.34%
3/13/2007	2.35	2.35%
3/14/2007	2.35	2.35%
3/15/2007	2.37	2.37%
3/16/2007	2.39	2.39%
3/19/2007	2.40	2.40%
3/20/2007	2.39	2.39%
3/21/2007	2.39	2.39%
3/22/2007	2.43	2.43%
3/23/2007	2.43	2.43%
3/26/2007	2.44	2.44%
3/27/2007	2.46	2.46%
3/28/2007	2.45	2.45%
3/29/2007	2.46	2.46%
3/30/2007	2.44	2.44%
4/2/2007	2.44	2.44%
4/3/2007	2.42	2.42%
4/4/2007	2.43	2.43%
4/5/2007	2.46	2.46%
4/6/2007	2.49	2.49%
4/9/2007	2.48	2.48%
4/10/2007	2.46	2.46%
4/11/2007	2.46	2.46%
4/12/2007	2.46	2.46%
4/13/2007	2.45	2.45%
4/16/2007	2.44	2.44%
4/17/2007	2.40	2.40%
4/18/2007	2.40	2.40%
4/19/2007	2.41	2.41%
4/20/2007	2.41	2.41%
4/23/2007	2.41	2.41%
4/24/2007	2.42	2.42%
4/25/2007	2.44	2.44%
4/26/2007	2.43	2.43%
4/27/2007	2.46	2.46%
4/30/2007	2.43	2.43%
5/1/2007	2.45	2.45%

5/2/2007	2.43		2.43%
5/3/2007	2.43		2.43%
5/4/2007	2.41		2.41%
5/7/2007	2.37		2.37%
5/8/2007	2.36		2.36%
5/9/2007	2.38		2.38%
5/10/2007	2.38		2.38%
5/11/2007	2.37		2.37%
5/14/2007	2.37		2.37%
5/15/2007	2.34		2.34%
5/16/2007	2.33		2.33%
5/17/2007	2.35		2.35%
5/18/2007	2.35		2.35%
5/21/2007	2.36		2.36%
5/22/2007	2.35		2.35%
5/23/2007	2.36		2.36%
5/24/2007	2.38		2.38%
5/25/2007	2.37		2.37%
5/28/2007	#N/A	#N/A	
5/29/2007	2.34		2.34%
5/30/2007	2.36		2.36%
5/31/2007	2.36		2.36%
6/1/2007	2.38		2.38%
6/4/2007	2.38		2.38%
6/5/2007	2.38		2.38%
6/6/2007	2.39		2.39%
6/7/2007	2.41		2.41%
6/8/2007	2.43		2.43%
6/11/2007	2.42		2.42%
6/12/2007	2.43		2.43%
6/13/2007	2.45		2.45%
6/14/2007	2.46		2.46%
6/15/2007	2.43		2.43%
6/18/2007	2.42		2.42%
6/19/2007	2.42		2.42%
6/20/2007	2.41		2.41%
6/21/2007	2.42		2.42%
6/22/2007	2.44		2.44%
6/25/2007	2.42		2.42%
6/26/2007	2.40		2.40%
6/27/2007	2.39		2.39%
6/28/2007	2.39		2.39%
6/29/2007	2.38		2.38%
7/2/2007	2.39		2.39%
7/3/2007	2.37		2.37%
7/4/2007	#N/A	#N/A	
7/5/2007	2.40		2.40%
7/6/2007	2.40		2.40%
7/9/2007	2.41		2.41%
7/10/2007	2.39		2.39%
7/11/2007	2.38		2.38%
7/12/2007	2.39		2.39%
7/13/2007	2.38		2.38%
7/16/2007	2.36		2.36%
7/17/2007	2.35		2.35%
7/18/2007	2.38		2.38%
7/19/2007	2.39		2.39%
7/20/2007	2.36		2.36%
7/23/2007	2.34		2.34%
7/24/2007	2.36		2.36%
7/25/2007	2.36		2.36%
7/26/2007	2.32		2.32%
7/27/2007	2.32		2.32%
7/30/2007	2.33		2.33%
7/31/2007	2.34		2.34%
8/1/2007	2.32		2.32%
8/2/2007	2.31		2.31%
8/3/2007	2.27		2.27%
8/6/2007	2.26		2.26%
8/7/2007	2.26		2.26%
8/8/2007	2.26		2.26%
8/9/2007	2.25		2.25%
8/10/2007	2.25		2.25%
8/13/2007	2.26		2.26%
8/14/2007	2.24		2.24%
8/15/2007	2.23		2.23%
8/16/2007	2.21		2.21%
8/17/2007	2.23		2.23%
8/20/2007	2.20		2.20%
8/21/2007	2.22		2.22%
8/22/2007	2.21		2.21%
8/23/2007	2.23		2.23%
8/24/2007	2.23		2.23%
8/27/2007	2.22		2.22%
8/28/2007	2.20		2.20%
8/29/2007	2.19		2.19%
8/30/2007	2.19		2.19%
8/31/2007	2.20		2.20%
9/3/2007	#N/A	#N/A	
9/4/2007	2.20		2.20%
9/5/2007	2.19		2.19%
9/6/2007	2.19		2.19%
9/7/2007	2.19		2.19%
9/10/2007	2.20		2.20%
9/11/2007	2.21		2.21%
9/12/2007	2.23		2.23%
9/13/2007	2.25		2.25%
9/14/2007	2.27		2.27%
9/17/2007	2.27		2.27%
9/18/2007	2.31		2.31%
9/19/2007	2.32		2.32%
9/20/2007	2.35		2.35%
9/21/2007	2.33		2.33%
9/24/2007	2.30		2.30%
9/25/2007	2.29		2.29%
9/26/2007	2.29		2.29%
9/27/2007	2.31		2.31%
9/28/2007	2.32		2.32%
10/1/2007	2.30		2.30%
10/2/2007	2.31		2.31%
10/3/2007	2.30		2.30%
10/4/2007	2.30		2.30%
10/5/2007	2.31		2.31%
10/8/2007	#N/A	#N/A	

10/9/2007	2.33	2.33%
10/10/2007	2.32	2.32%
10/11/2007	2.34	2.34%
10/12/2007	2.34	2.34%
10/15/2007	2.35	2.35%
10/16/2007	2.35	2.35%
10/17/2007	2.35	2.35%
10/18/2007	2.32	2.32%
10/19/2007	2.32	2.32%
10/22/2007	2.31	2.31%
10/23/2007	2.30	2.30%
10/24/2007	2.29	2.29%
10/25/2007	2.33	2.33%
10/26/2007	2.36	2.36%
10/29/2007	2.35	2.35%
10/30/2007	2.34	2.34%
10/31/2007	2.34	2.34%
11/1/2007	2.36	2.36%
11/2/2007	2.39	2.39%
11/5/2007	2.41	2.41%
11/6/2007	2.45	2.45%
11/7/2007	2.43	2.43%
11/8/2007	2.40	2.40%
11/9/2007	2.41	2.41%
11/12/2007	#N/A	#N/A
11/13/2007	2.40	2.40%
11/14/2007	2.40	2.40%
11/15/2007	2.36	2.36%
11/16/2007	2.35	2.35%
11/19/2007	2.37	2.37%
11/20/2007	2.38	2.38%
11/21/2007	2.38	2.38%
11/22/2007	#N/A	#N/A
11/23/2007	2.38	2.38%
11/26/2007	2.38	2.38%
11/27/2007	2.37	2.37%
11/28/2007	2.32	2.32%
11/29/2007	2.33	2.33%
11/30/2007	2.34	2.34%
12/3/2007	2.32	2.32%
12/4/2007	2.30	2.30%
12/5/2007	2.26	2.26%
12/6/2007	2.25	2.25%
12/7/2007	2.26	2.26%
12/10/2007	2.26	2.26%
12/11/2007	2.25	2.25%
12/12/2007	2.27	2.27%
12/13/2007	2.31	2.31%
12/14/2007	2.34	2.34%
12/17/2007	2.34	2.34%
12/18/2007	2.34	2.34%
12/19/2007	2.33	2.33%
12/20/2007	2.30	2.30%
12/21/2007	2.34	2.34%
12/24/2007	2.35	2.35%
12/25/2007	#N/A	#N/A
12/26/2007	2.35	2.35%
12/27/2007	2.36	2.36%
12/28/2007	2.33	2.33%
12/31/2007	2.31	2.31%
1/1/2008	#N/A	#N/A
1/2/2008	2.32	2.32%
1/3/2008	2.33	2.33%
1/4/2008	2.32	2.32%
1/7/2008	2.29	2.29%
1/8/2008	2.29	2.29%
1/9/2008	2.26	2.26%
1/10/2008	2.23	2.23%
1/11/2008	2.26	2.26%
1/14/2008	2.28	2.28%
1/15/2008	2.27	2.27%
1/16/2008	2.24	2.24%
1/17/2008	2.23	2.23%
1/18/2008	2.24	2.24%
1/21/2008	#N/A	#N/A
1/22/2008	2.24	2.24%
1/23/2008	2.20	2.20%
1/24/2008	2.24	2.24%
1/25/2008	2.27	2.27%
1/28/2008	2.28	2.28%
1/29/2008	2.32	2.32%
1/30/2008	2.33	2.33%
1/31/2008	2.34	2.34%
2/1/2008	2.31	2.31%
2/4/2008	2.30	2.30%
2/5/2008	2.27	2.27%
2/6/2008	2.25	2.25%
2/7/2008	2.27	2.27%
2/8/2008	2.28	2.28%
2/11/2008	2.30	2.30%
2/12/2008	2.30	2.30%
2/13/2008	2.28	2.28%
2/14/2008	2.28	2.28%
2/15/2008	2.28	2.28%
2/18/2008	#N/A	#N/A
2/19/2008	2.33	2.33%
2/20/2008	2.38	2.38%
2/21/2008	2.34	2.34%
2/22/2008	2.35	2.35%
2/25/2008	2.38	2.38%
2/26/2008	2.44	2.44%
2/27/2008	2.43	2.43%
2/28/2008	2.45	2.45%
2/29/2008	2.43	2.43%
3/3/2008	2.46	2.46%
3/4/2008	2.48	2.48%
3/5/2008	2.54	2.54%
3/6/2008	2.55	2.55%
3/7/2008	2.55	2.55%
3/10/2008	2.56	2.56%
3/11/2008	2.55	2.55%
3/12/2008	2.54	2.54%
3/13/2008	2.51	2.51%
3/14/2008	2.43	2.43%

3/17/2008	2.29		2.29%
3/18/2008	2.40		2.40%
3/19/2008	2.34		2.34%
3/20/2008	2.32		2.32%
3/21/2008	#N/A	#N/A	
3/24/2008	2.32		2.32%
3/25/2008	2.26		2.26%
3/26/2008	2.27		2.27%
3/27/2008	2.33		2.33%
3/28/2008	2.34		2.34%
3/31/2008	2.34		2.34%
4/1/2008	2.35		2.35%
4/2/2008	2.34		2.34%
4/3/2008	2.33		2.33%
4/4/2008	2.32		2.32%
4/7/2008	2.34		2.34%
4/8/2008	2.32		2.32%
4/9/2008	2.30		2.30%
4/10/2008	2.29		2.29%
4/11/2008	2.30		2.30%
4/14/2008	2.30		2.30%
4/15/2008	2.32		2.32%
4/16/2008	2.31		2.31%
4/17/2008	2.31		2.31%
4/18/2008	2.32		2.32%
4/21/2008	2.31		2.31%
4/22/2008	2.31		2.31%
4/23/2008	2.33		2.33%
4/24/2008	2.31		2.31%
4/25/2008	2.31		2.31%
4/28/2008	2.30		2.30%
4/29/2008	2.29		2.29%
4/30/2008	2.27		2.27%
5/1/2008	2.26		2.26%
5/2/2008	2.36		2.36%
5/5/2008	2.35		2.35%
5/6/2008	2.38		2.38%
5/7/2008	2.36		2.36%
5/8/2008	2.36		2.36%
5/9/2008	2.38		2.38%
5/12/2008	2.37		2.37%
5/13/2008	2.39		2.39%
5/14/2008	2.43		2.43%
5/15/2008	2.43		2.43%
5/16/2008	2.44		2.44%
5/19/2008	2.47		2.47%
5/20/2008	2.47		2.47%
5/21/2008	2.51		2.51%
5/22/2008	2.51		2.51%
5/23/2008	2.49		2.49%
5/26/2008	#N/A	#N/A	
5/27/2008	2.47		2.47%
5/28/2008	2.45		2.45%
5/29/2008	2.46		2.46%
5/30/2008	2.48		2.48%
6/2/2008	2.47		2.47%
6/3/2008	2.41		2.41%
6/4/2008	2.39		2.39%
6/5/2008	2.43		2.43%
6/6/2008	2.47		2.47%
6/9/2008	2.48		2.48%
6/10/2008	2.49		2.49%
6/11/2008	2.48		2.48%
6/12/2008	2.50		2.50%
6/13/2008	2.50		2.50%
6/16/2008	2.49		2.49%
6/17/2008	2.48		2.48%
6/18/2008	2.48		2.48%
6/19/2008	2.47		2.47%
6/20/2008	2.44		2.44%
6/23/2008	2.44		2.44%
6/24/2008	2.46		2.46%
6/25/2008	2.47		2.47%
6/26/2008	2.52		2.52%
6/27/2008	2.51		2.51%
6/30/2008	2.51		2.51%
7/1/2008	2.52		2.52%
7/2/2008	2.56		2.56%
7/3/2008	2.57		2.57%
7/4/2008	#N/A	#N/A	
7/7/2008	2.52		2.52%
7/8/2008	2.46		2.46%
7/9/2008	2.46		2.46%
7/10/2008	2.43		2.43%
7/11/2008	2.48		2.48%
7/14/2008	2.47		2.47%
7/15/2008	2.47		2.47%
7/16/2008	2.49		2.49%
7/17/2008	2.47		2.47%
7/18/2008	2.46		2.46%
7/21/2008	2.43		2.43%
7/22/2008	2.43		2.43%
7/23/2008	2.36		2.36%
7/24/2008	2.34		2.34%
7/25/2008	2.34		2.34%
7/28/2008	2.36		2.36%
7/29/2008	2.33		2.33%
7/30/2008	2.36		2.36%
7/31/2008	2.34		2.34%
8/1/2008	2.34		2.34%
8/4/2008	2.34		2.34%
8/5/2008	2.30		2.30%
8/6/2008	2.27		2.27%
8/7/2008	2.24		2.24%
8/8/2008	2.22		2.22%
8/11/2008	2.19		2.19%
8/12/2008	2.19		2.19%
8/13/2008	2.19		2.19%
8/14/2008	2.22		2.22%
8/15/2008	2.18		2.18%
8/18/2008	2.15		2.15%
8/19/2008	2.15		2.15%
8/20/2008	2.19		2.19%
8/21/2008	2.23		2.23%

8/22/2008	2.18		2.18%
8/25/2008	2.15		2.15%
8/26/2008	2.16		2.16%
8/27/2008	2.19		2.19%
8/28/2008	2.17		2.17%
8/29/2008	2.15		2.15%
9/1/2008	#N/A	#N/A	
9/2/2008	2.05		2.05%
9/3/2008	2.00		2.00%
9/4/2008	1.94		1.94%
9/5/2008	1.95		1.95%
9/8/2008	1.98		1.98%
9/9/2008	1.93		1.93%
9/10/2008	1.95		1.95%
9/11/2008	1.97		1.97%
9/12/2008	1.95		1.95%
9/15/2008	1.77		1.77%
9/16/2008	1.63		1.63%
9/17/2008	1.60		1.60%
9/18/2008	1.60		1.60%
9/19/2008	1.93		1.93%
9/22/2008	1.98		1.98%
9/23/2008	1.86		1.86%
9/24/2008	1.75		1.75%
9/25/2008	1.79		1.79%
9/26/2008	1.75		1.75%
9/29/2008	1.58		1.58%
9/30/2008	1.60		1.60%
10/1/2008	1.51		1.51%
10/2/2008	1.49		1.49%
10/3/2008	1.45		1.45%
10/6/2008	1.27		1.27%
10/7/2008	1.18		1.18%
10/8/2008	1.03		1.03%
10/9/2008	1.05		1.05%
10/10/2008	0.92		0.92%
10/13/2008	#N/A	#N/A	
10/14/2008	1.03		1.03%
10/15/2008	1.02		1.02%
10/16/2008	0.97		0.97%
10/17/2008	1.11		1.11%
10/20/2008	1.15		1.15%
10/21/2008	1.13		1.13%
10/22/2008	1.06		1.06%
10/23/2008	0.96		0.96%
10/24/2008	0.74		0.74%
10/27/2008	0.77		0.77%
10/28/2008	0.83		0.83%
10/29/2008	0.88		0.88%
10/30/2008	0.94		0.94%
10/31/2008	0.87		0.87%
11/3/2008	0.87		0.87%
11/4/2008	0.93		0.93%
11/5/2008	0.97		0.97%
11/6/2008	0.94		0.94%
11/7/2008	0.97		0.97%
11/10/2008	0.98		0.98%
11/11/2008	#N/A	#N/A	
11/12/2008	0.96		0.96%
11/13/2008	0.89		0.89%
11/14/2008	0.85		0.85%
11/17/2008	0.83		0.83%
11/18/2008	0.61		0.61%
11/19/2008	0.40		0.40%
11/20/2008	0.04		0.04%
11/21/2008	0.05		0.05%
11/24/2008	0.24		0.24%
11/25/2008	0.32		0.32%
11/26/2008	0.31		0.31%
11/27/2008	#N/A	#N/A	
11/28/2008	0.33		0.33%
12/1/2008	0.34		0.34%
12/2/2008	0.42		0.42%
12/3/2008	0.53		0.53%
12/4/2008	0.57		0.57%
12/5/2008	0.44		0.44%
12/8/2008	0.30		0.30%
12/9/2008	0.26		0.26%
12/10/2008	0.25		0.25%
12/11/2008	0.29		0.29%
12/12/2008	0.17		0.17%
12/15/2008	0.10		0.10%
12/16/2008	0.16		0.16%
12/17/2008	0.34		0.34%
12/18/2008	0.23		0.23%
12/19/2008	0.15		0.15%
12/22/2008	0.15		0.15%
12/23/2008	0.15		0.15%
12/24/2008	0.13		0.13%
12/25/2008	#N/A	#N/A	
12/26/2008	0.13		0.13%
12/29/2008	0.11		0.11%
12/30/2008	0.09		0.09%
12/31/2008	0.11		0.11%
1/1/2009	#N/A	#N/A	
1/2/2009	0.17		0.17%
1/5/2009	0.15		0.15%
1/6/2009	0.42		0.42%
1/7/2009	0.47		0.47%
1/8/2009	0.50		0.50%
1/9/2009	0.56		0.56%
1/12/2009	0.59		0.59%
1/13/2009	0.59		0.59%
1/14/2009	0.45		0.45%
1/15/2009	0.45		0.45%
1/16/2009	0.55		0.55%
1/19/2009	#N/A	#N/A	
1/20/2009	0.58		0.58%
1/21/2009	0.58		0.58%
1/22/2009	0.65		0.65%
1/23/2009	0.72		0.72%
1/26/2009	0.78		0.78%
1/27/2009	0.82		0.82%
1/28/2009	0.90		0.90%

1/29/2009	1.04	1.04%
1/30/2009	1.14	1.14%
2/2/2009	1.07	1.07%
2/3/2009	1.13	1.13%
2/4/2009	1.17	1.17%
2/5/2009	1.11	1.11%
2/6/2009	1.23	1.23%
2/9/2009	1.41	1.41%
2/10/2009	1.25	1.25%
2/11/2009	1.12	1.12%
2/12/2009	1.14	1.14%
2/13/2009	1.21	1.21%
2/16/2009	#N/A	#N/A
2/17/2009	1.11	1.11%
2/18/2009	1.11	1.11%
2/19/2009	1.12	1.12%
2/20/2009	1.11	1.11%
2/23/2009	1.08	1.08%
2/24/2009	0.98	0.98%
2/25/2009	0.97	0.97%
2/26/2009	0.96	0.96%
2/27/2009	0.96	0.96%
3/2/2009	0.91	0.91%
3/3/2009	0.91	0.91%
3/4/2009	0.92	0.92%
3/5/2009	0.85	0.85%
3/6/2009	0.81	0.81%
3/9/2009	0.83	0.83%
3/10/2009	0.84	0.84%
3/11/2009	0.92	0.92%
3/12/2009	1.01	1.01%
3/13/2009	1.02	1.02%
3/16/2009	1.09	1.09%
3/17/2009	1.12	1.12%
3/18/2009	1.23	1.23%
3/19/2009	1.30	1.30%
3/20/2009	1.22	1.22%
3/23/2009	1.28	1.28%
3/24/2009	1.32	1.32%
3/25/2009	1.37	1.37%
3/26/2009	1.46	1.46%
3/27/2009	1.40	1.40%
3/30/2009	1.34	1.34%
3/31/2009	1.28	1.28%
4/1/2009	1.31	1.31%
4/2/2009	1.33	1.33%
4/3/2009	1.38	1.38%
4/6/2009	1.43	1.43%
4/7/2009	1.32	1.32%
4/8/2009	1.29	1.29%
4/9/2009	1.34	1.34%
4/10/2009	#N/A	#N/A
4/13/2009	1.33	1.33%
4/14/2009	1.28	1.28%
4/15/2009	1.27	1.27%
4/16/2009	1.27	1.27%
4/17/2009	1.28	1.28%
4/20/2009	1.22	1.22%
4/21/2009	1.25	1.25%
4/22/2009	1.33	1.33%
4/23/2009	1.44	1.44%
4/24/2009	1.50	1.50%
4/27/2009	1.47	1.47%
4/28/2009	1.51	1.51%
4/29/2009	1.53	1.53%
4/30/2009	1.47	1.47%
5/1/2009	1.41	1.41%
5/4/2009	1.42	1.42%
5/5/2009	1.43	1.43%
5/6/2009	1.44	1.44%
5/7/2009	1.55	1.55%
5/8/2009	1.52	1.52%
5/11/2009	1.47	1.47%
5/12/2009	1.48	1.48%
5/13/2009	1.44	1.44%
5/14/2009	1.42	1.42%
5/15/2009	1.48	1.48%
5/18/2009	1.56	1.56%
5/19/2009	1.60	1.60%
5/20/2009	1.63	1.63%
5/21/2009	1.68	1.68%
5/22/2009	1.73	1.73%
5/25/2009	#N/A	#N/A
5/26/2009	1.78	1.78%
5/27/2009	1.88	1.88%
5/28/2009	1.80	1.80%
5/29/2009	1.80	1.80%
6/1/2009	1.91	1.91%
6/2/2009	1.96	1.96%
6/3/2009	1.88	1.88%
6/4/2009	1.89	1.89%
6/5/2009	1.96	1.96%
6/8/2009	1.97	1.97%
6/9/2009	1.98	1.98%
6/10/2009	2.07	2.07%
6/11/2009	1.99	1.99%
6/12/2009	1.90	1.90%
6/15/2009	1.86	1.86%
6/16/2009	1.79	1.79%
6/17/2009	1.73	1.73%
6/18/2009	1.88	1.88%
6/19/2009	1.88	1.88%
6/22/2009	1.83	1.83%
6/23/2009	1.81	1.81%
6/24/2009	1.79	1.79%
6/25/2009	1.73	1.73%
6/26/2009	1.67	1.67%
6/29/2009	1.68	1.68%
6/30/2009	1.75	1.75%
7/1/2009	1.72	1.72%
7/2/2009	1.64	1.64%
7/3/2009	#N/A	#N/A
7/6/2009	1.49	1.49%
7/7/2009	1.60	1.60%

7/8/2009	1.54	1.54%
7/9/2009	1.57	1.57%
7/10/2009	1.52	1.52%
7/13/2009	1.54	1.54%
7/14/2009	1.64	1.64%
7/15/2009	1.76	1.76%
7/16/2009	1.77	1.77%
7/17/2009	1.86	1.86%
7/20/2009	1.88	1.88%
7/21/2009	1.79	1.79%
7/22/2009	1.83	1.83%
7/23/2009	1.92	1.92%
7/24/2009	1.89	1.89%
7/27/2009	1.90	1.90%
7/28/2009	1.86	1.86%
7/29/2009	1.85	1.85%
7/30/2009	1.89	1.89%
7/31/2009	1.81	1.81%
8/3/2009	1.88	1.88%
8/4/2009	1.89	1.89%
8/5/2009	1.95	1.95%
8/6/2009	1.92	1.92%
8/7/2009	2.01	2.01%
8/10/2009	1.97	1.97%
8/11/2009	1.91	1.91%
8/12/2009	1.88	1.88%
8/13/2009	1.79	1.79%
8/14/2009	1.70	1.70%
8/17/2009	1.69	1.69%
8/18/2009	1.73	1.73%
8/19/2009	1.75	1.75%
8/20/2009	1.82	1.82%
8/21/2009	1.87	1.87%
8/24/2009	1.81	1.81%
8/25/2009	1.73	1.73%
8/26/2009	1.72	1.72%
8/27/2009	1.72	1.72%
8/28/2009	1.70	1.70%
8/31/2009	1.64	1.64%
9/1/2009	1.64	1.64%
9/2/2009	1.58	1.58%
9/3/2009	1.64	1.64%
9/4/2009	1.75	1.75%
9/7/2009	#N/A	#N/A
9/8/2009	1.81	1.81%
9/9/2009	1.82	1.82%
9/10/2009	1.77	1.77%
9/11/2009	1.75	1.75%
9/14/2009	1.77	1.77%
9/15/2009	1.83	1.83%
9/16/2009	1.86	1.86%
9/17/2009	1.80	1.80%
9/18/2009	1.81	1.81%
9/21/2009	1.80	1.80%
9/22/2009	1.81	1.81%
9/23/2009	1.81	1.81%
9/24/2009	1.76	1.76%
9/25/2009	1.74	1.74%
9/28/2009	1.74	1.74%
9/29/2009	1.72	1.72%
9/30/2009	1.75	1.75%
10/1/2009	1.71	1.71%
10/2/2009	1.70	1.70%
10/5/2009	1.73	1.73%
10/6/2009	1.74	1.74%
10/7/2009	1.76	1.76%
10/8/2009	1.78	1.78%
10/9/2009	1.84	1.84%
10/12/2009	#N/A	#N/A
10/13/2009	1.88	1.88%
10/14/2009	1.94	1.94%
10/15/2009	1.99	1.99%
10/16/2009	1.98	1.98%
10/19/2009	2.03	2.03%
10/20/2009	1.98	1.98%
10/21/2009	1.99	1.99%
10/22/2009	1.95	1.95%
10/23/2009	2.00	2.00%
10/26/2009	2.00	2.00%
10/27/2009	2.00	2.00%
10/28/2009	1.96	1.96%
10/29/2009	2.03	2.03%
10/30/2009	2.00	2.00%
11/2/2009	2.04	2.04%
11/3/2009	2.05	2.05%
11/4/2009	2.12	2.12%
11/5/2009	2.16	2.16%
11/6/2009	2.17	2.17%
11/9/2009	2.22	2.22%
11/10/2009	2.19	2.19%
11/11/2009	#N/A	#N/A
11/12/2009	2.12	2.12%
11/13/2009	2.12	2.12%
11/16/2009	2.12	2.12%
11/17/2009	2.13	2.13%
11/18/2009	2.15	2.15%
11/19/2009	2.14	2.14%
11/20/2009	2.15	2.15%
11/23/2009	2.17	2.17%
11/24/2009	2.11	2.11%
11/25/2009	2.12	2.12%
11/26/2009	#N/A	#N/A
11/27/2009	2.06	2.06%
11/30/2009	2.08	2.08%
12/1/2009	2.14	2.14%
12/2/2009	2.14	2.14%
12/3/2009	2.15	2.15%
12/4/2009	2.14	2.14%
12/7/2009	2.13	2.13%
12/8/2009	2.09	2.09%
12/9/2009	2.09	2.09%
12/10/2009	2.09	2.09%
12/11/2009	2.14	2.14%
12/14/2009	2.19	2.19%

12/15/2009	2.23	2.23%
12/16/2009	2.27	2.27%
12/17/2009	2.22	2.22%
12/18/2009	2.24	2.24%
12/21/2009	2.30	2.30%
12/22/2009	2.33	2.33%
12/23/2009	2.31	2.31%
12/24/2009	2.32	2.32%
12/25/2009	#N/A	#N/A
12/28/2009	2.35	2.35%
12/29/2009	2.36	2.36%
12/30/2009	2.36	2.36%
12/31/2009	2.37	2.37%
1/1/2010	#N/A	#N/A
1/4/2010	2.38	2.38%
1/5/2010	2.34	2.34%
1/6/2010	2.37	2.37%
1/7/2010	2.41	2.41%
1/8/2010	2.42	2.42%
1/11/2010	2.38	2.38%
1/12/2010	2.39	2.39%
1/13/2010	2.37	2.37%
1/14/2010	2.36	2.36%
1/15/2010	2.36	2.36%
1/18/2010	#N/A	#N/A
1/19/2010	2.38	2.38%
1/20/2010	2.37	2.37%
1/21/2010	2.33	2.33%
1/22/2010	2.31	2.31%
1/25/2010	2.33	2.33%
1/26/2010	2.34	2.34%
1/27/2010	2.31	2.31%
1/28/2010	2.33	2.33%
1/29/2010	2.33	2.33%
2/1/2010	2.39	2.39%
2/2/2010	2.41	2.41%
2/3/2010	2.43	2.43%
2/4/2010	2.35	2.35%
2/5/2010	2.27	2.27%
2/8/2010	2.27	2.27%
2/9/2010	2.30	2.30%
2/10/2010	2.28	2.28%
2/11/2010	2.26	2.26%
2/12/2010	2.23	2.23%
2/15/2010	#N/A	#N/A
2/16/2010	2.24	2.24%
2/17/2010	2.28	2.28%
2/18/2010	2.31	2.31%
2/19/2010	2.26	2.26%
2/22/2010	2.25	2.25%
2/23/2010	2.19	2.19%
2/24/2010	2.19	2.19%
2/25/2010	2.13	2.13%
2/26/2010	2.13	2.13%
3/1/2010	2.15	2.15%
3/2/2010	2.16	2.16%
3/3/2010	2.17	2.17%
3/4/2010	2.17	2.17%
3/5/2010	2.21	2.21%
3/8/2010	2.23	2.23%
3/9/2010	2.23	2.23%
3/10/2010	2.24	2.24%
3/11/2010	2.24	2.24%
3/12/2010	2.26	2.26%
3/15/2010	2.25	2.25%
3/16/2010	2.24	2.24%
3/17/2010	2.25	2.25%
3/18/2010	2.23	2.23%
3/19/2010	2.20	2.20%
3/22/2010	2.19	2.19%
3/23/2010	2.20	2.20%
3/24/2010	2.24	2.24%
3/25/2010	2.26	2.26%
3/26/2010	2.24	2.24%
3/29/2010	2.22	2.22%
3/30/2010	2.22	2.22%
3/31/2010	2.24	2.24%
4/1/2010	2.28	2.28%
4/2/2010	2.27	2.27%
4/5/2010	2.31	2.31%
4/6/2010	2.30	2.30%
4/7/2010	2.34	2.34%
4/8/2010	2.33	2.33%
4/9/2010	2.34	2.34%
4/12/2010	2.35	2.35%
4/13/2010	2.34	2.34%
4/14/2010	2.34	2.34%
4/15/2010	2.37	2.37%
4/16/2010	2.33	2.33%
4/19/2010	2.34	2.34%
4/20/2010	2.35	2.35%
4/21/2010	2.35	2.35%
4/22/2010	2.34	2.34%
4/23/2010	2.37	2.37%
4/26/2010	2.37	2.37%
4/27/2010	2.34	2.34%
4/28/2010	2.40	2.40%
4/29/2010	2.45	2.45%
4/30/2010	2.40	2.40%
5/3/2010	2.40	2.40%
5/4/2010	2.32	2.32%
5/5/2010	2.28	2.28%
5/6/2010	2.16	2.16%
5/7/2010	2.15	2.15%
5/10/2010	2.24	2.24%
5/11/2010	2.25	2.25%
5/12/2010	2.28	2.28%
5/13/2010	2.27	2.27%
5/14/2010	2.18	2.18%
5/17/2010	2.16	2.16%
5/18/2010	2.13	2.13%
5/19/2010	2.04	2.04%
5/20/2010	1.89	1.89%
5/21/2010	1.87	1.87%

5/24/2010	1.88	1.88%
5/25/2010	1.85	1.85%
5/26/2010	1.91	1.91%
5/27/2010	2.01	2.01%
5/28/2010	1.99	1.99%
5/31/2010	#N/A	#N/A
6/1/2010	1.97	1.97%
6/2/2010	1.99	1.99%
6/3/2010	2.05	2.05%
6/4/2010	1.94	1.94%
6/7/2010	1.92	1.92%
6/8/2010	1.89	1.89%
6/9/2010	1.92	1.92%
6/10/2010	1.98	1.98%
6/11/2010	1.95	1.95%
6/14/2010	1.97	1.97%
6/15/2010	2.00	2.00%
6/16/2010	1.99	1.99%
6/17/2010	1.99	1.99%
6/18/2010	1.99	1.99%
6/21/2010	2.02	2.02%
6/22/2010	1.98	1.98%
6/23/2010	1.94	1.94%
6/24/2010	1.91	1.91%
6/25/2010	1.91	1.91%
6/28/2010	1.88	1.88%
6/29/2010	1.83	1.83%
6/30/2010	1.82	1.82%
7/1/2010	1.75	1.75%
7/2/2010	1.73	1.73%
7/5/2010	#N/A	#N/A
7/6/2010	1.69	1.69%
7/7/2010	1.70	1.70%
7/8/2010	1.79	1.79%
7/9/2010	1.81	1.81%
7/12/2010	1.82	1.82%
7/13/2010	1.87	1.87%
7/14/2010	1.84	1.84%
7/15/2010	1.79	1.79%
7/16/2010	1.71	1.71%
7/19/2010	1.70	1.70%
7/20/2010	1.70	1.70%
7/21/2010	1.71	1.71%
7/22/2010	1.75	1.75%
7/23/2010	1.78	1.78%
7/26/2010	1.79	1.79%
7/27/2010	1.82	1.82%
7/28/2010	1.81	1.81%
7/29/2010	1.82	1.82%
7/30/2010	1.80	1.80%
8/2/2010	1.86	1.86%
8/3/2010	1.87	1.87%
8/4/2010	1.86	1.86%
8/5/2010	1.87	1.87%
8/6/2010	1.82	1.82%
8/9/2010	1.82	1.82%
8/10/2010	1.84	1.84%
8/11/2010	1.77	1.77%
8/12/2010	1.69	1.69%
8/13/2010	1.68	1.68%
8/16/2010	1.63	1.63%
8/17/2010	1.63	1.63%
8/18/2010	1.62	1.62%
8/19/2010	1.56	1.56%
8/20/2010	1.57	1.57%
8/23/2010	1.55	1.55%
8/24/2010	1.49	1.49%
8/25/2010	1.53	1.53%
8/26/2010	1.55	1.55%
8/27/2010	1.61	1.61%
8/30/2010	1.55	1.55%
8/31/2010	1.52	1.52%
9/1/2010	1.56	1.56%
9/2/2010	1.58	1.58%
9/3/2010	1.62	1.62%
9/6/2010	#N/A	#N/A
9/7/2010	1.63	1.63%
9/8/2010	1.64	1.64%
9/9/2010	1.72	1.72%
9/10/2010	1.79	1.79%
9/13/2010	1.80	1.80%
9/14/2010	1.75	1.75%
9/15/2010	1.77	1.77%
9/16/2010	1.77	1.77%
9/17/2010	1.75	1.75%
9/20/2010	1.78	1.78%
9/21/2010	1.83	1.83%
9/22/2010	1.82	1.82%
9/23/2010	1.79	1.79%
9/24/2010	1.81	1.81%
9/27/2010	1.75	1.75%
9/28/2010	1.79	1.79%
9/29/2010	1.78	1.78%
9/30/2010	1.78	1.78%
10/1/2010	1.79	1.79%
10/4/2010	1.78	1.78%
10/5/2010	1.85	1.85%
10/6/2010	1.89	1.89%
10/7/2010	1.88	1.88%
10/8/2010	1.96	1.96%
10/11/2010	#N/A	#N/A
10/12/2010	1.95	1.95%
10/13/2010	2.02	2.02%
10/14/2010	2.11	2.11%
10/15/2010	2.09	2.09%
10/18/2010	2.05	2.05%
10/19/2010	2.06	2.06%
10/20/2010	2.04	2.04%
10/21/2010	2.07	2.07%
10/22/2010	2.09	2.09%
10/25/2010	2.14	2.14%
10/26/2010	2.15	2.15%
10/27/2010	2.13	2.13%
10/28/2010	2.12	2.12%

10/29/2010	2.13		2.13%
11/1/2010	2.17		2.17%
11/2/2010	2.14		2.14%
11/3/2010	2.17		2.17%
11/4/2010	2.09		2.09%
11/5/2010	2.10		2.10%
11/8/2010	2.12		2.12%
11/9/2010	2.14		2.14%
11/10/2010	2.09		2.09%
11/11/2010	#N/A	#N/A	
11/12/2010	2.05		2.05%
11/15/2010	2.05		2.05%
11/16/2010	1.98		1.98%
11/17/2010	2.05		2.05%
11/18/2010	2.07		2.07%
11/19/2010	2.11		2.11%
11/22/2010	2.10		2.10%
11/23/2010	2.08		2.08%
11/24/2010	2.13		2.13%
11/25/2010	#N/A	#N/A	
11/26/2010	2.12		2.12%
11/29/2010	2.11		2.11%
11/30/2010	2.07		2.07%
12/1/2010	2.14		2.14%
12/2/2010	2.17		2.17%
12/3/2010	2.17		2.17%
12/6/2010	2.16		2.16%
12/7/2010	2.23		2.23%
12/8/2010	2.19		2.19%
12/9/2010	2.14		2.14%
12/10/2010	2.16		2.16%
12/13/2010	2.18		2.18%
12/14/2010	2.22		2.22%
12/15/2010	2.31		2.31%
12/16/2010	2.32		2.32%
12/17/2010	2.28		2.28%
12/20/2010	2.29		2.29%
12/21/2010	2.29		2.29%
12/22/2010	2.33		2.33%
12/23/2010	2.33		2.33%
12/24/2010	#N/A	#N/A	
12/27/2010	2.30		2.30%
12/28/2010	2.33		2.33%
12/29/2010	2.29		2.29%
12/30/2010	2.30		2.30%
12/31/2010	2.30		2.30%
1/3/2011	2.31		2.31%
1/4/2011	2.35		2.35%
1/5/2011	2.42		2.42%
1/6/2011	2.41		2.41%
1/7/2011	2.36		2.36%
1/10/2011	2.36		2.36%
1/11/2011	2.40		2.40%
1/12/2011	2.42		2.42%
1/13/2011	2.37		2.37%
1/14/2011	2.35		2.35%
1/17/2011	#N/A	#N/A	
1/18/2011	2.40		2.40%
1/19/2011	2.38		2.38%
1/20/2011	2.25		2.25%
1/21/2011	2.24		2.24%
1/24/2011	2.25		2.25%
1/25/2011	2.24		2.24%
1/26/2011	2.29		2.29%
1/27/2011	2.26		2.26%
1/28/2011	2.27		2.27%
1/31/2011	2.34		2.34%
2/1/2011	2.37		2.37%
2/2/2011	2.36		2.36%
2/3/2011	2.35		2.35%
2/4/2011	2.38		2.38%
2/7/2011	2.36		2.36%
2/8/2011	2.36		2.36%
2/9/2011	2.31		2.31%
2/10/2011	2.31		2.31%
2/11/2011	2.28		2.28%
2/14/2011	2.28		2.28%
2/15/2011	2.28		2.28%
2/16/2011	2.25		2.25%
2/17/2011	2.27		2.27%
2/18/2011	2.34		2.34%
2/21/2011	#N/A	#N/A	
2/22/2011	2.34		2.34%
2/23/2011	2.39		2.39%
2/24/2011	2.41		2.41%
2/25/2011	2.40		2.40%
2/28/2011	2.39		2.39%
3/1/2011	2.41		2.41%
3/2/2011	2.45		2.45%
3/3/2011	2.49		2.49%
3/4/2011	2.49		2.49%
3/7/2011	2.51		2.51%
3/8/2011	2.55		2.55%
3/9/2011	2.50		2.50%
3/10/2011	2.46		2.46%
3/11/2011	2.44		2.44%
3/14/2011	2.43		2.43%
3/15/2011	2.40		2.40%
3/16/2011	2.37		2.37%
3/17/2011	2.43		2.43%
3/18/2011	2.43		2.43%
3/21/2011	2.44		2.44%
3/22/2011	2.39		2.39%
3/23/2011	2.38		2.38%
3/24/2011	2.47		2.47%
3/25/2011	2.44		2.44%
3/28/2011	2.46		2.46%
3/29/2011	2.47		2.47%
3/30/2011	2.47		2.47%
3/31/2011	2.48		2.48%
4/1/2011	2.52		2.52%
4/4/2011	2.54		2.54%
4/5/2011	2.56		2.56%
4/6/2011	2.57		2.57%

4/7/2011	2.59	2.59%
4/8/2011	2.64	2.64%
4/11/2011	2.63	2.63%
4/12/2011	2.62	2.62%
4/13/2011	2.61	2.61%
4/14/2011	2.62	2.62%
4/15/2011	2.61	2.61%
4/18/2011	2.60	2.60%
4/19/2011	2.63	2.63%
4/20/2011	2.61	2.61%
4/21/2011	2.59	2.59%
4/22/2011	#N/A	#N/A
4/25/2011	2.60	2.60%
4/26/2011	2.58	2.58%
4/27/2011	2.58	2.58%
4/28/2011	2.56	2.56%
4/29/2011	2.57	2.57%
5/2/2011	2.56	2.56%
5/3/2011	2.55	2.55%
5/4/2011	2.55	2.55%
5/5/2011	2.48	2.48%
5/6/2011	2.48	2.48%
5/9/2011	2.48	2.48%
5/10/2011	2.49	2.49%
5/11/2011	2.43	2.43%
5/12/2011	2.43	2.43%
5/13/2011	2.39	2.39%
5/16/2011	2.34	2.34%
5/17/2011	2.30	2.30%
5/18/2011	2.36	2.36%
5/19/2011	2.26	2.26%
5/20/2011	2.30	2.30%
5/23/2011	2.29	2.29%
5/24/2011	2.33	2.33%
5/25/2011	2.33	2.33%
5/26/2011	2.31	2.31%
5/27/2011	2.28	2.28%
5/30/2011	#N/A	#N/A
5/31/2011	2.25	2.25%
6/1/2011	2.22	2.22%
6/2/2011	2.26	2.26%
6/3/2011	2.24	2.24%
6/6/2011	2.25	2.25%
6/7/2011	2.25	2.25%
6/8/2011	2.22	2.22%
6/9/2011	2.21	2.21%
6/10/2011	2.20	2.20%
6/13/2011	2.20	2.20%
6/14/2011	2.28	2.28%
6/15/2011	2.24	2.24%
6/16/2011	2.20	2.20%
6/17/2011	2.19	2.19%
6/20/2011	2.18	2.18%
6/21/2011	2.21	2.21%
6/22/2011	2.19	2.19%
6/23/2011	2.22	2.22%
6/24/2011	2.24	2.24%
6/27/2011	2.28	2.28%
6/28/2011	2.32	2.32%
6/29/2011	2.40	2.40%
6/30/2011	2.43	2.43%
7/1/2011	2.45	2.45%
7/4/2011	#N/A	#N/A
7/5/2011	2.39	2.39%
7/6/2011	2.38	2.38%
7/7/2011	2.42	2.42%
7/8/2011	2.34	2.34%
7/11/2011	2.31	2.31%
7/12/2011	2.32	2.32%
7/13/2011	2.33	2.33%
7/14/2011	2.30	2.30%
7/15/2011	2.33	2.33%
7/18/2011	2.36	2.36%
7/19/2011	2.37	2.37%
7/20/2011	2.34	2.34%
7/21/2011	2.35	2.35%
7/22/2011	2.38	2.38%
7/25/2011	2.45	2.45%
7/26/2011	2.42	2.42%
7/27/2011	2.45	2.45%
7/28/2011	2.46	2.46%
7/29/2011	2.44	2.44%
8/1/2011	2.44	2.44%
8/2/2011	2.37	2.37%
8/3/2011	2.28	2.28%
8/4/2011	2.23	2.23%
8/5/2011	2.26	2.26%
8/8/2011	2.20	2.20%
8/9/2011	2.20	2.20%
8/10/2011	2.30	2.30%
8/11/2011	2.28	2.28%
8/12/2011	2.26	2.26%
8/15/2011	2.23	2.23%
8/16/2011	2.18	2.18%
8/17/2011	2.16	2.16%
8/18/2011	1.99	1.99%
8/19/2011	2.05	2.05%
8/22/2011	2.07	2.07%
8/23/2011	2.02	2.02%
8/24/2011	2.04	2.04%
8/25/2011	2.10	2.10%
8/26/2011	2.04	2.04%
8/29/2011	2.06	2.06%
8/30/2011	2.05	2.05%
8/31/2011	2.05	2.05%
9/1/2011	2.08	2.08%
9/2/2011	2.02	2.02%
9/5/2011	#N/A	#N/A
9/6/2011	1.93	1.93%
9/7/2011	1.96	1.96%
9/8/2011	2.00	2.00%
9/9/2011	1.96	1.96%
9/12/2011	1.94	1.94%
9/13/2011	1.93	1.93%

9/14/2011	1.91		1.91%
9/15/2011	1.96		1.96%
9/16/2011	1.95		1.95%
9/19/2011	1.88		1.88%
9/20/2011	1.91		1.91%
9/21/2011	1.86		1.86%
9/22/2011	1.71		1.71%
9/23/2011	1.74		1.74%
9/26/2011	1.79		1.79%
9/27/2011	1.88		1.88%
9/28/2011	1.87		1.87%
9/29/2011	1.82		1.82%
9/30/2011	1.75		1.75%
10/3/2011	1.73		1.73%
10/4/2011	1.76		1.76%
10/5/2011	1.80		1.80%
10/6/2011	1.88		1.88%
10/7/2011	1.94		1.94%
10/10/2011	#N/A	#N/A	
10/11/2011	1.95		1.95%
10/12/2011	1.98		1.98%
10/13/2011	1.92		1.92%
10/14/2011	1.98		1.98%
10/17/2011	1.94		1.94%
10/18/2011	1.97		1.97%
10/19/2011	1.95		1.95%
10/20/2011	1.98		1.98%
10/21/2011	2.00		2.00%
10/24/2011	2.02		2.02%
10/25/2011	2.02		2.02%
10/26/2011	2.08		2.08%
10/27/2011	2.18		2.18%
10/28/2011	2.15		2.15%
10/31/2011	2.09		2.09%
11/1/2011	2.05		2.05%
11/2/2011	2.10		2.10%
11/3/2011	2.09		2.09%
11/4/2011	2.12		2.12%
11/7/2011	2.14		2.14%
11/8/2011	2.13		2.13%
11/9/2011	2.04		2.04%
11/10/2011	2.08		2.08%
11/11/2011	#N/A	#N/A	
11/14/2011	2.05		2.05%
11/15/2011	2.02		2.02%
11/16/2011	1.96		1.96%
11/17/2011	1.90		1.90%
11/18/2011	1.96		1.96%
11/21/2011	1.90		1.90%
11/22/2011	1.89		1.89%
11/23/2011	1.90		1.90%
11/24/2011	#N/A	#N/A	
11/25/2011	1.92		1.92%
11/28/2011	1.95		1.95%
11/29/2011	1.99		1.99%
11/30/2011	2.05		2.05%
12/1/2011	2.05		2.05%
12/2/2011	2.05		2.05%
12/5/2011	2.05		2.05%
12/6/2011	2.07		2.07%
12/7/2011	2.03		2.03%
12/8/2011	1.98		1.98%
12/9/2011	2.02		2.02%
12/12/2011	2.04		2.04%
12/13/2011	2.01		2.01%
12/14/2011	1.96		1.96%
12/15/2011	1.93		1.93%
12/16/2011	1.91		1.91%
12/19/2011	1.94		1.94%
12/20/2011	2.04		2.04%
12/21/2011	2.05		2.05%
12/22/2011	2.04		2.04%
12/23/2011	2.07		2.07%
12/26/2011	#N/A	#N/A	
12/27/2011	2.04		2.04%
12/28/2011	2.00		2.00%
12/29/2011	1.96		1.96%
12/30/2011	1.96		1.96%
1/2/2012	#N/A	#N/A	
1/3/2012	2.01		2.01%
1/4/2012	2.08		2.08%
1/5/2012	2.12		2.12%
1/6/2012	2.09		2.09%
1/9/2012	2.11		2.11%
1/10/2012	2.08		2.08%
1/11/2012	2.03		2.03%
1/12/2012	2.04		2.04%
1/13/2012	2.03		2.03%
1/16/2012	#N/A	#N/A	
1/17/2012	2.04		2.04%
1/18/2012	2.07		2.07%
1/19/2012	2.01		2.01%
1/20/2012	2.04		2.04%
1/23/2012	2.07		2.07%
1/24/2012	2.09		2.09%
1/25/2012	2.13		2.13%
1/26/2012	2.12		2.12%
1/27/2012	2.11		2.11%
1/30/2012	2.11		2.11%
1/31/2012	2.11		2.11%
2/1/2012	2.15		2.15%
2/2/2012	2.16		2.16%
2/3/2012	2.18		2.18%
2/6/2012	2.19		2.19%
2/7/2012	2.21		2.21%
2/8/2012	2.22		2.22%
2/9/2012	2.21		2.21%
2/10/2012	2.20		2.20%
2/13/2012	2.21		2.21%
2/14/2012	2.19		2.19%
2/15/2012	2.19		2.19%
2/16/2012	2.23		2.23%
2/17/2012	2.24		2.24%
2/20/2012	#N/A	#N/A	

2/21/2012	2.27	2.27%
2/22/2012	2.28	2.28%
2/23/2012	2.29	2.29%
2/24/2012	2.27	2.27%
2/27/2012	2.24	2.24%
2/28/2012	2.25	2.25%
2/29/2012	2.26	2.26%
3/1/2012	2.26	2.26%
3/2/2012	2.23	2.23%
3/5/2012	2.20	2.20%
3/6/2012	2.17	2.17%
3/7/2012	2.20	2.20%
3/8/2012	2.24	2.24%
3/9/2012	2.28	2.28%
3/12/2012	2.28	2.28%
3/13/2012	2.34	2.34%
3/14/2012	2.36	2.36%
3/15/2012	2.37	2.37%
3/16/2012	2.40	2.40%
3/19/2012	2.42	2.42%
3/20/2012	2.42	2.42%
3/21/2012	2.39	2.39%
3/22/2012	2.37	2.37%
3/23/2012	2.36	2.36%
3/26/2012	2.34	2.34%
3/27/2012	2.33	2.33%
3/28/2012	2.32	2.32%
3/29/2012	2.31	2.31%
3/30/2012	2.32	2.32%
4/2/2012	2.36	2.36%
4/3/2012	2.36	2.36%
4/4/2012	2.30	2.30%
4/5/2012	2.27	2.27%
4/6/2012	2.23	2.23%
4/9/2012	2.23	2.23%
4/10/2012	2.25	2.25%
4/11/2012	2.30	2.30%
4/12/2012	2.30	2.30%
4/13/2012	2.27	2.27%
4/16/2012	2.26	2.26%
4/17/2012	2.29	2.29%
4/18/2012	2.26	2.26%
4/19/2012	2.19	2.19%
4/20/2012	2.23	2.23%
4/23/2012	2.22	2.22%
4/24/2012	2.25	2.25%
4/25/2012	2.25	2.25%
4/26/2012	2.27	2.27%
4/27/2012	2.26	2.26%
4/30/2012	2.25	2.25%
5/1/2012	2.26	2.26%
5/2/2012	2.24	2.24%
5/3/2012	2.23	2.23%
5/4/2012	2.21	2.21%
5/7/2012	2.19	2.19%
5/8/2012	2.16	2.16%
5/9/2012	2.14	2.14%
5/10/2012	2.14	2.14%
5/11/2012	2.12	2.12%
5/14/2012	2.11	2.11%
5/15/2012	2.12	2.12%
5/16/2012	2.09	2.09%
5/17/2012	2.05	2.05%
5/18/2012	2.10	2.10%
5/21/2012	2.16	2.16%
5/22/2012	2.17	2.17%
5/23/2012	2.14	2.14%
5/24/2012	2.14	2.14%
5/25/2012	2.13	2.13%
5/28/2012	#N/A	#N/A
5/29/2012	2.11	2.11%
5/30/2012	2.08	2.08%
5/31/2012	2.09	2.09%
6/1/2012	2.06	2.06%
6/4/2012	2.09	2.09%
6/5/2012	2.13	2.13%
6/6/2012	2.16	2.16%
6/7/2012	2.15	2.15%
6/8/2012	2.15	2.15%
6/11/2012	2.13	2.13%
6/12/2012	2.15	2.15%
6/13/2012	2.12	2.12%
6/14/2012	2.11	2.11%
6/15/2012	2.14	2.14%
6/18/2012	2.13	2.13%
6/19/2012	2.17	2.17%
6/20/2012	2.16	2.16%
6/21/2012	2.10	2.10%
6/22/2012	2.11	2.11%
6/25/2012	2.10	2.10%
6/26/2012	2.11	2.11%
6/27/2012	2.10	2.10%
6/28/2012	2.08	2.08%
6/29/2012	2.13	2.13%
7/2/2012	2.11	2.11%
7/3/2012	2.13	2.13%
7/4/2012	#N/A	#N/A
7/5/2012	2.13	2.13%
7/6/2012	2.10	2.10%
7/9/2012	2.10	2.10%
7/10/2012	2.12	2.12%
7/11/2012	2.11	2.11%
7/12/2012	2.08	2.08%
7/13/2012	2.11	2.11%
7/16/2012	2.11	2.11%
7/17/2012	2.12	2.12%
7/18/2012	2.12	2.12%
7/19/2012	2.16	2.16%
7/20/2012	2.16	2.16%
7/23/2012	2.15	2.15%
7/24/2012	2.12	2.12%
7/25/2012	2.10	2.10%
7/26/2012	2.11	2.11%
7/27/2012	2.19	2.19%

7/30/2012	2.17		2.17%
7/31/2012	2.20		2.20%
8/1/2012	2.23		2.23%
8/2/2012	2.20		2.20%
8/3/2012	2.26		2.26%
8/6/2012	2.27		2.27%
8/7/2012	2.31		2.31%
8/8/2012	2.29		2.29%
8/9/2012	2.27		2.27%
8/10/2012	2.25		2.25%
8/13/2012	2.23		2.23%
8/14/2012	2.26		2.26%
8/15/2012	2.25		2.25%
8/16/2012	2.25		2.25%
8/17/2012	2.24		2.24%
8/20/2012	2.25		2.25%
8/21/2012	2.25		2.25%
8/22/2012	2.26		2.26%
8/23/2012	2.30		2.30%
8/24/2012	2.28		2.28%
8/27/2012	2.29		2.29%
8/28/2012	2.32		2.32%
8/29/2012	2.30		2.30%
8/30/2012	2.26		2.26%
8/31/2012	2.25		2.25%
9/3/2012	#N/A	#N/A	
9/4/2012	2.27		2.27%
9/5/2012	2.29		2.29%
9/6/2012	2.31		2.31%
9/7/2012	2.35		2.35%
9/10/2012	2.36		2.36%
9/11/2012	2.38		2.38%
9/12/2012	2.38		2.38%
9/13/2012	2.47		2.47%
9/14/2012	2.64		2.64%
9/17/2012	2.59		2.59%
9/18/2012	2.55		2.55%
9/19/2012	2.54		2.54%
9/20/2012	2.50		2.50%
9/21/2012	2.48		2.48%
9/24/2012	2.47		2.47%
9/25/2012	2.44		2.44%
9/26/2012	2.41		2.41%
9/27/2012	2.44		2.44%
9/28/2012	2.42		2.42%
10/1/2012	2.42		2.42%
10/2/2012	2.47		2.47%
10/3/2012	2.47		2.47%
10/4/2012	2.56		2.56%
10/5/2012	2.57		2.57%
10/8/2012	#N/A	#N/A	
10/9/2012	2.55		2.55%
10/10/2012	2.52		2.52%
10/11/2012	2.47		2.47%
10/12/2012	2.47		2.47%
10/15/2012	2.48		2.48%
10/16/2012	2.46		2.46%
10/17/2012	2.48		2.48%
10/18/2012	2.52		2.52%
10/19/2012	2.50		2.50%
10/22/2012	2.53		2.53%
10/23/2012	2.50		2.50%
10/24/2012	2.49		2.49%
10/25/2012	2.49		2.49%
10/26/2012	2.47		2.47%
10/29/2012	2.47		2.47%
10/30/2012	#N/A	#N/A	
10/31/2012	2.50		2.50%
11/1/2012	2.52		2.52%
11/2/2012	2.48		2.48%
11/5/2012	2.47		2.47%
11/6/2012	2.50		2.50%
11/7/2012	2.48		2.48%
11/8/2012	2.47		2.47%
11/9/2012	2.44		2.44%
11/12/2012	#N/A	#N/A	
11/13/2012	2.43		2.43%
11/14/2012	2.40		2.40%
11/15/2012	2.38		2.38%
11/16/2012	2.39		2.39%
11/19/2012	2.39		2.39%
11/20/2012	2.40		2.40%
11/21/2012	2.40		2.40%
11/22/2012	#N/A	#N/A	
11/23/2012	2.42		2.42%
11/26/2012	2.39		2.39%
11/27/2012	2.38		2.38%
11/28/2012	2.38		2.38%
11/29/2012	2.40		2.40%
11/30/2012	2.41		2.41%
12/3/2012	2.44		2.44%
12/4/2012	2.45		2.45%
12/5/2012	2.45		2.45%
12/6/2012	2.46		2.46%
12/7/2012	2.50		2.50%
12/10/2012	2.50		2.50%
12/11/2012	2.50		2.50%
12/12/2012	2.51		2.51%
12/13/2012	2.47		2.47%
12/14/2012	2.46		2.46%
12/17/2012	2.48		2.48%
12/18/2012	2.51		2.51%
12/19/2012	2.48		2.48%
12/20/2012	2.50		2.50%
12/21/2012	2.48		2.48%
12/24/2012	2.48		2.48%
12/25/2012	#N/A	#N/A	
12/26/2012	2.48		2.48%
12/27/2012	2.47		2.47%
12/28/2012	2.46		2.46%
12/31/2012	2.45		2.45%
1/1/2013	#N/A	#N/A	
1/2/2013	2.48		2.48%
1/3/2013	2.46		2.46%

1/4/2013	2.48	2.48%
1/7/2013	2.52	2.52%
1/8/2013	2.49	2.49%
1/9/2013	2.52	2.52%
1/10/2013	2.53	2.53%
1/11/2013	2.52	2.52%
1/14/2013	2.55	2.55%
1/15/2013	2.52	2.52%
1/16/2013	2.49	2.49%
1/17/2013	2.53	2.53%
1/18/2013	2.53	2.53%
1/21/2013	#N/A	#N/A
1/22/2013	2.54	2.54%
1/23/2013	2.52	2.52%
1/24/2013	2.50	2.50%
1/25/2013	2.54	2.54%
1/28/2013	2.55	2.55%
1/29/2013	2.56	2.56%
1/30/2013	2.57	2.57%
1/31/2013	2.59	2.59%
2/1/2013	2.59	2.59%
2/4/2013	2.59	2.59%
2/5/2013	2.59	2.59%
2/6/2013	2.58	2.58%
2/7/2013	2.57	2.57%
2/8/2013	2.56	2.56%
2/11/2013	2.57	2.57%
2/12/2013	2.59	2.59%
2/13/2013	2.59	2.59%
2/14/2013	2.56	2.56%
2/15/2013	2.54	2.54%
2/18/2013	#N/A	#N/A
2/19/2013	2.55	2.55%
2/20/2013	2.54	2.54%
2/21/2013	2.53	2.53%
2/22/2013	2.54	2.54%
2/25/2013	2.50	2.50%
2/26/2013	2.50	2.50%
2/27/2013	2.52	2.52%
2/28/2013	2.53	2.53%
3/1/2013	2.53	2.53%
3/4/2013	2.53	2.53%
3/5/2013	2.55	2.55%
3/6/2013	2.56	2.56%
3/7/2013	2.56	2.56%
3/8/2013	2.56	2.56%
3/11/2013	2.57	2.57%
3/12/2013	2.55	2.55%
3/13/2013	2.56	2.56%
3/14/2013	2.57	2.57%
3/15/2013	2.56	2.56%
3/18/2013	2.56	2.56%
3/19/2013	2.53	2.53%
3/20/2013	2.53	2.53%
3/21/2013	2.52	2.52%
3/22/2013	2.53	2.53%
3/25/2013	2.53	2.53%
3/26/2013	2.53	2.53%
3/27/2013	2.51	2.51%
3/28/2013	2.51	2.51%
3/29/2013	#N/A	#N/A
4/1/2013	2.51	2.51%
4/2/2013	2.51	2.51%
4/3/2013	2.48	2.48%
4/4/2013	2.48	2.48%
4/5/2013	2.46	2.46%
4/8/2013	2.45	2.45%
4/9/2013	2.45	2.45%
4/10/2013	2.44	2.44%
4/11/2013	2.47	2.47%
4/12/2013	2.43	2.43%
4/15/2013	2.41	2.41%
4/16/2013	2.40	2.40%
4/17/2013	2.37	2.37%
4/18/2013	2.27	2.27%
4/19/2013	2.32	2.32%
4/22/2013	2.35	2.35%
4/23/2013	2.38	2.38%
4/24/2013	2.38	2.38%
4/25/2013	2.40	2.40%
4/26/2013	2.38	2.38%
4/29/2013	2.37	2.37%
4/30/2013	2.34	2.34%
5/1/2013	2.30	2.30%
5/2/2013	2.28	2.28%
5/3/2013	2.31	2.31%
5/6/2013	2.31	2.31%
5/7/2013	2.32	2.32%
5/8/2013	2.29	2.29%
5/9/2013	2.31	2.31%
5/10/2013	2.35	2.35%
5/13/2013	2.33	2.33%
5/14/2013	2.33	2.33%
5/15/2013	2.30	2.30%
5/16/2013	2.27	2.27%
5/17/2013	2.26	2.26%
5/20/2013	2.28	2.28%
5/21/2013	2.28	2.28%
5/22/2013	2.27	2.27%
5/23/2013	2.26	2.26%
5/24/2013	2.27	2.27%
5/27/2013	#N/A	#N/A
5/28/2013	2.29	2.29%
5/29/2013	2.23	2.23%
5/30/2013	2.18	2.18%
5/31/2013	2.21	2.21%
6/3/2013	2.20	2.20%
6/4/2013	2.19	2.19%
6/5/2013	2.16	2.16%
6/6/2013	2.13	2.13%
6/7/2013	2.14	2.14%
6/10/2013	2.11	2.11%
6/11/2013	2.07	2.07%
6/12/2013	2.04	2.04%

6/13/2013	2.04	2.04%
6/14/2013	2.05	2.05%
6/17/2013	2.04	2.04%
6/18/2013	2.06	2.06%
6/19/2013	2.04	2.04%
6/20/2013	1.95	1.95%
6/21/2013	1.93	1.93%
6/24/2013	1.93	1.93%
6/25/2013	1.96	1.96%
6/26/2013	1.95	1.95%
6/27/2013	1.99	1.99%
6/28/2013	1.99	1.99%
7/1/2013	2.02	2.02%
7/2/2013	2.04	2.04%
7/3/2013	2.04	2.04%
7/4/2013	#N/A	#N/A
7/5/2013	2.07	2.07%
7/8/2013	2.07	2.07%
7/9/2013	2.06	2.06%
7/10/2013	2.06	2.06%
7/11/2013	2.04	2.04%
7/12/2013	2.06	2.06%
7/15/2013	2.10	2.10%
7/16/2013	2.14	2.14%
7/17/2013	2.14	2.14%
7/18/2013	2.18	2.18%
7/19/2013	2.21	2.21%
7/22/2013	2.22	2.22%
7/23/2013	2.20	2.20%
7/24/2013	2.17	2.17%
7/25/2013	2.17	2.17%
7/26/2013	2.15	2.15%
7/29/2013	2.16	2.16%
7/30/2013	2.17	2.17%
7/31/2013	2.22	2.22%
8/1/2013	2.26	2.26%
8/2/2013	2.21	2.21%
8/5/2013	2.25	2.25%
8/6/2013	2.28	2.28%
8/7/2013	2.26	2.26%
8/8/2013	2.24	2.24%
8/9/2013	2.24	2.24%
8/12/2013	2.24	2.24%
8/13/2013	2.23	2.23%
8/14/2013	2.21	2.21%
8/15/2013	2.17	2.17%
8/16/2013	2.16	2.16%
8/19/2013	2.13	2.13%
8/20/2013	2.15	2.15%
8/21/2013	2.14	2.14%
8/22/2013	2.11	2.11%
8/23/2013	2.13	2.13%
8/26/2013	2.15	2.15%
8/27/2013	2.15	2.15%
8/28/2013	2.15	2.15%
8/29/2013	2.10	2.10%
8/30/2013	2.10	2.10%
9/2/2013	#N/A	#N/A
9/3/2013	2.10	2.10%
9/4/2013	2.07	2.07%
9/5/2013	2.06	2.06%
9/6/2013	2.07	2.07%
9/9/2013	2.06	2.06%
9/10/2013	2.10	2.10%
9/11/2013	2.13	2.13%
9/12/2013	2.11	2.11%
9/13/2013	2.10	2.10%
9/16/2013	2.12	2.12%
9/17/2013	2.16	2.16%
9/18/2013	2.20	2.20%
9/19/2013	2.21	2.21%
9/20/2013	2.23	2.23%
9/23/2013	2.26	2.26%
9/24/2013	2.19	2.19%
9/25/2013	2.18	2.18%
9/26/2013	2.19	2.19%
9/27/2013	2.18	2.18%
9/30/2013	2.19	2.19%
10/1/2013	2.20	2.20%
10/2/2013	2.20	2.20%
10/3/2013	2.19	2.19%
10/4/2013	2.20	2.20%
10/7/2013	2.20	2.20%
10/8/2013	2.18	2.18%
10/9/2013	2.21	2.21%
10/10/2013	2.21	2.21%
10/11/2013	2.20	2.20%
10/14/2013	#N/A	#N/A
10/15/2013	2.21	2.21%
10/16/2013	2.19	2.19%
10/17/2013	2.16	2.16%
10/18/2013	2.18	2.18%
10/21/2013	2.19	2.19%
10/22/2013	2.17	2.17%
10/23/2013	2.15	2.15%
10/24/2013	2.17	2.17%
10/25/2013	2.19	2.19%
10/28/2013	2.19	2.19%
10/29/2013	2.18	2.18%
10/30/2013	2.18	2.18%
10/31/2013	2.17	2.17%
11/1/2013	2.15	2.15%
11/4/2013	2.13	2.13%
11/5/2013	2.14	2.14%
11/6/2013	2.19	2.19%
11/7/2013	2.17	2.17%
11/8/2013	2.18	2.18%
11/11/2013	#N/A	#N/A
11/12/2013	2.18	2.18%
11/13/2013	2.17	2.17%
11/14/2013	2.18	2.18%
11/15/2013	2.18	2.18%
11/18/2013	2.19	2.19%
11/19/2013	2.18	2.18%

11/20/2013	2.16		2.16%
11/21/2013	2.19		2.19%
11/22/2013	2.19		2.19%
11/25/2013	2.18		2.18%
11/26/2013	2.17		2.17%
11/27/2013	2.16		2.16%
11/28/2013	#N/A	#N/A	
11/29/2013	2.15		2.15%
12/2/2013	2.15		2.15%
12/3/2013	2.15		2.15%
12/4/2013	2.11		2.11%
12/5/2013	2.12		2.12%
12/6/2013	2.11		2.11%
12/9/2013	2.12		2.12%
12/10/2013	2.12		2.12%
12/11/2013	2.15		2.15%
12/12/2013	2.14		2.14%
12/13/2013	2.16		2.16%
12/16/2013	2.18		2.18%
12/17/2013	2.18		2.18%
12/18/2013	2.17		2.17%
12/19/2013	2.15		2.15%
12/20/2013	2.16		2.16%
12/23/2013	2.18		2.18%
12/24/2013	2.19		2.19%
12/25/2013	#N/A	#N/A	
12/26/2013	2.20		2.20%
12/27/2013	2.22		2.22%
12/30/2013	2.23		2.23%
12/31/2013	2.24		2.24%
1/1/2014	#N/A	#N/A	
1/2/2014	2.26		2.26%
1/3/2014	2.26		2.26%
1/6/2014	2.26		2.26%
1/7/2014	2.26		2.26%
1/8/2014	2.29		2.29%
1/9/2014	2.31		2.31%
1/10/2014	2.29		2.29%
1/13/2014	2.27		2.27%
1/14/2014	2.26		2.26%
1/15/2014	2.28		2.28%
1/16/2014	2.25		2.25%
1/17/2014	2.26		2.26%
1/20/2014	#N/A	#N/A	
1/21/2014	2.26		2.26%
1/22/2014	2.25		2.25%
1/23/2014	2.13		2.13%
1/24/2014	2.14		2.14%
1/27/2014	2.14		2.14%
1/28/2014	2.15		2.15%
1/29/2014	2.14		2.14%
1/30/2014	2.15		2.15%
1/31/2014	2.14		2.14%
2/3/2014	2.14		2.14%
2/4/2014	2.13		2.13%
2/5/2014	2.14		2.14%
2/6/2014	2.16		2.16%
2/7/2014	2.18		2.18%
2/10/2014	2.19		2.19%
2/11/2014	2.19		2.19%
2/12/2014	2.21		2.21%
2/13/2014	2.17		2.17%
2/14/2014	2.16		2.16%
2/17/2014	#N/A	#N/A	
2/18/2014	2.14		2.14%
2/19/2014	2.13		2.13%
2/20/2014	2.13		2.13%
2/21/2014	2.12		2.12%
2/24/2014	2.16		2.16%
2/25/2014	2.15		2.15%
2/26/2014	2.16		2.16%
2/27/2014	2.16		2.16%
2/28/2014	2.17		2.17%
3/3/2014	2.16		2.16%
3/4/2014	2.18		2.18%
3/5/2014	2.18		2.18%
3/6/2014	2.21		2.21%
3/7/2014	2.23		2.23%
3/10/2014	2.22		2.22%
3/11/2014	2.20		2.20%
3/12/2014	2.19		2.19%
3/13/2014	2.17		2.17%
3/14/2014	2.17		2.17%
3/17/2014	2.18		2.18%
3/18/2014	2.18		2.18%
3/19/2014	2.16		2.16%
3/20/2014	2.13		2.13%
3/21/2014	2.14		2.14%
3/24/2014	2.15		2.15%
3/25/2014	2.14		2.14%
3/26/2014	2.14		2.14%
3/27/2014	2.13		2.13%
3/28/2014	2.13		2.13%
3/31/2014	2.13		2.13%
4/1/2014	2.14		2.14%
4/2/2014	2.14		2.14%
4/3/2014	2.14		2.14%
4/4/2014	2.13		2.13%
4/7/2014	2.12		2.12%
4/8/2014	2.11		2.11%
4/9/2014	2.14		2.14%
4/10/2014	2.14		2.14%
4/11/2014	2.13		2.13%
4/14/2014	2.13		2.13%
4/15/2014	2.14		2.14%
4/16/2014	2.17		2.17%
4/17/2014	2.21		2.21%
4/18/2014	#N/A	#N/A	
4/21/2014	2.20		2.20%
4/22/2014	2.21		2.21%
4/23/2014	2.21		2.21%
4/24/2014	2.21		2.21%
4/25/2014	2.20		2.20%
4/28/2014	2.18		2.18%

4/29/2014	2.18	2.18%
4/30/2014	2.18	2.18%
5/1/2014	2.20	2.20%
5/2/2014	2.19	2.19%
5/5/2014	2.18	2.18%
5/6/2014	2.16	2.16%
5/7/2014	2.20	2.20%
5/8/2014	2.19	2.19%
5/9/2014	2.18	2.18%
5/12/2014	2.18	2.18%
5/13/2014	2.16	2.16%
5/14/2014	2.17	2.17%
5/15/2014	2.19	2.19%
5/16/2014	2.18	2.18%
5/19/2014	2.17	2.17%
5/20/2014	2.17	2.17%
5/21/2014	2.18	2.18%
5/22/2014	2.21	2.21%
5/23/2014	2.22	2.22%
5/26/2014	#N/A	#N/A
5/27/2014	2.21	2.21%
5/28/2014	2.22	2.22%
5/29/2014	2.23	2.23%
5/30/2014	2.22	2.22%
6/2/2014	2.22	2.22%
6/3/2014	2.19	2.19%
6/4/2014	2.17	2.17%
6/5/2014	2.18	2.18%
6/6/2014	2.20	2.20%
6/9/2014	2.21	2.21%
6/10/2014	2.21	2.21%
6/11/2014	2.22	2.22%
6/12/2014	2.19	2.19%
6/13/2014	2.19	2.19%
6/16/2014	2.20	2.20%
6/17/2014	2.23	2.23%
6/18/2014	2.23	2.23%
6/19/2014	2.25	2.25%
6/20/2014	2.28	2.28%
6/23/2014	2.28	2.28%
6/24/2014	2.28	2.28%
6/25/2014	2.28	2.28%
6/26/2014	2.27	2.27%
6/27/2014	2.27	2.27%
6/30/2014	2.26	2.26%
7/1/2014	2.26	2.26%
7/2/2014	2.26	2.26%
7/3/2014	2.28	2.28%
7/4/2014	#N/A	#N/A
7/7/2014	2.27	2.27%
7/8/2014	2.27	2.27%
7/9/2014	2.29	2.29%
7/10/2014	2.28	2.28%
7/11/2014	2.28	2.28%
7/14/2014	2.27	2.27%
7/15/2014	2.25	2.25%
7/16/2014	2.23	2.23%
7/17/2014	2.23	2.23%
7/18/2014	2.24	2.24%
7/21/2014	2.24	2.24%
7/22/2014	2.23	2.23%
7/23/2014	2.23	2.23%
7/24/2014	2.27	2.27%
7/25/2014	2.28	2.28%
7/28/2014	2.28	2.28%
7/29/2014	2.27	2.27%
7/30/2014	2.28	2.28%
7/31/2014	2.29	2.29%
8/1/2014	2.27	2.27%
8/4/2014	2.25	2.25%
8/5/2014	2.24	2.24%
8/6/2014	2.25	2.25%
8/7/2014	2.24	2.24%
8/8/2014	2.25	2.25%
8/11/2014	2.25	2.25%
8/12/2014	2.24	2.24%
8/13/2014	2.23	2.23%
8/14/2014	2.21	2.21%
8/15/2014	2.18	2.18%
8/18/2014	2.18	2.18%
8/19/2014	2.17	2.17%
8/20/2014	2.17	2.17%
8/21/2014	2.17	2.17%
8/22/2014	2.14	2.14%
8/25/2014	2.15	2.15%
8/26/2014	2.14	2.14%
8/27/2014	2.14	2.14%
8/28/2014	2.13	2.13%
8/29/2014	2.12	2.12%
9/1/2014	#N/A	#N/A
9/2/2014	2.15	2.15%
9/3/2014	2.17	2.17%
9/4/2014	2.17	2.17%
9/5/2014	2.15	2.15%
9/8/2014	2.13	2.13%
9/9/2014	2.11	2.11%
9/10/2014	2.10	2.10%
9/11/2014	2.12	2.12%
9/12/2014	2.13	2.13%
9/15/2014	2.13	2.13%
9/16/2014	2.12	2.12%
9/17/2014	2.06	2.06%
9/18/2014	2.02	2.02%
9/19/2014	2.03	2.03%
9/22/2014	1.99	1.99%
9/23/2014	2.02	2.02%
9/24/2014	2.03	2.03%
9/25/2014	2.02	2.02%
9/26/2014	1.97	1.97%
9/29/2014	1.95	1.95%
9/30/2014	1.97	1.97%
10/1/2014	1.96	1.96%
10/2/2014	1.95	1.95%
10/3/2014	1.93	1.93%

10/6/2014	1.93		1.93%
10/7/2014	1.92		1.92%
10/8/2014	1.96		1.96%
10/9/2014	1.97		1.97%
10/10/2014	1.96		1.96%
10/13/2014	#N/A	#N/A	
10/14/2014	1.92		1.92%
10/15/2014	1.86		1.86%
10/16/2014	1.89		1.89%
10/17/2014	1.92		1.92%
10/20/2014	1.91		1.91%
10/21/2014	1.90		1.90%
10/22/2014	1.91		1.91%
10/23/2014	1.91		1.91%
10/24/2014	1.90		1.90%
10/27/2014	1.89		1.89%
10/28/2014	1.91		1.91%
10/29/2014	1.92		1.92%
10/30/2014	1.90		1.90%
10/31/2014	1.92		1.92%
11/3/2014	1.93		1.93%
11/4/2014	1.92		1.92%
11/5/2014	1.93		1.93%
11/6/2014	1.94		1.94%
11/7/2014	1.94		1.94%
11/10/2014	1.94		1.94%
11/11/2014	#N/A	#N/A	
11/12/2014	1.91		1.91%
11/13/2014	1.88		1.88%
11/14/2014	1.89		1.89%
11/17/2014	1.86		1.86%
11/18/2014	1.84		1.84%
11/19/2014	1.83		1.83%
11/20/2014	1.85		1.85%
11/21/2014	1.86		1.86%
11/24/2014	1.86		1.86%
11/25/2014	1.85		1.85%
11/26/2014	1.82		1.82%
11/27/2014	#N/A	#N/A	
11/28/2014	1.79		1.79%
12/1/2014	1.79		1.79%
12/2/2014	1.77		1.77%
12/3/2014	1.79		1.79%
12/4/2014	1.77		1.77%
12/5/2014	1.75		1.75%
12/8/2014	1.71		1.71%
12/9/2014	1.73		1.73%
12/10/2014	1.71		1.71%
12/11/2014	1.70		1.70%
12/12/2014	1.64		1.64%
12/15/2014	1.62		1.62%
12/16/2014	1.65		1.65%
12/17/2014	1.65		1.65%
12/18/2014	1.65		1.65%
12/19/2014	1.68		1.68%
12/22/2014	1.70		1.70%
12/23/2014	1.70		1.70%
12/24/2014	1.68		1.68%
12/25/2014	#N/A	#N/A	
12/26/2014	1.67		1.67%
12/29/2014	1.65		1.65%
12/30/2014	1.64		1.64%
12/31/2014	1.68		1.68%
1/1/2015	#N/A	#N/A	
1/2/2015	1.71		1.71%
1/5/2015	1.64		1.64%
1/6/2015	1.56		1.56%
1/7/2015	1.57		1.57%
1/8/2015	1.62		1.62%
1/9/2015	1.62		1.62%
1/12/2015	1.57		1.57%
1/13/2015	1.54		1.54%
1/14/2015	1.57		1.57%
1/15/2015	1.58		1.58%
1/16/2015	1.60		1.60%
1/19/2015	#N/A	#N/A	
1/20/2015	1.59		1.59%
1/21/2015	1.61		1.61%
1/22/2015	1.61		1.61%
1/23/2015	1.60		1.60%
1/26/2015	1.61		1.61%
1/27/2015	1.66		1.66%
1/28/2015	1.61		1.61%
1/29/2015	1.62		1.62%
1/30/2015	1.65		1.65%
2/2/2015	1.65		1.65%
2/3/2015	1.70		1.70%
2/4/2015	1.71		1.71%
2/5/2015	1.70		1.70%
2/6/2015	1.71		1.71%
2/9/2015	1.71		1.71%
2/10/2015	1.70		1.70%
2/11/2015	1.68		1.68%
2/12/2015	1.66		1.66%
2/13/2015	1.68		1.68%
2/16/2015	#N/A	#N/A	
2/17/2015	1.71		1.71%
2/18/2015	1.71		1.71%
2/19/2015	1.74		1.74%
2/20/2015	1.75		1.75%
2/23/2015	1.72		1.72%
2/24/2015	1.72		1.72%
2/25/2015	1.72		1.72%
2/26/2015	1.79		1.79%
2/27/2015	1.83		1.83%
3/2/2015	1.83		1.83%
3/3/2015	1.86		1.86%
3/4/2015	1.87		1.87%
3/5/2015	1.84		1.84%
3/6/2015	1.83		1.83%
3/9/2015	1.76		1.76%
3/10/2015	1.73		1.73%
3/11/2015	1.72		1.72%
3/12/2015	1.71		1.71%

3/13/2015	1.69	1.69%
3/16/2015	1.65	1.65%
3/17/2015	1.64	1.64%
3/18/2015	1.70	1.70%
3/19/2015	1.79	1.79%
3/20/2015	1.76	1.76%
3/23/2015	1.75	1.75%
3/24/2015	1.77	1.77%
3/25/2015	1.81	1.81%
3/26/2015	1.80	1.80%
3/27/2015	1.76	1.76%
3/30/2015	1.73	1.73%
3/31/2015	1.76	1.76%
4/1/2015	1.80	1.80%
4/2/2015	1.81	1.81%
4/3/2015	1.83	1.83%
4/6/2015	1.85	1.85%
4/7/2015	1.85	1.85%
4/8/2015	1.84	1.84%
4/9/2015	1.84	1.84%
4/10/2015	1.82	1.82%
4/13/2015	1.80	1.80%
4/14/2015	1.80	1.80%
4/15/2015	1.84	1.84%
4/16/2015	1.85	1.85%
4/17/2015	1.89	1.89%
4/20/2015	1.89	1.89%
4/21/2015	1.86	1.86%
4/22/2015	1.87	1.87%
4/23/2015	1.89	1.89%
4/24/2015	1.89	1.89%
4/27/2015	1.91	1.91%
4/28/2015	1.89	1.89%
4/29/2015	1.92	1.92%
4/30/2015	1.94	1.94%
5/1/2015	1.94	1.94%
5/4/2015	1.92	1.92%
5/5/2015	1.94	1.94%
5/6/2015	1.91	1.91%
5/7/2015	1.88	1.88%
5/8/2015	1.88	1.88%
5/11/2015	1.88	1.88%
5/12/2015	1.88	1.88%
5/13/2015	1.86	1.86%
5/14/2015	1.87	1.87%
5/15/2015	1.83	1.83%
5/18/2015	1.86	1.86%
5/19/2015	1.85	1.85%
5/20/2015	1.88	1.88%
5/21/2015	1.84	1.84%
5/22/2015	1.87	1.87%
5/25/2015	#N/A	#N/A
5/26/2015	1.82	1.82%
5/27/2015	1.80	1.80%
5/28/2015	1.80	1.80%
5/29/2015	1.80	1.80%
6/1/2015	1.80	1.80%
6/2/2015	1.83	1.83%
6/3/2015	1.83	1.83%
6/4/2015	1.81	1.81%
6/5/2015	1.86	1.86%
6/8/2015	1.85	1.85%
6/9/2015	1.86	1.86%
6/10/2015	1.87	1.87%
6/11/2015	1.83	1.83%
6/12/2015	1.84	1.84%
6/15/2015	1.85	1.85%
6/16/2015	1.88	1.88%
6/17/2015	1.90	1.90%
6/18/2015	1.89	1.89%
6/19/2015	1.86	1.86%
6/22/2015	1.90	1.90%
6/23/2015	1.92	1.92%
6/24/2015	1.90	1.90%
6/25/2015	1.91	1.91%
6/26/2015	1.92	1.92%
6/29/2015	1.87	1.87%
6/30/2015	1.87	1.87%
7/1/2015	1.89	1.89%
7/2/2015	1.91	1.91%
7/3/2015	#N/A	#N/A
7/6/2015	1.87	1.87%
7/7/2015	1.87	1.87%
7/8/2015	1.83	1.83%
7/9/2015	1.85	1.85%
7/10/2015	1.87	1.87%
7/13/2015	1.86	1.86%
7/14/2015	1.85	1.85%
7/15/2015	1.84	1.84%
7/16/2015	1.84	1.84%
7/17/2015	1.83	1.83%
7/20/2015	1.82	1.82%
7/21/2015	1.82	1.82%
7/22/2015	1.80	1.80%
7/23/2015	1.79	1.79%
7/24/2015	1.76	1.76%
7/27/2015	1.73	1.73%
7/28/2015	1.75	1.75%
7/29/2015	1.77	1.77%
7/30/2015	1.77	1.77%
7/31/2015	1.74	1.74%
8/3/2015	1.70	1.70%
8/4/2015	1.71	1.71%
8/5/2015	1.70	1.70%
8/6/2015	1.67	1.67%
8/7/2015	1.66	1.66%
8/10/2015	1.69	1.69%
8/11/2015	1.66	1.66%
8/12/2015	1.62	1.62%
8/13/2015	1.62	1.62%
8/14/2015	1.62	1.62%
8/17/2015	1.58	1.58%
8/18/2015	1.58	1.58%
8/19/2015	1.57	1.57%

8/20/2015	1.56		1.56%
8/21/2015	1.53		1.53%
8/24/2015	1.49		1.49%
8/25/2015	1.53		1.53%
8/26/2015	1.53		1.53%
8/27/2015	1.58		1.58%
8/28/2015	1.61		1.61%
8/31/2015	1.63		1.63%
9/1/2015	1.57		1.57%
9/2/2015	1.56		1.56%
9/3/2015	1.54		1.54%
9/4/2015	1.51		1.51%
9/7/2015	#N/A	#N/A	
9/8/2015	1.53		1.53%
9/9/2015	1.56		1.56%
9/10/2015	1.59		1.59%
9/11/2015	1.59		1.59%
9/14/2015	1.56		1.56%
9/15/2015	1.56		1.56%
9/16/2015	1.57		1.57%
9/17/2015	1.58		1.58%
9/18/2015	1.55		1.55%
9/21/2015	1.54		1.54%
9/22/2015	1.51		1.51%
9/23/2015	1.52		1.52%
9/24/2015	1.49		1.49%
9/25/2015	1.46		1.46%
9/28/2015	1.39		1.39%
9/29/2015	1.39		1.39%
9/30/2015	1.41		1.41%
10/1/2015	1.46		1.46%
10/2/2015	1.48		1.48%
10/5/2015	1.51		1.51%
10/6/2015	1.52		1.52%
10/7/2015	1.55		1.55%
10/8/2015	1.58		1.58%
10/9/2015	1.54		1.54%
10/12/2015	#N/A	#N/A	
10/13/2015	1.52		1.52%
10/14/2015	1.49		1.49%
10/15/2015	1.50		1.50%
10/16/2015	1.48		1.48%
10/19/2015	1.45		1.45%
10/20/2015	1.48		1.48%
10/21/2015	1.45		1.45%
10/22/2015	1.47		1.47%
10/23/2015	1.51		1.51%
10/26/2015	1.48		1.48%
10/27/2015	1.48		1.48%
10/28/2015	1.47		1.47%
10/29/2015	1.52		1.52%
10/30/2015	1.53		1.53%
11/2/2015	1.55		1.55%
11/3/2015	1.58		1.58%
11/4/2015	1.57		1.57%
11/5/2015	1.55		1.55%
11/6/2015	1.59		1.59%
11/9/2015	1.60		1.60%
11/10/2015	1.55		1.55%
11/11/2015	#N/A	#N/A	
11/12/2015	1.54		1.54%
11/13/2015	1.52		1.52%
11/16/2015	1.51		1.51%
11/17/2015	1.53		1.53%
11/18/2015	1.56		1.56%
11/19/2015	1.56		1.56%
11/20/2015	1.60		1.60%
11/23/2015	1.61		1.61%
11/24/2015	1.62		1.62%
11/25/2015	1.61		1.61%
11/26/2015	#N/A	#N/A	
11/27/2015	1.60		1.60%
11/30/2015	1.59		1.59%
12/1/2015	1.57		1.57%
12/2/2015	1.56		1.56%
12/3/2015	1.61		1.61%
12/4/2015	1.60		1.60%
12/7/2015	1.56		1.56%
12/8/2015	1.56		1.56%
12/9/2015	1.53		1.53%
12/10/2015	1.51		1.51%
12/11/2015	1.46		1.46%
12/14/2015	1.45		1.45%
12/15/2015	1.48		1.48%
12/16/2015	1.46		1.46%
12/17/2015	1.47		1.47%
12/18/2015	1.46		1.46%
12/21/2015	1.45		1.45%
12/22/2015	1.46		1.46%
12/23/2015	1.51		1.51%
12/24/2015	1.52		1.52%
12/25/2015	#N/A	#N/A	
12/28/2015	1.50		1.50%
12/29/2015	1.53		1.53%
12/30/2015	1.54		1.54%
12/31/2015	1.54		1.54%
1/1/2016	#N/A	#N/A	
1/4/2016	1.55		1.55%
1/5/2016	1.56		1.56%
1/6/2016	1.53		1.53%
1/7/2016	1.50		1.50%
1/8/2016	1.48		1.48%
1/11/2016	1.45		1.45%
1/12/2016	1.43		1.43%
1/13/2016	1.43		1.43%
1/14/2016	1.43		1.43%
1/15/2016	1.36		1.36%
1/18/2016	#N/A	#N/A	
1/19/2016	1.38		1.38%
1/20/2016	1.32		1.32%
1/21/2016	1.28		1.28%
1/22/2016	1.35		1.35%
1/25/2016	1.34		1.34%
1/26/2016	1.36		1.36%