

Project Report on

Relationship between Spot and Futures Markets

(Vector Error Correction Model)

Submitted By :

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2K15/EMBA/509

Under the Guidance of :

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DECLARATION

I **Neeru Rohilla** student of **EMBA 2015-2017** batch of Delhi School of Management, Delhi Technological University, Bawana road, Delhi-42 declare that major project “Relationship between Spot and Futures Markets (Vector Error Correction Model)” submitted in partial fulfillment of Executive MBA programme is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Award and Fellowship.

Name of candidate

Neeru Rohilla

Place: New Delhi

ACKNOWLEDGEMENT

I am using this opportunity to express my gratitude to everyone who supported me to complete the major MBA project on “**Relationship between Spot and Futures Markets (Vector Error Correction Model)**”. I am thankful for their aspiring guidance, invaluable constructive criticism and friendly advice during the project work. I am sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to the project.

I express my warm thanks to **Dr P K Gupta** for their support and guidance.

Thank You,
Neeru Rohilla

CERTIFICATE

This is to certify that the project entitled '**Relationship between Spot and Futures Markets (Vector Error Correction Model)**' has been successfully completed by Neeru Rohilla–
2K15/EMBA/509

This is further certified that this project work is a record of bonafide work done by him under my guidance. The matter embodied in this report has not been submitted for award of any degree.

Dr P K Gupta
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Abstract

The present study attempts to investigate long and short run causality between spot price and future prices of selected Stocks in India. The data looks at the spot and future daily closing prices of TCS, MindTree, Cipla and Dr Reddy. We found strong evidence of cointegration between the daily spot and one-month futures prices of the stocks. After identifying single cointegration vector between spot and future prices of the selected Stocks, the Vector Error Correction Model (VECM) was employed to examine the causal nexus between future and spot market of the selected stocks. Finally, VECM model and Wald test are used to measure long run as well as short run causality among these four commodities. The evidence shows that future leads to spot in case of TCS.

Objectives of the project

In this report efforts are made to examine the causal nexus between future and spot price of the selected four stocks (TCS, MindTree, Cipla and Dr Reddy). It tries to identify the relationship between spot and future markets price, that who plays a leading role in price discovery in long run and Short Run.

Data Collection and Analysis Methods

The near month futures contract has been used for the study as they are heavily traded as compared to next month(1month) and far month(2-3 months) future contracts. All the required data information for the study has been retrieved from the National Stock Exchange of India(NSE) website.

As a preliminary investigation, Augmented Dickey Fuller tests was employed to test the stationarity of spot and future price series of selected stocks. And then Johansen's Cointegration test is performed to examine the long-run relationship between spot and future markets of selected stocks.

After identifying single cointegration vector between spot and future prices of the selected stocks, the Vector Error Correction Model (VECM) was employed to examine the causal nexus between future and spot market of the stocks. Besides, the vector error correction model is sensitive to the selection of optimal lag length and the necessary lag length of future and spot price series for the selected stocks are determined by the Schwarz Information Criterion (SC).

Summary of the findings

There is one-way causal linkage from future market to spot market prices for MindTree and Dr Reddy. This indicates that information gets reflected first in the future prices and then it transmitted to spot market prices of the MindTree and Dr Reddy. We found no causal relationship for Cipla in the long term.

In the short run we found unidirectional causality MindTree from Spot to Future. It is bidirectional in case of Cipla and Dr Reddy. This reveals that in case of spot price leads but in case of Cipla and Dr Reddy both the spot and future markets price of plays a leading role through price discovery process and is said to be efficient and reacts more quickly to each other.

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1. Introduction

A spot contract is a contract that involves the purchase or sale of a commodity, security or currency for immediate delivery and payment on the spot date, which is normally two business days after the trade date. The spot rate, or spot price, is the price quoted for the immediate settlement of the spot contract.

Stock Future contract is an agreement to buy or sell a specified quantity of underlying equity share for a future date at a price agreed upon between the buyer and seller. The contracts have standardized specifications like market lot, expiry day, unit of price quotation, tick size and method of settlement.

A futures contract is a contract to buy (and sell) a specified asset at a fixed price in a future time period. There are two parties to every futures contract - the seller of the contract, who agrees to deliver the asset at the specified time in the future, and the buyer of the contract, who agrees to pay a fixed price and take delivery of the asset. If the asset that underlies the futures contract is traded and is not perishable, you can construct a pure arbitrage if the futures contract is mispriced. In this section, we will consider the potential for arbitrage first with storable commodities and then with financial assets and then look at whether such arbitrage is possible. Features of the futures Contract:-

- Future contracts are traded on organized future exchanges. These are forward contracts traded on organized futures exchanges
- Future contracts are standardized contracts in terms of quantity, quality and amount.
- Margin money is required to be deposited by the buyer or sellers in form of cash or securities. This practice ensures honor of the deal.
- In case of future contracts, there is a daily opening and closing of position, known as marked to market. The price differences every day are settled through the exchange clearing house. The clearing house pays to the buyer if the price of a futures contract increases on a particular day and similarly seller pays the money to the clearing house. The reverse may happen in case of decrease in price.

Price discovery function

An important function of futures market is the price discovery which reveals information about futures cash market prices through the futures market. Further, price discovery function of the futures market also leads to the inter-temporal inventory allocation function. According to this, the traders can compare the spot and futures prices and will be able to decide the optimum allocation of their quantity of underlying asset between the immediate sale and futures sale. The price discovery function can be explained by an example. Supposing, a copper miner is trying to take a decision whether to reopen a marginally profitable copper mine or not. Assuming that the

copper ore in the mine is not of the best quality and so the yield from the mine will be relatively low. The decision will depend upon the cost incurred on mining and refining of copper and the price of the copper to be obtained in futures. Hence, the crucial element in this decision is the futures price of copper. The miner can analyze the copper prices quoted in the futures market today for determining the estimate of the futures price of copper at a specified futures period. In this calculation, the miner has used the futures market as a vehicle of price discovery.

1.1 Industry Profile

India has an emerging economy. Indian capital market has witnessed significant transformations and structural changes due to implementation of financial sector reform measures by the Govt. of India since early 1990s. In this process, index futures trading were launched on June 9, 2000 at BSE and on June 12, 2000 at NSE and India started trading in derivative products. The main objectives behind the introduction of derivatives market were to control the increasing volatility of the asset prices, and to introduce sophisticated risk management tools leading to higher returns by reducing risk and transaction costs as compared to individual financial assets. The introduction of stock index futures has profoundly changed the nature of trading on stock exchanges. Futures market offer investors flexibility in altering the composition of their portfolios and also provide opportunities to hedge the risks involved with holding diversified equity portfolios. As a consequence, significant portion of cash market equity transactions are tied to futures market activity.

IT Industry

The Indian IT sector is expected to grow at a rate of 12-14 per cent for FY2016-17 in constant currency terms. The sector is also expected triple its current annual revenue to reach US\$ 350 billion by FY 2025.

Employees from 12 Indian start-ups, such as Flipkart, Snapdeal, Makemytrip, Naukri, Ola, and others, have gone on to form 700 start-ups on their own, thus expanding the Indian start-up ecosystem. India ranks third among global start-up ecosystems with more than 4,200 start-up. Total spending on IT by banking and security firms in India is expected to grow 8.6 per cent year-on-year to US\$ 7.8 billion by 2017. India's internet economy is expected to touch Rs 10 trillion (US\$ 146.72 billion) by 2018, accounting for 5 per cent of the country's GDP.

The public cloud services market in India is slated to grow 35.9 per cent to reach US\$ 1.3 billion according to IT consultancy, Gartner. Increased penetration of internet (including in rural areas) and rapid emergence of e-commerce are the main drivers for continued growth of data centre co-location and hosting market in India. The Indian Healthcare Information Technology (IT) market is valued at US\$ 1 billion currently and is expected to grow 1.5 times by 2020. India's business to business (B2B) e-commerce market is expected to reach US\$ 700 billion by 2020 whereas the business to consumer (B2C) e-commerce market is expected to reach US\$ 102 billion by 2020.

Cross-border online shopping by Indians is expected to increase 85 per cent in 2017, and total online spending is projected to rise 31 per cent to Rs 8.75 lakh crore (US\$ 128 billion) by 2018.

India ranks among the top five countries in terms of digitalization maturity as per Accenture's Platform Readiness Index, and is expected to be among the top countries with the opportunity to grow and scale up digital platforms by 2020.

Pharmaceuticals Industry

Pharmaceuticals sector is one of the key sectors where Indian companies have created a global brand for themselves besides software. Indian companies have taken advantage of the opportunities in the regulated generics market in the western countries and made deep inroads especially in providing low cost equivalents of expensive drugs. Pharma outsourcing into India and low cost Healthcare services are expected to be the key areas of growth in the near future. In addition, the inherent potential of biotechnology has also attracted many new companies and this is also a key growth area for Indian companies.

The Indian pharmaceuticals industry, which is expected to grow over 15 per cent per annum between 2015 and 2020, will outperform the global pharma industry, which is set to grow at an annual rate of 5 per cent between the same period. The market is expected to grow to US\$ 55 billion by 2020, thereby emerging as the sixth largest pharmaceutical market globally by absolute size, as stated by Mr Arun Singh, Indian Ambassador to the US. Branded generics dominate the pharmaceuticals market, constituting nearly 80 per cent of the market share (in terms of revenues).

India has also maintained its lead over China in pharmaceutical exports with a year-on-year growth of 11.44 per cent to US\$ 12.91 billion in FY 2015-16, according to data from the Ministry of Commerce and Industry. In addition, Indian pharmaceutical exports are poised to grow between 8-10 per cent in FY 2016-17. Imports of pharmaceutical products rose marginally by 0.80 per cent year-on-year to US\$ 1,641.15 million.

Overall drug approvals given by the US Food and Drug Administration (USFDA) to Indian companies have nearly doubled to 201 in FY 2015-16 from 109 in FY 2014-15. The country accounts for around 30 per cent (by volume) and about 10 per cent (value) in the US\$ 70-80 billion US generics market.

India's biotechnology industry comprising bio-pharmaceuticals, bio-services, bio-agriculture, bio-industry and bioinformatics is expected grow at an average growth rate of around 30 per cent a year and reach US\$ 100 billion by 2025. Biopharma, comprising vaccines, therapeutics and diagnostics, is the largest sub-sector contributing nearly 62 per cent of the total revenues at Rs 12,600 crore (US\$ 1.89 billion).

1.2 Company Profile

TCS

Tata Consultancy Services Limited (TCS) is engaged in providing information technology (IT) services, digital and business solutions. The Company's segments include banking, finance and insurance services (BFSI); manufacturing; retail and consumer packaged goods (CPG); telecom, media and entertainment, and others, such as energy, resources and utilities, hi-tech, life science and healthcare, s-Governance, travel, transportation and hospitality, and other products. Its services portfolio consists of IT and assurance services, business intelligence and performance management, business process services, cloud services, connected marketing solutions, consulting, engineering and industrial services, enterprise solutions, IT infrastructure services, mobility products and services and platform solutions. Its software offerings include Digital Software and Solutions, TCS BaNCS and TCS MasterCraft, among others. It serves industries, including insurance, healthcare, retail, telecom and others.

MindTree

MindTree Limited is a holding company. The Company is an international information technology consulting and implementation company that delivers business solutions through global software development. The Company operates in five segments: Retail, CPG and Manufacturing (RCM); Banking, Financial Services and Insurance (BFSI); Technology, Media and Services (TMS); Travel and Hospitality (TH), and Others. It offers services in the areas of analytics and information management, application development and maintenance, business process management, business technology consulting, cloud, digital business's, independent testing, infrastructure management services, mobility, product engineering, and systems, applications, products (SAP) services. It has offices in India, the United States, the United Kingdom, Japan, Singapore, Malaysia, Australia, Germany, Switzerland, Sweden, the United Arab Emirates, Netherlands, Canada, Belgium, France, Ireland, South Africa and Republic of China.

Cipla

Cipla Limited is a holding company. The Company is a pharmaceutical company. The Company's strategic business units include Active Pharmaceutical Ingredients (APIs), Respiratory and Cipla Global Access. The Company's geographical segments include India, USA, South Africa and Rest of the World. The Company manufactures metered dose inhalers, dry powder inhalers, nasal sprays, nebulizers and a range of inhaled accessory devices. Cipla Global Access is a tender-based institutional business that concentrates on approximately four therapy areas: human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), malaria, multi drug-resistant tuberculosis and reproductive health. The Company offers its products for the therapeutic areas, including cardiovascular, children's health, dermatology and cosmetology, diabetes, HIV/AIDS, infectious diseases and critical care, malaria, neurosciences, oncology, ophthalmology, osteoporosis, respiratory, urology and women's health.

Dr Reddy

Dr. Reddy's Laboratories Limited is a pharmaceutical company that is engaged in providing medicines. The Company operates in three segments: Global Generics, Pharmaceutical Services and Active Ingredients (PSAI), and Proprietary Products. The Global Generics segment includes manufacturing and marketing prescription and over-the-counter finished pharmaceutical products ready for consumption by the patient, marketed under a brand name (branded formulations) or as generic finished dosages with

therapeutic equivalence to branded formulations (generics). PSAI segment includes the Company's business of manufacturing and marketing active pharmaceutical ingredients and intermediates (API) or bulk drugs. Proprietary Products segment focuses on the research, development and manufacture of differentiated formulations and new chemical entities. These products fall within the dermatology and neurology therapeutic areas, and are marketed and sold through its subsidiary, Promius Pharma, LLC.

2. LITERATURE REVIEW

L Raju and Karande (2003) examined the price discovery between the S & P CNX Nifty and its corresponding futures. Cointegration technique and Error correction model has been employed for examining the objectives. Daily closing values of index futures and BSE 100 index were comprised for June 2000 through October 2002. All the required data information's were collected from website of NSE. The analysis revealed that the futures market (and not the spot market) responds the deviation from equilibrium and price discovery occurs in the both futures and the spot market.

P. Srinivasan, K. Sham Bhat applied Johansen's Cointegration technique followed by the Vector Error Correction Model (VECM) to examine the lead-lag relationship between NSE spot and futures market for selected twenty-one commercial banking stocks of India. The analysis reveals mixed findings. However, most of the selected commercial bank stocks in India reveal future leads to spot and equal number of selected banking stocks reveals bi-directional and spot lead to future prices.

Tan, Juat-Hong (2002) analysed the temporal causal relationships between spot and futures markets using daily closing prices for both Malaysian stock composite index(MSCI) and Kuala Lumpur futures index (KLFI). The Johansen procedure was used to test for cointegration. The standard Granger F-statistic, Hsiao's sequential approach (HSM), including the error correction variable for testing the short and long run causality were employed to evaluate the casual nexus between spot and futures markets. The empirical analysis indicated that both MSCI and KLFI series are cointegrated. The empirical regression from standard regression causality and HSM revealed a bidirectional relationship for the short-run period; while the ECM provides the evidence that the stock index futures (KLFI) leads the Malaysian Composite Index (MSCI).

At the national level, an attempt is made to investigate the empirical relationship between NSE 50 futures and NSE 50 index by Thenmozhi, M (2002). She examined the lead-lag relationship between stock index futures and spot index returns. The daily closing price returns of Nifty spot and futures index from 15th June 2000 to 25th July 2002 has been used for the study. The data sources were retrieved from the National Stock Exchange (NSE) Website. The lead lag relationship between spot and index futures were examined by using simultaneous equation modeling, ordinary least squares and two stage least squares regression. The lead lag analysis shows that futures market is faster than spot market in disseminating information and futures returns lead the spot index returns.

However, the existing literature reveals the following lacunae: Firstly, All of the studies have adopted index futures for the purpose of analyze the price discovery and causality between the spot and futures price. Therefore, there exists a scope for further analyze by employing the stock futures on individual securities. This can give the detail analysis of price discovery between the spot and futures on each individual security. Secondly, Most of the studies were investigated by employing the Granger Causality, Engle-Granger's co-integration and Johansen's cointegration test. At the national level, simultaneous equation model and Engle- Granger's cointegration techniques were

employed by earlier authors. It revealed that Johansen's cointegration test and vector error correction model (VECM) are the superior techniques for examine the causality between the spot and futures. Thirdly, it is important for investors and traders for trading in the leading market in the short-run, because they can make arbitrage profit by trading in the leading market.

3. RESEARCH METHODOLOGY

Johansen's Co-integration and Vector Error Correction Model (VECM) were employed to examine the lead-lag relationship between spot and futures price of the selected agricultural commodity. Augmented Dickey-Fuller (1979) was employed to verify the stationarity of the data series. Further, the necessary lag length of the data series was selected on the basis of Schwarz Information Criterion (SC). Johansen's Co-integration test is employed to examine long-run relationship among the variables after they are integrated in an identical order. After identifying single co-integration vector between spot and future prices of the selected agricultural commodity, the Vector Error Correction Model (VECM) was employed to examine the long-run relationship between the two and it is presented below:

$$\Delta SPOT = c1 + \sum_{k=1}^n \alpha_{1i} \Delta SPOT_{t-k} + \sum_{k=1}^n \beta_{2i} \Delta FUT_{t-k} + \rho_1 ECT_{t-1} + u_{1t}$$

$$\Delta FUT = c2 + \sum_{k=1}^n \beta_{1i} \Delta FUT_{t-k} + \sum_{k=1}^n \alpha_{2i} \Delta SPOT_{t-k} + \rho_2 ECT_{t-1} + u_{2t}$$

Where, SPOT_t and FUT_t are spot and future market prices of individual stocks at time t. u_{1t} and u_{2t} are white noise disturbance terms and ECT_{t-1} is the lagged error correction term.

Augmented Dickey–Fuller test

In statistics and econometrics, an augmented Dickey–Fuller test (ADF) tests the null hypothesis of a unit root is present in a time series sample. The alternative hypothesis is different depending on which version of the test is used, but is usually stationarity or trend-stationarity. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models.

The augmented Dickey–Fuller (ADF) statistic, used in the test, is a negative number. The more negative it is, the stronger the rejection of the hypothesis that there is a unit root at some level of confidence.

Johansen Co-Integration Test

Cointegration means that, while many developments can cause permanent changes in the individual variable (i.e. $x_{i,t}$), there is some long-run equilibrium relation tying the individual variables together, represented by some linear combination of them.

In statistics, the Johansen test, named after Søren Johansen, is a procedure for testing cointegration of several, say k , $I(1)$ time series. This test permits more than one cointegrating relationship so is more generally applicable than the Engle–Granger test which is based on the Dickey–Fuller (or the augmented) test for unit roots in the residuals from a single (estimated) cointegrating relationship.

There are two types of Johansen test, either with trace or with eigenvalue, and the inferences might be a little bit different. The null hypothesis for the trace test is that the number of cointegration vectors is $r=r^*<k$, vs. the alternative that $r=k$. Testing proceeds sequentially for $r^*=1,2,\text{etc.}$ and the first non-rejection of the null is taken as an estimate of r . The null hypothesis for the "maximum eigenvalue" test is as for the trace test but the alternative is $r=r^*+1$ and, again, testing proceeds sequentially for $r^*=1,2,\text{etc.}$, with the first non-rejection used as an estimator for r .

Wald test

The Wald test is a parametric statistical test named after the Hungarian statistician Abraham Wald. Whenever a relationship within or between data items can be expressed as a statistical model with parameters to be estimated from a sample, the Wald test can be used to test the true value of the parameter based on the sample estimate.

Suppose an economist, who has data on social class and shoe size, wonders whether social class is associated with shoe size. Say θ is the average increase in shoe size for upper-class people compared to middle-class people: then the Wald test can be used to test whether θ is 0 (in which case social class has no association with shoe size) or non-zero (shoe size varies between social classes). Here, θ , the hypothetical difference in shoe sizes between upper and middle-class people in the whole population, is a parameter. An estimate of θ might be the difference in shoe size between upper and middle-class people in the sample. In the Wald test, the economist uses the estimate and an estimate of variability (see below) to draw conclusions about the unobserved true θ . Or, for a medical example, suppose smoking multiplies the risk of lung cancer by some number R : then the Wald test can be used to test whether $R = 1$ (i.e. there is no effect of smoking) or is greater (or less) than 1 (i.e. smoking alters risk).

A Wald test can be used in a great variety of different models including models for dichotomous variables and models for continuous variables.

Nonlinear hypothesis

In the standard form, the Wald test is used to test linear hypotheses, that can be represented by a single matrix R . If one wishes to test a non-linear hypothesis of the form:

$$\begin{aligned}H_0 : c(\theta) &= 0 \\H_1 : c(\theta) &\neq 0\end{aligned}$$

The test statistic becomes:

$$c(\hat{\theta}_n)' \left[c'(\hat{\theta}_n) (\hat{V}_n/n) c'(\hat{\theta}_n)' \right]^{-1} c(\hat{\theta}_n) \xrightarrow{\mathcal{D}} \chi^2_Q$$

where $c'(\hat{\theta}_n)$ is the derivative of c evaluated at the sample estimator. This result is obtained using the delta method, which uses a first order approximation of the variance.

Non-invariance to re-parametrisations

The fact that one uses an approximation of the variance has the drawback that the Wald statistic is not-invariant to a non-linear transformation/reparametrisation of the hypothesis: it can give different answers to the same question, depending on how the question is phrased. For example, asking whether $R = 1$ is the same as asking whether $\log R = 0$; but the Wald statistic for $R = 1$ is not the same as the Wald statistic for $\log R = 0$ (because there is in general no neat relationship between the standard errors of R and $\log R$, so it needs to be approximated).

Research tools

EViews (Econometric Views) is a statistical package for Windows, used mainly for time-series oriented econometric analysis. It is developed by Quantitative Micro Software (QMS), now a part of IHS. Version 1.0 was released in March 1994, and replaced MicroTSP. The TSP software and programming language had been originally developed by Robert Hall in 1965. The current version of EViews is 9.5, released in March 2016.

EViews can be used for general statistical analysis and econometric analyses, such as cross-section and panel data analysis and time series estimation and forecasting.

4. DATA ANALYSIS

The near month futures contract has been used for the study as they are heavily traded as compared to next month(1month) and far month(2-3 months) future contracts. All the required data information for the study has been retrieved from the National Stock Exchange of India(NSE) website.

As a preliminary investigation, Augmented Dickey Fuller tests was employed to test the stationarity of spot and future price series of selected stocks. And then Johansen's Cointegration test is performed to examine the long-run relationship between spot and future markets of selected stocks.

After identifying single cointegration vector between spot and future prices of the selected stocks, the Vector Error Correction Model (VECM) was employed to examine the causal nexus between future and spot market of the stocks. Besides, the vector error correction model is sensitive to the selection of optimal lag length and the necessary lag length of future and spot price series for the selected stocks are determined by the Schwarz Information Criterion (SC).

TCS Analysis

For this study 1 month futures data is being used from June 2015 to Mar 2017.

Table 1: TCS Future and Spot Price

Symbol	Date	Expiry date	Future Price	Spot Price
TCS	1-Jun-15	25-Jun-15	2608.90	2617.75
TCS	2-Jun-15	25-Jun-15	2585.10	2599.90
TCS	3-Jun-15	25-Jun-15	2594.90	2610.90
TCS	4-Jun-15	25-Jun-15	2588.75	2605.65
TCS	5-Jun-15	25-Jun-15	2579.75	2575.85
TCS	8-Jun-15	25-Jun-15	2581.05	2577.45
TCS	9-Jun-15	25-Jun-15	2563.45	2561.65
TCS	10-Jun-15	25-Jun-15	2606.45	2600.75
TCS	11-Jun-15	25-Jun-15	2570.55	2571.30
TCS	12-Jun-15	25-Jun-15	2512.45	2505.80
TCS	15-Jun-15	25-Jun-15	2510.55	2504.80
TCS	16-Jun-15	25-Jun-15	2516.85	2512.00
TCS	17-Jun-15	25-Jun-15	2511.80	2513.80
TCS	18-Jun-15	25-Jun-15	2528.90	2530.05
TCS	19-Jun-15	25-Jun-15	2555.35	2549.55
TCS	22-Jun-15	25-Jun-15	2596.00	2591.50
TCS	23-Jun-15	25-Jun-15	2577.65	2574.60
TCS	24-Jun-15	25-Jun-15	2568.25	2570.30
TCS	25-Jun-15	25-Jun-15	2550.00	2550.00
TCS	3-Jul-15	30-Jul-15	2611.10	2603.90
TCS	6-Jul-15	30-Jul-15	2640.20	2633.30
TCS	7-Jul-15	30-Jul-15	2624.55	2616.25
TCS	8-Jul-15	30-Jul-15	2599.55	2595.10
TCS	9-Jul-15	30-Jul-15	2530.10	2522.50
TCS	10-Jul-15	30-Jul-15	2480.45	2474.35
TCS	13-Jul-15	30-Jul-15	2510.10	2509.55
TCS	14-Jul-15	30-Jul-15	2501.15	2499.50
TCS	15-Jul-15	30-Jul-15	2541.25	2545.75
TCS	16-Jul-15	30-Jul-15	2538.70	2540.20
TCS	17-Jul-15	30-Jul-15	2558.25	2564.40
TCS	20-Jul-15	30-Jul-15	2577.90	2579.15
TCS	21-Jul-15	30-Jul-15	2568.50	2561.40
TCS	22-Jul-15	30-Jul-15	2536.25	2528.05
TCS	23-Jul-15	30-Jul-15	2495.80	2488.60
TCS	24-Jul-15	30-Jul-15	2507.80	2505.15
TCS	27-Jul-15	30-Jul-15	2499.60	2497.05

TCS	28-Jul-15	30-Jul-15	2504.00	2502.05
TCS	29-Jul-15	30-Jul-15	2505.50	2506.75
TCS	30-Jul-15	30-Jul-15	2480.65	2480.65
TCS	31-Jul-15	27-Aug-15	2522.60	2510.75
TCS	3-Aug-15	27-Aug-15	2515.75	2509.60
TCS	4-Aug-15	27-Aug-15	2514.40	2508.90
TCS	5-Aug-15	27-Aug-15	2554.40	2547.15
TCS	6-Aug-15	27-Aug-15	2576.25	2573.30
TCS	7-Aug-15	27-Aug-15	2560.65	2552.05
TCS	10-Aug-15	27-Aug-15	2572.75	2572.10
TCS	11-Aug-15	27-Aug-15	2607.90	2604.20
TCS	12-Aug-15	27-Aug-15	2673.60	2671.70
TCS	13-Aug-15	27-Aug-15	2645.90	2635.60
TCS	14-Aug-15	27-Aug-15	2700.90	2703.20
TCS	17-Aug-15	27-Aug-15	2684.95	2684.75
TCS	18-Aug-15	27-Aug-15	2740.60	2740.90
TCS	19-Aug-15	27-Aug-15	2731.50	2733.60
TCS	20-Aug-15	27-Aug-15	2692.05	2686.85
TCS	21-Aug-15	27-Aug-15	2678.95	2676.15
TCS	24-Aug-15	27-Aug-15	2583.45	2578.65
TCS	25-Aug-15	27-Aug-15	2572.40	2567.15
TCS	26-Aug-15	27-Aug-15	2580.90	2576.75
TCS	27-Aug-15	27-Aug-15	2574.65	2574.65
TCS	28-Aug-15	24-Sep-15	2583.80	2570.85
TCS	31-Aug-15	24-Sep-15	2578.75	2564.05
TCS	1-Sep-15	24-Sep-15	2546.15	2537.40
TCS	2-Sep-15	24-Sep-15	2601.25	2591.80
TCS	3-Sep-15	24-Sep-15	2612.80	2605.60
TCS	4-Sep-15	24-Sep-15	2557.00	2547.45
TCS	7-Sep-15	24-Sep-15	2544.30	2539.75
TCS	8-Sep-15	24-Sep-15	2553.45	2540.30
TCS	9-Sep-15	24-Sep-15	2557.10	2549.75
TCS	10-Sep-15	24-Sep-15	2552.80	2545.40
TCS	11-Sep-15	24-Sep-15	2552.25	2552.00
TCS	14-Sep-15	24-Sep-15	2554.65	2551.65
TCS	15-Sep-15	24-Sep-15	2548.70	2547.60
TCS	16-Sep-15	24-Sep-15	2554.05	2550.35
TCS	18-Sep-15	24-Sep-15	2556.35	2551.25
TCS	21-Sep-15	24-Sep-15	2549.80	2551.05
TCS	22-Sep-15	24-Sep-15	2524.10	2526.80
TCS	23-Sep-15	24-Sep-15	2535.90	2532.65

TCS	24-Sep-15	24-Sep-15	2580.40	2580.40
TCS	5-Oct-15	29-Oct-15	2708.25	2711.65
TCS	6-Oct-15	29-Oct-15	2694.40	2700.00
TCS	7-Oct-15	29-Oct-15	2661.80	2653.95
TCS	8-Oct-15	29-Oct-15	2642.40	2633.80
TCS	9-Oct-15	29-Oct-15	2636.50	2629.65
TCS	12-Oct-15	29-Oct-15	2595.35	2592.60
TCS	13-Oct-15	29-Oct-15	2595.40	2598.55
TCS	14-Oct-15	29-Oct-15	2489.75	2483.70
TCS	15-Oct-15	29-Oct-15	2472.60	2467.75
TCS	16-Oct-15	29-Oct-15	2477.20	2473.75
TCS	19-Oct-15	29-Oct-15	2485.95	2488.75
TCS	20-Oct-15	29-Oct-15	2518.45	2526.75
TCS	21-Oct-15	29-Oct-15	2524.60	2530.00
TCS	23-Oct-15	29-Oct-15	2532.75	2537.15
TCS	26-Oct-15	29-Oct-15	2537.40	2536.55
TCS	27-Oct-15	29-Oct-15	2535.75	2531.10
TCS	28-Oct-15	29-Oct-15	2529.60	2529.10
TCS	29-Oct-15	29-Oct-15	2495.35	2495.35
TCS	30-Oct-15	26-Nov-15	2507.60	2495.20
TCS	2-Nov-15	26-Nov-15	2523.65	2517.35
TCS	3-Nov-15	26-Nov-15	2548.25	2543.45
TCS	4-Nov-15	26-Nov-15	2538.70	2533.80
TCS	5-Nov-15	26-Nov-15	2494.30	2482.65
TCS	6-Nov-15	26-Nov-15	2509.70	2505.75
TCS	9-Nov-15	26-Nov-15	2479.05	2471.35
TCS	10-Nov-15	26-Nov-15	2464.20	2458.15
TCS	11-Nov-15	26-Nov-15	2465.95	2468.80
TCS	13-Nov-15	26-Nov-15	2407.35	2397.40
TCS	16-Nov-15	26-Nov-15	2384.35	2374.60
TCS	17-Nov-15	26-Nov-15	2394.10	2390.55
TCS	18-Nov-15	26-Nov-15	2352.80	2351.45
TCS	19-Nov-15	26-Nov-15	2371.95	2362.55
TCS	20-Nov-15	26-Nov-15	2398.15	2398.35
TCS	23-Nov-15	26-Nov-15	2396.30	2391.05
TCS	24-Nov-15	26-Nov-15	2370.35	2367.95
TCS	26-Nov-15	26-Nov-15	2345.55	2345.55
TCS	4-Dec-15	31-Dec-15	2340.80	2328.40
TCS	7-Dec-15	31-Dec-15	2334.30	2319.80
TCS	8-Dec-15	31-Dec-15	2336.80	2329.00
TCS	9-Dec-15	31-Dec-15	2372.20	2367.65

TCS	10-Dec-15	31-Dec-15	2389.35	2384.55
TCS	11-Dec-15	31-Dec-15	2389.45	2386.00
TCS	14-Dec-15	31-Dec-15	2380.70	2378.45
TCS	15-Dec-15	31-Dec-15	2379.70	2375.85
TCS	16-Dec-15	31-Dec-15	2408.70	2408.40
TCS	17-Dec-15	31-Dec-15	2439.45	2439.75
TCS	18-Dec-15	31-Dec-15	2421.15	2416.80
TCS	21-Dec-15	31-Dec-15	2447.10	2446.40
TCS	22-Dec-15	31-Dec-15	2407.85	2405.05
TCS	23-Dec-15	31-Dec-15	2420.65	2425.80
TCS	24-Dec-15	31-Dec-15	2437.00	2434.25
TCS	28-Dec-15	31-Dec-15	2452.35	2462.70
TCS	29-Dec-15	31-Dec-15	2450.30	2455.80
TCS	30-Dec-15	31-Dec-15	2420.90	2418.30
TCS	31-Dec-15	31-Dec-15	2436.85	2436.85
TCS	1-Jan-16	28-Jan-16	2425.35	2416.40
TCS	4-Jan-16	28-Jan-16	2378.40	2369.60
TCS	5-Jan-16	28-Jan-16	2356.30	2348.95
TCS	6-Jan-16	28-Jan-16	2377.65	2381.60
TCS	7-Jan-16	28-Jan-16	2367.30	2371.25
TCS	8-Jan-16	28-Jan-16	2393.55	2397.60
TCS	11-Jan-16	28-Jan-16	2357.40	2362.35
TCS	12-Jan-16	28-Jan-16	2326.60	2327.05
TCS	13-Jan-16	28-Jan-16	2282.75	2279.20
TCS	14-Jan-16	28-Jan-16	2275.05	2278.80
TCS	15-Jan-16	28-Jan-16	2258.45	2261.10
TCS	18-Jan-16	28-Jan-16	2281.20	2277.65
TCS	19-Jan-16	28-Jan-16	2281.10	2279.30
TCS	20-Jan-16	28-Jan-16	2274.80	2280.10
TCS	21-Jan-16	28-Jan-16	2260.45	2254.50
TCS	22-Jan-16	28-Jan-16	2295.85	2295.75
TCS	25-Jan-16	28-Jan-16	2307.65	2304.65
TCS	27-Jan-16	28-Jan-16	2319.20	2319.75
TCS	28-Jan-16	28-Jan-16	2331.20	2331.20
TCS	29-Jan-16	25-Feb-16	2392.15	2391.30
TCS	1-Feb-16	25-Feb-16	2404.05	2402.70
TCS	2-Feb-16	25-Feb-16	2400.05	2398.10
TCS	3-Feb-16	25-Feb-16	2419.85	2416.30
TCS	4-Feb-16	25-Feb-16	2427.20	2420.05
TCS	5-Feb-16	25-Feb-16	2432.45	2421.95
TCS	8-Feb-16	25-Feb-16	2366.95	2362.95

TCS	9-Feb-16	25-Feb-16	2290.50	2281.40
TCS	10-Feb-16	25-Feb-16	2282.40	2268.80
TCS	11-Feb-16	25-Feb-16	2203.15	2197.95
TCS	12-Feb-16	25-Feb-16	2229.80	2226.60
TCS	15-Feb-16	25-Feb-16	2268.80	2269.15
TCS	16-Feb-16	25-Feb-16	2266.70	2265.55
TCS	17-Feb-16	25-Feb-16	2279.35	2275.55
TCS	18-Feb-16	25-Feb-16	2313.65	2315.85
TCS	19-Feb-16	25-Feb-16	2319.10	2319.65
TCS	22-Feb-16	25-Feb-16	2317.55	2315.90
TCS	23-Feb-16	25-Feb-16	2268.50	2264.00
TCS	24-Feb-16	25-Feb-16	2213.25	2210.95
TCS	25-Feb-16	25-Feb-16	2212.85	2212.85
TCS	4-Mar-16	31-Mar-16	2342.60	2357.55
TCS	8-Mar-16	31-Mar-16	2339.50	2354.30
TCS	9-Mar-16	31-Mar-16	2345.00	2357.25
TCS	10-Mar-16	31-Mar-16	2338.30	2348.30
TCS	11-Mar-16	31-Mar-16	2362.65	2365.25
TCS	14-Mar-16	31-Mar-16	2358.05	2355.00
TCS	15-Mar-16	31-Mar-16	2338.85	2329.90
TCS	16-Mar-16	31-Mar-16	2339.70	2327.05
TCS	17-Mar-16	31-Mar-16	2352.90	2352.05
TCS	18-Mar-16	31-Mar-16	2426.10	2425.85
TCS	21-Mar-16	31-Mar-16	2445.60	2446.25
TCS	22-Mar-16	31-Mar-16	2476.60	2473.10
TCS	23-Mar-16	31-Mar-16	2481.45	2473.80
TCS	28-Mar-16	31-Mar-16	2479.50	2473.40
TCS	29-Mar-16	31-Mar-16	2476.75	2469.40
TCS	30-Mar-16	31-Mar-16	2489.55	2489.50
TCS	31-Mar-16	31-Mar-16	2520.30	2520.30
TCS	1-Apr-16	28-Apr-16	2467.30	2453.90
TCS	4-Apr-16	28-Apr-16	2484.35	2471.25
TCS	5-Apr-16	28-Apr-16	2467.50	2462.75
TCS	6-Apr-16	28-Apr-16	2482.05	2481.90
TCS	7-Apr-16	28-Apr-16	2469.95	2470.80
TCS	8-Apr-16	28-Apr-16	2439.30	2432.05
TCS	11-Apr-16	28-Apr-16	2518.85	2506.65
TCS	12-Apr-16	28-Apr-16	2522.25	2518.15
TCS	13-Apr-16	28-Apr-16	2533.05	2526.20
TCS	18-Apr-16	28-Apr-16	2529.40	2519.75
TCS	20-Apr-16	28-Apr-16	2459.20	2450.35

TCS	21-Apr-16	28-Apr-16	2428.15	2424.40
TCS	22-Apr-16	28-Apr-16	2424.20	2417.05
TCS	25-Apr-16	28-Apr-16	2452.30	2451.25
TCS	26-Apr-16	28-Apr-16	2491.75	2489.80
TCS	27-Apr-16	28-Apr-16	2511.00	2511.10
TCS	28-Apr-16	28-Apr-16	2527.75	2527.75
TCS	29-Apr-16	26-May-16	2541.05	2535.50
TCS	2-May-16	26-May-16	2534.00	2526.70
TCS	3-May-16	26-May-16	2491.70	2478.10
TCS	4-May-16	26-May-16	2488.15	2478.00
TCS	5-May-16	26-May-16	2484.35	2470.30
TCS	6-May-16	26-May-16	2478.95	2473.40
TCS	9-May-16	26-May-16	2525.00	2512.55
TCS	10-May-16	26-May-16	2534.05	2522.90
TCS	11-May-16	26-May-16	2523.70	2518.30
TCS	12-May-16	26-May-16	2575.85	2566.20
TCS	13-May-16	26-May-16	2531.65	2523.40
TCS	16-May-16	26-May-16	2559.70	2551.15
TCS	17-May-16	26-May-16	2571.35	2570.20
TCS	18-May-16	26-May-16	2552.50	2551.10
TCS	19-May-16	26-May-16	2556.20	2556.95
TCS	20-May-16	26-May-16	2533.60	2529.30
TCS	23-May-16	26-May-16	2496.90	2491.45
TCS	24-May-16	26-May-16	2473.75	2467.70
TCS	25-May-16	26-May-16	2530.35	2526.45
TCS	26-May-16	26-May-16	2548.70	2548.70
TCS	3-Jun-16	30-Jun-16	2623.25	2629.55
TCS	6-Jun-16	30-Jun-16	2626.45	2612.50
TCS	7-Jun-16	30-Jun-16	2642.70	2631.15
TCS	8-Jun-16	30-Jun-16	2621.50	2613.10
TCS	9-Jun-16	30-Jun-16	2592.25	2577.25
TCS	10-Jun-16	30-Jun-16	2569.25	2555.75
TCS	13-Jun-16	30-Jun-16	2559.40	2547.00
TCS	14-Jun-16	30-Jun-16	2543.65	2534.85
TCS	15-Jun-16	30-Jun-16	2568.95	2556.85
TCS	16-Jun-16	30-Jun-16	2562.00	2558.30
TCS	17-Jun-16	30-Jun-16	2604.45	2602.60
TCS	20-Jun-16	30-Jun-16	2661.55	2659.30
TCS	21-Jun-16	30-Jun-16	2653.35	2651.20
TCS	22-Jun-16	30-Jun-16	2667.50	2667.65
TCS	23-Jun-16	30-Jun-16	2653.15	2645.35

TCS	24-Jun-16	30-Jun-16	2575.25	2573.95
TCS	27-Jun-16	30-Jun-16	2497.05	2495.85
TCS	28-Jun-16	30-Jun-16	2468.25	2463.95
TCS	29-Jun-16	30-Jun-16	2504.10	2502.90
TCS	30-Jun-16	30-Jun-16	2553.10	2553.10
TCS	1-Jul-16	28-Jul-16	2504.65	2500.85
TCS	4-Jul-16	28-Jul-16	2495.70	2494.20
TCS	5-Jul-16	28-Jul-16	2487.45	2485.30
TCS	7-Jul-16	28-Jul-16	2436.65	2429.80
TCS	8-Jul-16	28-Jul-16	2429.35	2426.60
TCS	11-Jul-16	28-Jul-16	2468.10	2464.15
TCS	12-Jul-16	28-Jul-16	2462.05	2464.95
TCS	13-Jul-16	28-Jul-16	2483.65	2493.10
TCS	14-Jul-16	28-Jul-16	2508.30	2521.90
TCS	15-Jul-16	28-Jul-16	2442.70	2445.35
TCS	18-Jul-16	28-Jul-16	2436.55	2433.45
TCS	19-Jul-16	28-Jul-16	2460.35	2466.20
TCS	20-Jul-16	28-Jul-16	2487.85	2494.95
TCS	21-Jul-16	28-Jul-16	2498.35	2506.05
TCS	22-Jul-16	28-Jul-16	2505.60	2515.10
TCS	25-Jul-16	28-Jul-16	2554.45	2558.95
TCS	26-Jul-16	28-Jul-16	2549.80	2552.60
TCS	27-Jul-16	28-Jul-16	2575.85	2577.55
TCS	28-Jul-16	28-Jul-16	2619.25	2619.25
TCS	29-Jul-16	25-Aug-16	2635.25	2619.30
TCS	1-Aug-16	25-Aug-16	2719.35	2708.25
TCS	2-Aug-16	25-Aug-16	2707.75	2699.20
TCS	3-Aug-16	25-Aug-16	2672.70	2656.30
TCS	4-Aug-16	25-Aug-16	2668.15	2652.00
TCS	5-Aug-16	25-Aug-16	2663.60	2649.10
TCS	8-Aug-16	25-Aug-16	2662.85	2649.50
TCS	9-Aug-16	25-Aug-16	2661.75	2650.20
TCS	10-Aug-16	25-Aug-16	2686.90	2675.40
TCS	11-Aug-16	25-Aug-16	2713.45	2709.90
TCS	12-Aug-16	25-Aug-16	2738.55	2738.45
TCS	16-Aug-16	25-Aug-16	2697.15	2691.70
TCS	17-Aug-16	25-Aug-16	2632.90	2624.55
TCS	18-Aug-16	25-Aug-16	2640.60	2638.55
TCS	19-Aug-16	25-Aug-16	2611.15	2603.50
TCS	22-Aug-16	25-Aug-16	2554.65	2548.70
TCS	23-Aug-16	25-Aug-16	2606.00	2601.05

TCS	24-Aug-16	25-Aug-16	2577.95	2572.05
TCS	25-Aug-16	25-Aug-16	2551.05	2551.05
TCS	2-Sep-16	29-Sep-16	2521.15	2514.80
TCS	6-Sep-16	29-Sep-16	2496.00	2484.05
TCS	7-Sep-16	29-Sep-16	2454.25	2440.55
TCS	8-Sep-16	29-Sep-16	2329.75	2322.10
TCS	9-Sep-16	29-Sep-16	2355.90	2352.45
TCS	12-Sep-16	29-Sep-16	2362.75	2359.05
TCS	14-Sep-16	29-Sep-16	2340.20	2328.45
TCS	15-Sep-16	29-Sep-16	2336.85	2326.95
TCS	16-Sep-16	29-Sep-16	2365.20	2361.70
TCS	19-Sep-16	29-Sep-16	2412.90	2411.45
TCS	20-Sep-16	29-Sep-16	2409.90	2406.50
TCS	21-Sep-16	29-Sep-16	2415.40	2413.40
TCS	22-Sep-16	29-Sep-16	2381.80	2378.00
TCS	23-Sep-16	29-Sep-16	2398.25	2398.10
TCS	26-Sep-16	29-Sep-16	2400.35	2401.10
TCS	27-Sep-16	29-Sep-16	2433.10	2436.10
TCS	29-Sep-16	29-Sep-16	2437.80	2437.80
TCS	30-Sep-16	27-Oct-16	2429.10	2430.80
TCS	3-Oct-16	27-Oct-16	2414.40	2411.70
TCS	4-Oct-16	27-Oct-16	2409.10	2405.15
TCS	5-Oct-16	27-Oct-16	2387.40	2386.35
TCS	6-Oct-16	27-Oct-16	2387.60	2388.75
TCS	7-Oct-16	27-Oct-16	2364.45	2367.80
TCS	10-Oct-16	27-Oct-16	2376.10	2380.30
TCS	13-Oct-16	27-Oct-16	2320.40	2328.90
TCS	14-Oct-16	27-Oct-16	2369.85	2366.20
TCS	17-Oct-16	27-Oct-16	2358.10	2362.45
TCS	18-Oct-16	27-Oct-16	2396.95	2400.20
TCS	19-Oct-16	27-Oct-16	2388.05	2395.10
TCS	20-Oct-16	27-Oct-16	2396.15	2401.15
TCS	21-Oct-16	27-Oct-16	2420.35	2428.65
TCS	24-Oct-16	27-Oct-16	2424.35	2427.70
TCS	25-Oct-16	27-Oct-16	2396.35	2398.45
TCS	26-Oct-16	27-Oct-16	2390.60	2396.25
TCS	27-Oct-16	27-Oct-16	2418.10	2418.10
TCS	28-Oct-16	24-Nov-16	2402.75	2398.70
TCS	30-Oct-16	24-Nov-16	2391.30	2391.05
TCS	1-Nov-16	24-Nov-16	2356.70	2350.00
TCS	2-Nov-16	24-Nov-16	2316.30	2304.05

TCS	3-Nov-16	24-Nov-16	2326.40	2319.45
TCS	4-Nov-16	24-Nov-16	2339.55	2330.55
TCS	7-Nov-16	24-Nov-16	2286.45	2277.05
TCS	8-Nov-16	24-Nov-16	2293.80	2283.20
TCS	9-Nov-16	24-Nov-16	2179.80	2169.85
TCS	10-Nov-16	24-Nov-16	2163.85	2155.45
TCS	11-Nov-16	24-Nov-16	2110.05	2101.15
TCS	15-Nov-16	24-Nov-16	2133.65	2121.30
TCS	16-Nov-16	24-Nov-16	2193.95	2189.60
TCS	17-Nov-16	24-Nov-16	2143.30	2137.20
TCS	18-Nov-16	24-Nov-16	2126.00	2125.10
TCS	21-Nov-16	24-Nov-16	2138.05	2132.90
TCS	22-Nov-16	24-Nov-16	2136.95	2135.00
TCS	23-Nov-16	24-Nov-16	2156.10	2156.35
TCS	24-Nov-16	24-Nov-16	2188.45	2188.45
TCS	2-Dec-16	29-Dec-16	2231.55	2221.85
TCS	5-Dec-16	29-Dec-16	2196.90	2186.00
TCS	6-Dec-16	29-Dec-16	2192.25	2182.35
TCS	7-Dec-16	29-Dec-16	2163.50	2154.55
TCS	8-Dec-16	29-Dec-16	2197.80	2195.75
TCS	9-Dec-16	29-Dec-16	2202.60	2195.25
TCS	12-Dec-16	29-Dec-16	2211.40	2208.20
TCS	13-Dec-16	29-Dec-16	2208.10	2200.30
TCS	14-Dec-16	29-Dec-16	2214.85	2207.60
TCS	15-Dec-16	29-Dec-16	2260.15	2259.30
TCS	16-Dec-16	29-Dec-16	2283.45	2282.65
TCS	19-Dec-16	29-Dec-16	2292.30	2288.90
TCS	20-Dec-16	29-Dec-16	2339.50	2339.30
TCS	21-Dec-16	29-Dec-16	2317.75	2313.60
TCS	22-Dec-16	29-Dec-16	2310.30	2307.70
TCS	23-Dec-16	29-Dec-16	2289.25	2288.10
TCS	26-Dec-16	29-Dec-16	2290.15	2293.10
TCS	27-Dec-16	29-Dec-16	2321.75	2323.40
TCS	28-Dec-16	29-Dec-16	2313.00	2313.40
TCS	29-Dec-16	29-Dec-16	2351.70	2351.70
TCS	30-Dec-16	25-Jan-17	2360.60	2365.55
TCS	2-Jan-17	25-Jan-17	2356.80	2361.35
TCS	3-Jan-17	25-Jan-17	2363.15	2368.25
TCS	4-Jan-17	25-Jan-17	2374.55	2379.50
TCS	5-Jan-17	25-Jan-17	2339.05	2334.40
TCS	6-Jan-17	25-Jan-17	2284.50	2281.40

TCS	9-Jan-17	25-Jan-17	2301.75	2303.70
TCS	10-Jan-17	25-Jan-17	2309.15	2315.35
TCS	11-Jan-17	25-Jan-17	2318.40	2324.40
TCS	12-Jan-17	25-Jan-17	2337.70	2344.35
TCS	13-Jan-17	25-Jan-17	2250.00	2249.30
TCS	16-Jan-17	25-Jan-17	2260.45	2258.55
TCS	17-Jan-17	25-Jan-17	2272.50	2278.75
TCS	18-Jan-17	25-Jan-17	2287.50	2295.10
TCS	19-Jan-17	25-Jan-17	2284.60	2291.00
TCS	20-Jan-17	25-Jan-17	2279.15	2285.35
TCS	23-Jan-17	25-Jan-17	2306.60	2306.70
TCS	24-Jan-17	25-Jan-17	2316.80	2318.35
TCS	25-Jan-17	25-Jan-17	2353.00	2353.00
TCS	27-Jan-17	23-Feb-17	2364.60	2357.80
TCS	30-Jan-17	23-Feb-17	2342.75	2332.90
TCS	31-Jan-17	23-Feb-17	2237.15	2229.80
TCS	1-Feb-17	23-Feb-17	2178.75	2167.90
TCS	2-Feb-17	23-Feb-17	2214.35	2207.65
TCS	3-Feb-17	23-Feb-17	2235.45	2232.55
TCS	6-Feb-17	23-Feb-17	2241.95	2240.75
TCS	7-Feb-17	23-Feb-17	2245.40	2244.60
TCS	8-Feb-17	23-Feb-17	2272.40	2270.95
TCS	9-Feb-17	23-Feb-17	2324.65	2317.30
TCS	10-Feb-17	23-Feb-17	2395.95	2397.95
TCS	13-Feb-17	23-Feb-17	2410.75	2414.25
TCS	14-Feb-17	23-Feb-17	2409.15	2406.25
TCS	15-Feb-17	23-Feb-17	2422.05	2413.70
TCS	16-Feb-17	23-Feb-17	2446.35	2447.75
TCS	17-Feb-17	23-Feb-17	2414.85	2407.90
TCS	20-Feb-17	23-Feb-17	2497.80	2502.20
TCS	21-Feb-17	23-Feb-17	2469.05	2465.35
TCS	22-Feb-17	23-Feb-17	2414.85	2411.50
TCS	23-Feb-17	23-Feb-17	2481.80	2481.80
TCS	3-Mar-17	30-Mar-17	2500.45	2494.05
TCS	6-Mar-17	30-Mar-17	2481.00	2472.50
TCS	7-Mar-17	30-Mar-17	2509.25	2499.80
TCS	8-Mar-17	30-Mar-17	2525.00	2512.20
TCS	9-Mar-17	30-Mar-17	2530.45	2519.75
TCS	10-Mar-17	30-Mar-17	2545.05	2542.25
TCS	14-Mar-17	30-Mar-17	2568.00	2567.50
TCS	15-Mar-17	30-Mar-17	2509.90	2498.30

TCS	16-Mar-17	30-Mar-17	2530.30	2520.90
TCS	17-Mar-17	30-Mar-17	2529.75	2525.75
TCS	20-Mar-17	30-Mar-17	2489.25	2480.00
TCS	21-Mar-17	30-Mar-17	2495.10	2486.70
TCS	22-Mar-17	30-Mar-17	2486.90	2478.95
TCS	23-Mar-17	30-Mar-17	2469.15	2460.35
TCS	24-Mar-17	30-Mar-17	2436.00	2427.20
TCS	27-Mar-17	30-Mar-17	2417.45	2412.05
TCS	28-Mar-17	30-Mar-17	2436.90	2429.95
TCS	29-Mar-17	30-Mar-17	2445.25	2444.60
TCS	30-Mar-17	30-Mar-17	2441.00	2441.00
TCS	31-Mar-17	27-Apr-17	2438.05	2431.80

Mind Tree Data

Table 2: MindTree Future and Spot Price

Symbol	Date	Expiry	FP	SP
MINDTREE	14-May-15	28-May-15	1351.05	1351.40
MINDTREE	15-May-15	28-May-15	1392.50	1394.80
MINDTREE	18-May-15	28-May-15	1389.45	1398.10
MINDTREE	19-May-15	28-May-15	1386.45	1383.30
MINDTREE	20-May-15	28-May-15	1398.50	1395.05
MINDTREE	21-May-15	28-May-15	1406.00	1403.80
MINDTREE	22-May-15	28-May-15	1444.95	1451.30
MINDTREE	25-May-15	28-May-15	1425.75	1430.70
MINDTREE	25-May-15	25-Jun-15	1430.85	1430.70
MINDTREE	26-May-15	28-May-15	1419.65	1421.65
MINDTREE	26-May-15	25-Jun-15	1414.90	1421.65
MINDTREE	27-May-15	28-May-15	1436.55	1448.95
MINDTREE	27-May-15	25-Jun-15	1432.45	1448.95
MINDTREE	28-May-15	28-May-15	1448.90	1448.90
MINDTREE	28-May-15	25-Jun-15	1449.45	1448.90
MINDTREE	29-May-15	25-Jun-15	1448.50	1448.70
MINDTREE	1-Jun-15	25-Jun-15	1410.65	1416.80
MINDTREE	2-Jun-15	25-Jun-15	1404.75	1409.40
MINDTREE	3-Jun-15	25-Jun-15	1391.65	1396.55
MINDTREE	4-Jun-15	25-Jun-15	1384.75	1387.20
MINDTREE	5-Jun-15	25-Jun-15	1371.20	1373.75
MINDTREE	8-Jun-15	25-Jun-15	1361.30	1369.10
MINDTREE	9-Jun-15	25-Jun-15	1350.95	1355.60
MINDTREE	10-Jun-15	25-Jun-15	1396.25	1399.30

MINDTREE	11-Jun-15	25-Jun-15	1343.05	1349.00
MINDTREE	12-Jun-15	25-Jun-15	1298.60	1297.25
MINDTREE	15-Jun-15	25-Jun-15	1316.50	1316.55
MINDTREE	16-Jun-15	25-Jun-15	1318.80	1314.05
MINDTREE	17-Jun-15	25-Jun-15	1326.70	1322.05
MINDTREE	18-Jun-15	25-Jun-15	1320.00	1315.30
MINDTREE	19-Jun-15	25-Jun-15	1319.40	1314.95
MINDTREE	22-Jun-15	25-Jun-15	1348.25	1345.20
MINDTREE	23-Jun-15	25-Jun-15	1349.30	1348.00
MINDTREE	24-Jun-15	25-Jun-15	1363.90	1363.15
MINDTREE	25-Jun-15	25-Jun-15	1293.80	1293.80
MINDTREE	29-Jun-15	30-Jul-15	1261.25	1263.75
MINDTREE	30-Jun-15	30-Jul-15	1278.50	1273.80
MINDTREE	1-Jul-15	30-Jul-15	1298.50	1292.35
MINDTREE	2-Jul-15	30-Jul-15	1270.35	1267.40
MINDTREE	3-Jul-15	30-Jul-15	1277.90	1279.20
MINDTREE	6-Jul-15	30-Jul-15	1267.35	1264.15
MINDTREE	7-Jul-15	30-Jul-15	1270.05	1270.00
MINDTREE	8-Jul-15	30-Jul-15	1232.70	1231.75
MINDTREE	9-Jul-15	30-Jul-15	1210.45	1207.25
MINDTREE	10-Jul-15	30-Jul-15	1203.20	1202.00
MINDTREE	13-Jul-15	30-Jul-15	1239.05	1234.30
MINDTREE	14-Jul-15	30-Jul-15	1234.55	1232.40
MINDTREE	15-Jul-15	30-Jul-15	1227.15	1224.35
MINDTREE	16-Jul-15	30-Jul-15	1228.00	1225.50
MINDTREE	17-Jul-15	30-Jul-15	1269.20	1267.60
MINDTREE	20-Jul-15	30-Jul-15	1290.45	1291.90
MINDTREE	21-Jul-15	30-Jul-15	1269.40	1266.40
MINDTREE	22-Jul-15	30-Jul-15	1291.60	1288.05
MINDTREE	23-Jul-15	30-Jul-15	1310.20	1309.95
MINDTREE	24-Jul-15	30-Jul-15	1266.95	1269.85
MINDTREE	27-Jul-15	30-Jul-15	1263.50	1265.80
MINDTREE	27-Jul-15	27-Aug-15	1271.55	1265.80
MINDTREE	28-Jul-15	30-Jul-15	1242.20	1241.90
MINDTREE	28-Jul-15	27-Aug-15	1250.55	1241.90
MINDTREE	29-Jul-15	30-Jul-15	1266.95	1269.15
MINDTREE	29-Jul-15	27-Aug-15	1273.95	1269.15
MINDTREE	30-Jul-15	30-Jul-15	1246.80	1246.80
MINDTREE	30-Jul-15	27-Aug-15	1255.15	1246.80
MINDTREE	31-Jul-15	27-Aug-15	1284.85	1279.65
MINDTREE	3-Aug-15	27-Aug-15	1285.30	1277.45

MINDTREE	4-Aug-15	27-Aug-15	1274.85	1273.20
MINDTREE	5-Aug-15	27-Aug-15	1291.05	1290.85
MINDTREE	6-Aug-15	27-Aug-15	1300.35	1297.85
MINDTREE	7-Aug-15	27-Aug-15	1299.25	1298.50
MINDTREE	10-Aug-15	27-Aug-15	1360.60	1354.25
MINDTREE	11-Aug-15	27-Aug-15	1382.70	1378.95
MINDTREE	12-Aug-15	27-Aug-15	1400.00	1399.05
MINDTREE	13-Aug-15	27-Aug-15	1378.70	1377.70
MINDTREE	14-Aug-15	27-Aug-15	1376.55	1370.85
MINDTREE	17-Aug-15	27-Aug-15	1407.30	1402.40
MINDTREE	18-Aug-15	27-Aug-15	1424.10	1421.90
MINDTREE	19-Aug-15	27-Aug-15	1438.70	1433.45
MINDTREE	20-Aug-15	27-Aug-15	1377.45	1377.30
MINDTREE	21-Aug-15	27-Aug-15	1415.05	1412.15
MINDTREE	24-Aug-15	27-Aug-15	1328.25	1330.30
MINDTREE	24-Aug-15	24-Sep-15	1336.40	1330.30
MINDTREE	25-Aug-15	27-Aug-15	1281.60	1278.05
MINDTREE	25-Aug-15	24-Sep-15	1288.50	1278.05
MINDTREE	26-Aug-15	27-Aug-15	1318.75	1319.80
MINDTREE	26-Aug-15	24-Sep-15	1326.45	1319.80
MINDTREE	27-Aug-15	27-Aug-15	1329.80	1329.80
MINDTREE	27-Aug-15	24-Sep-15	1340.10	1329.80
MINDTREE	28-Aug-15	24-Sep-15	1404.95	1396.30
MINDTREE	31-Aug-15	24-Sep-15	1400.65	1395.85
MINDTREE	1-Sep-15	24-Sep-15	1369.65	1367.70
MINDTREE	2-Sep-15	24-Sep-15	1372.65	1372.50
MINDTREE	3-Sep-15	24-Sep-15	1374.45	1371.25
MINDTREE	4-Sep-15	24-Sep-15	1353.45	1356.45
MINDTREE	7-Sep-15	24-Sep-15	1302.80	1300.05
MINDTREE	8-Sep-15	24-Sep-15	1324.30	1319.45
MINDTREE	9-Sep-15	24-Sep-15	1344.65	1340.15
MINDTREE	10-Sep-15	24-Sep-15	1354.40	1349.55
MINDTREE	11-Sep-15	24-Sep-15	1359.65	1356.25
MINDTREE	14-Sep-15	24-Sep-15	1376.05	1369.85
MINDTREE	15-Sep-15	24-Sep-15	1378.20	1374.80
MINDTREE	16-Sep-15	24-Sep-15	1378.80	1379.50
MINDTREE	18-Sep-15	24-Sep-15	1396.00	1399.50
MINDTREE	21-Sep-15	24-Sep-15	1419.35	1423.30
MINDTREE	22-Sep-15	24-Sep-15	1463.50	1472.20
MINDTREE	23-Sep-15	24-Sep-15	1486.10	1506.25
MINDTREE	24-Sep-15	24-Sep-15	1560.30	1560.30

MINDTREE	28-Sep-15	29-Oct-15	1514.00	1508.50
MINDTREE	29-Sep-15	29-Oct-15	1524.85	1516.15
MINDTREE	30-Sep-15	29-Oct-15	1524.40	1514.45
MINDTREE	1-Oct-15	29-Oct-15	1501.00	1493.05
MINDTREE	5-Oct-15	29-Oct-15	1536.45	1529.95
MINDTREE	6-Oct-15	29-Oct-15	1530.00	1525.70
MINDTREE	7-Oct-15	29-Oct-15	1523.25	1519.20
MINDTREE	8-Oct-15	29-Oct-15	1468.30	1462.25
MINDTREE	9-Oct-15	29-Oct-15	1442.90	1437.65
MINDTREE	12-Oct-15	29-Oct-15	1408.70	1404.20
MINDTREE	13-Oct-15	29-Oct-15	1413.15	1409.70
MINDTREE	14-Oct-15	29-Oct-15	1412.25	1408.75
MINDTREE	15-Oct-15	29-Oct-15	1402.35	1403.55
MINDTREE	16-Oct-15	29-Oct-15	1425.75	1423.50
MINDTREE	19-Oct-15	29-Oct-15	1451.35	1450.25
MINDTREE	20-Oct-15	29-Oct-15	1475.05	1476.60
MINDTREE	21-Oct-15	29-Oct-15	1473.25	1472.95
MINDTREE	23-Oct-15	29-Oct-15	1488.40	1489.90
MINDTREE	26-Oct-15	29-Oct-15	1512.80	1515.55
MINDTREE	26-Oct-15	26-Nov-15	1518.05	1515.55
MINDTREE	27-Oct-15	29-Oct-15	1541.80	1545.15
MINDTREE	27-Oct-15	26-Nov-15	1547.05	1545.15
MINDTREE	28-Oct-15	29-Oct-15	1533.60	1532.80
MINDTREE	28-Oct-15	26-Nov-15	1542.60	1532.80
MINDTREE	29-Oct-15	29-Oct-15	1557.00	1557.00
MINDTREE	29-Oct-15	26-Nov-15	1561.00	1557.00
MINDTREE	30-Oct-15	26-Nov-15	1567.15	1569.30
MINDTREE	2-Nov-15	26-Nov-15	1507.65	1500.00
MINDTREE	3-Nov-15	26-Nov-15	1540.95	1536.15
MINDTREE	4-Nov-15	26-Nov-15	1520.50	1516.90
MINDTREE	5-Nov-15	26-Nov-15	1520.55	1518.65
MINDTREE	6-Nov-15	26-Nov-15	1506.00	1498.45
MINDTREE	9-Nov-15	26-Nov-15	1516.25	1507.90
MINDTREE	10-Nov-15	26-Nov-15	1491.90	1495.15
MINDTREE	11-Nov-15	26-Nov-15	1505.20	1503.45
MINDTREE	13-Nov-15	26-Nov-15	1512.20	1515.80
MINDTREE	16-Nov-15	26-Nov-15	1478.30	1476.50
MINDTREE	17-Nov-15	26-Nov-15	1458.50	1455.80
MINDTREE	18-Nov-15	26-Nov-15	1452.05	1450.00
MINDTREE	19-Nov-15	26-Nov-15	1424.90	1420.85
MINDTREE	20-Nov-15	26-Nov-15	1445.65	1445.50

MINDTREE	23-Nov-15	26-Nov-15	1445.20	1445.00
MINDTREE	24-Nov-15	26-Nov-15	1444.45	1442.50
MINDTREE	26-Nov-15	26-Nov-15	1430.35	1430.35
MINDTREE	30-Nov-15	31-Dec-15	1446.05	1435.60
MINDTREE	1-Dec-15	31-Dec-15	1493.85	1485.10
MINDTREE	2-Dec-15	31-Dec-15	1485.65	1479.05
MINDTREE	3-Dec-15	31-Dec-15	1475.90	1469.90
MINDTREE	4-Dec-15	31-Dec-15	1469.35	1464.40
MINDTREE	7-Dec-15	31-Dec-15	1470.25	1464.85
MINDTREE	8-Dec-15	31-Dec-15	1458.25	1453.55
MINDTREE	9-Dec-15	31-Dec-15	1422.25	1420.95
MINDTREE	10-Dec-15	31-Dec-15	1482.15	1476.55
MINDTREE	11-Dec-15	31-Dec-15	1455.70	1455.20
MINDTREE	14-Dec-15	31-Dec-15	1476.35	1471.90
MINDTREE	15-Dec-15	31-Dec-15	1471.60	1472.95
MINDTREE	16-Dec-15	31-Dec-15	1479.10	1477.10
MINDTREE	17-Dec-15	31-Dec-15	1510.70	1505.80
MINDTREE	18-Dec-15	31-Dec-15	1497.55	1491.60
MINDTREE	21-Dec-15	31-Dec-15	1484.75	1478.30
MINDTREE	22-Dec-15	31-Dec-15	1466.70	1466.00
MINDTREE	23-Dec-15	31-Dec-15	1474.05	1469.80
MINDTREE	24-Dec-15	31-Dec-15	1465.35	1461.65
MINDTREE	28-Dec-15	31-Dec-15	1474.00	1472.45
MINDTREE	28-Dec-15	28-Jan-16	1481.60	1472.45
MINDTREE	29-Dec-15	31-Dec-15	1463.20	1460.20
MINDTREE	29-Dec-15	28-Jan-16	1468.95	1460.20
MINDTREE	30-Dec-15	31-Dec-15	1434.40	1432.90
MINDTREE	30-Dec-15	28-Jan-16	1440.75	1432.90
MINDTREE	31-Dec-15	31-Dec-15	1433.75	1433.75
MINDTREE	31-Dec-15	28-Jan-16	1442.10	1433.75
MINDTREE	1-Jan-16	28-Jan-16	1447.55	1441.55
MINDTREE	4-Jan-16	28-Jan-16	1452.10	1450.75
MINDTREE	5-Jan-16	28-Jan-16	1472.95	1471.30
MINDTREE	6-Jan-16	28-Jan-16	1455.30	1451.90
MINDTREE	7-Jan-16	28-Jan-16	1413.60	1417.35
MINDTREE	8-Jan-16	28-Jan-16	1410.55	1408.55
MINDTREE	11-Jan-16	28-Jan-16	1470.15	1474.85
MINDTREE	12-Jan-16	28-Jan-16	1488.65	1500.05
MINDTREE	13-Jan-16	28-Jan-16	1496.95	1499.70
MINDTREE	14-Jan-16	28-Jan-16	1515.00	1518.50
MINDTREE	15-Jan-16	28-Jan-16	1525.00	1542.40

MINDTREE	18-Jan-16	28-Jan-16	1467.70	1469.85
MINDTREE	19-Jan-16	28-Jan-16	1446.25	1443.55
MINDTREE	20-Jan-16	28-Jan-16	1440.90	1444.95
MINDTREE	21-Jan-16	28-Jan-16	1445.80	1453.50
MINDTREE	22-Jan-16	28-Jan-16	1448.60	1449.75
MINDTREE	25-Jan-16	28-Jan-16	1470.00	1469.20
MINDTREE	25-Jan-16	25-Feb-16	1473.15	1469.20
MINDTREE	27-Jan-16	28-Jan-16	1485.05	1487.85
MINDTREE	27-Jan-16	25-Feb-16	1489.20	1487.85
MINDTREE	28-Jan-16	28-Jan-16	1477.40	1477.40
MINDTREE	28-Jan-16	25-Feb-16	1487.65	1477.40
MINDTREE	29-Jan-16	25-Feb-16	1477.95	1472.05
MINDTREE	1-Feb-16	25-Feb-16	1489.15	1488.20
MINDTREE	2-Feb-16	25-Feb-16	1514.25	1517.75
MINDTREE	3-Feb-16	25-Feb-16	1487.40	1495.25
MINDTREE	4-Feb-16	25-Feb-16	1486.85	1500.35
MINDTREE	5-Feb-16	25-Feb-16	1499.40	1531.55
MINDTREE	8-Feb-16	25-Feb-16	1503.85	1526.85
MINDTREE	9-Feb-16	25-Feb-16	1460.20	1481.20
MINDTREE	10-Feb-16	25-Feb-16	1476.00	1484.55
MINDTREE	11-Feb-16	25-Feb-16	1432.35	1441.90
MINDTREE	12-Feb-16	25-Feb-16	1421.60	1428.10
MINDTREE	15-Feb-16	25-Feb-16	1437.10	1438.60
MINDTREE	16-Feb-16	25-Feb-16	1400.55	1399.25
MINDTREE	17-Feb-16	25-Feb-16	1378.85	1390.05
MINDTREE	18-Feb-16	25-Feb-16	1407.20	1406.85
MINDTREE	19-Feb-16	25-Feb-16	1418.65	1420.95
MINDTREE	22-Feb-16	25-Feb-16	1421.75	1420.65
MINDTREE	23-Feb-16	25-Feb-16	1434.80	1437.90
MINDTREE	24-Feb-16	25-Feb-16	1426.40	1425.70
MINDTREE	25-Feb-16	25-Feb-16	1435.75	1435.75
MINDTREE	29-Feb-16	31-Mar-16	1404.75	1426.35
MINDTREE	1-Mar-16	31-Mar-16	1436.65	1469.20
MINDTREE	2-Mar-16	31-Mar-16	1464.00	1525.65
MINDTREE	3-Mar-16	31-Mar-16	1482.20	1575.40
MINDTREE	4-Mar-16	31-Mar-16	1486.80	1589.90
MINDTREE	8-Mar-16	31-Mar-16	1472.85	1546.35
MINDTREE	9-Mar-16	31-Mar-16	686.60	684.30
MINDTREE	10-Mar-16	31-Mar-16	672.80	670.45
MINDTREE	11-Mar-16	31-Mar-16	663.85	663.15
MINDTREE	14-Mar-16	31-Mar-16	654.15	651.60

MINDTREE	15-Mar-16	31-Mar-16	645.70	642.45
MINDTREE	16-Mar-16	31-Mar-16	643.25	639.75
MINDTREE	17-Mar-16	31-Mar-16	657.50	656.85
MINDTREE	18-Mar-16	31-Mar-16	667.00	666.15
MINDTREE	21-Mar-16	31-Mar-16	670.50	667.85
MINDTREE	22-Mar-16	31-Mar-16	660.50	658.25
MINDTREE	23-Mar-16	31-Mar-16	653.45	651.05
MINDTREE	28-Mar-16	31-Mar-16	629.35	626.65
MINDTREE	28-Mar-16	28-Apr-16	628.00	626.65
MINDTREE	29-Mar-16	31-Mar-16	619.50	616.10
MINDTREE	29-Mar-16	28-Apr-16	619.85	616.10
MINDTREE	30-Mar-16	31-Mar-16	663.95	663.05
MINDTREE	30-Mar-16	28-Apr-16	663.95	663.05
MINDTREE	31-Mar-16	31-Mar-16	653.25	653.25
MINDTREE	31-Mar-16	28-Apr-16	654.60	653.25
MINDTREE	1-Apr-16	28-Apr-16	670.75	668.15
MINDTREE	4-Apr-16	28-Apr-16	676.20	676.05
MINDTREE	5-Apr-16	28-Apr-16	660.40	658.35
MINDTREE	6-Apr-16	28-Apr-16	669.50	667.90
MINDTREE	7-Apr-16	28-Apr-16	671.25	671.65
MINDTREE	8-Apr-16	28-Apr-16	668.05	667.50
MINDTREE	11-Apr-16	28-Apr-16	671.55	667.70
MINDTREE	12-Apr-16	28-Apr-16	678.25	677.00
MINDTREE	13-Apr-16	28-Apr-16	690.65	691.60
MINDTREE	18-Apr-16	28-Apr-16	730.95	730.80
MINDTREE	20-Apr-16	28-Apr-16	725.15	723.95
MINDTREE	21-Apr-16	28-Apr-16	714.60	715.80
MINDTREE	22-Apr-16	28-Apr-16	709.15	708.30
MINDTREE	25-Apr-16	28-Apr-16	700.15	698.50
MINDTREE	25-Apr-16	26-May-16	700.35	698.50
MINDTREE	26-Apr-16	28-Apr-16	709.30	707.35
MINDTREE	26-Apr-16	26-May-16	709.10	707.35
MINDTREE	27-Apr-16	28-Apr-16	701.60	699.70
MINDTREE	27-Apr-16	26-May-16	701.00	699.70
MINDTREE	28-Apr-16	28-Apr-16	686.20	686.20
MINDTREE	28-Apr-16	26-May-16	691.45	686.20
MINDTREE	29-Apr-16	26-May-16	683.35	678.80
MINDTREE	2-May-16	26-May-16	686.85	681.85
MINDTREE	3-May-16	26-May-16	673.80	670.25
MINDTREE	4-May-16	26-May-16	664.85	661.45
MINDTREE	5-May-16	26-May-16	667.95	664.00

MINDTREE	6-May-16	26-May-16	663.30	659.00
MINDTREE	9-May-16	26-May-16	660.95	657.15
MINDTREE	10-May-16	26-May-16	649.30	645.85
MINDTREE	11-May-16	26-May-16	655.95	652.35
MINDTREE	12-May-16	26-May-16	662.90	660.25
MINDTREE	13-May-16	26-May-16	653.55	652.90
MINDTREE	16-May-16	26-May-16	648.25	645.30
MINDTREE	17-May-16	26-May-16	648.35	645.50
MINDTREE	18-May-16	26-May-16	646.55	644.00
MINDTREE	19-May-16	26-May-16	644.80	644.00
MINDTREE	20-May-16	26-May-16	631.25	630.45
MINDTREE	23-May-16	26-May-16	641.90	640.85
MINDTREE	24-May-16	26-May-16	648.10	647.75
MINDTREE	25-May-16	26-May-16	650.70	648.75
MINDTREE	26-May-16	26-May-16	665.35	665.35
MINDTREE	30-May-16	30-Jun-16	677.55	671.70
MINDTREE	31-May-16	30-Jun-16	666.65	660.90
MINDTREE	1-Jun-16	30-Jun-16	660.05	654.80
MINDTREE	2-Jun-16	30-Jun-16	658.45	653.60
MINDTREE	3-Jun-16	30-Jun-16	652.20	647.45
MINDTREE	6-Jun-16	30-Jun-16	649.15	644.55
MINDTREE	7-Jun-16	30-Jun-16	654.20	650.30
MINDTREE	8-Jun-16	30-Jun-16	654.25	650.70
MINDTREE	9-Jun-16	30-Jun-16	641.65	639.20
MINDTREE	10-Jun-16	30-Jun-16	641.40	639.35
MINDTREE	13-Jun-16	30-Jun-16	638.75	635.15
MINDTREE	14-Jun-16	30-Jun-16	645.05	643.95
MINDTREE	15-Jun-16	30-Jun-16	641.85	640.05
MINDTREE	16-Jun-16	30-Jun-16	632.95	630.05
MINDTREE	17-Jun-16	30-Jun-16	632.35	630.00
MINDTREE	20-Jun-16	30-Jun-16	642.80	639.80
MINDTREE	21-Jun-16	30-Jun-16	657.75	657.70
MINDTREE	22-Jun-16	30-Jun-16	653.85	653.60
MINDTREE	23-Jun-16	30-Jun-16	659.10	659.95
MINDTREE	24-Jun-16	30-Jun-16	658.50	659.90
MINDTREE	27-Jun-16	30-Jun-16	654.30	651.85
MINDTREE	27-Jun-16	28-Jul-16	653.50	651.85
MINDTREE	28-Jun-16	30-Jun-16	659.30	662.80
MINDTREE	28-Jun-16	28-Jul-16	659.00	662.80
MINDTREE	29-Jun-16	30-Jun-16	666.35	663.40
MINDTREE	29-Jun-16	28-Jul-16	666.15	663.40

MINDTREE	30-Jun-16	30-Jun-16	664.85	664.85
MINDTREE	30-Jun-16	28-Jul-16	662.90	664.85
MINDTREE	1-Jul-16	28-Jul-16	671.25	673.90
MINDTREE	4-Jul-16	28-Jul-16	673.60	672.15
MINDTREE	5-Jul-16	28-Jul-16	679.25	678.30
MINDTREE	7-Jul-16	28-Jul-16	660.20	659.35
MINDTREE	8-Jul-16	28-Jul-16	657.35	654.40
MINDTREE	11-Jul-16	28-Jul-16	664.90	665.55
MINDTREE	12-Jul-16	28-Jul-16	661.75	661.05
MINDTREE	13-Jul-16	28-Jul-16	652.95	650.45
MINDTREE	14-Jul-16	28-Jul-16	655.95	653.30
MINDTREE	15-Jul-16	28-Jul-16	639.10	637.25
MINDTREE	18-Jul-16	28-Jul-16	607.30	614.20
MINDTREE	19-Jul-16	28-Jul-16	563.55	561.55
MINDTREE	20-Jul-16	28-Jul-16	572.10	570.40
MINDTREE	21-Jul-16	28-Jul-16	568.25	565.95
MINDTREE	22-Jul-16	28-Jul-16	558.90	556.90
MINDTREE	25-Jul-16	28-Jul-16	553.50	551.75
MINDTREE	25-Jul-16	25-Aug-16	555.70	551.75
MINDTREE	26-Jul-16	28-Jul-16	563.80	565.00
MINDTREE	26-Jul-16	25-Aug-16	565.70	565.00
MINDTREE	27-Jul-16	28-Jul-16	564.35	565.10
MINDTREE	27-Jul-16	25-Aug-16	567.05	565.10
MINDTREE	28-Jul-16	28-Jul-16	582.30	582.30
MINDTREE	28-Jul-16	25-Aug-16	579.75	582.30
MINDTREE	29-Jul-16	25-Aug-16	577.55	578.65
MINDTREE	1-Aug-16	25-Aug-16	598.65	601.60
MINDTREE	2-Aug-16	25-Aug-16	608.65	612.95
MINDTREE	3-Aug-16	25-Aug-16	597.50	600.10
MINDTREE	4-Aug-16	25-Aug-16	604.60	604.85
MINDTREE	5-Aug-16	25-Aug-16	610.05	613.00
MINDTREE	8-Aug-16	25-Aug-16	616.80	617.80
MINDTREE	9-Aug-16	25-Aug-16	599.70	596.55
MINDTREE	10-Aug-16	25-Aug-16	575.60	572.30
MINDTREE	11-Aug-16	25-Aug-16	582.55	580.70
MINDTREE	12-Aug-16	25-Aug-16	580.60	579.80
MINDTREE	16-Aug-16	25-Aug-16	570.90	569.15
MINDTREE	17-Aug-16	25-Aug-16	568.05	566.35
MINDTREE	18-Aug-16	25-Aug-16	566.95	564.75
MINDTREE	19-Aug-16	25-Aug-16	567.85	565.70
MINDTREE	22-Aug-16	25-Aug-16	553.40	551.25

MINDTREE	23-Aug-16	25-Aug-16	566.50	566.20
MINDTREE	24-Aug-16	25-Aug-16	568.85	568.60
MINDTREE	25-Aug-16	25-Aug-16	567.80	567.80
MINDTREE	29-Aug-16	29-Sep-16	564.70	564.95
MINDTREE	30-Aug-16	29-Sep-16	573.15	570.15
MINDTREE	31-Aug-16	29-Sep-16	566.50	562.55
MINDTREE	1-Sep-16	29-Sep-16	557.70	553.75
MINDTREE	2-Sep-16	29-Sep-16	552.45	548.85
MINDTREE	6-Sep-16	29-Sep-16	521.00	525.00
MINDTREE	7-Sep-16	29-Sep-16	521.05	518.90
MINDTREE	8-Sep-16	29-Sep-16	517.10	515.30
MINDTREE	9-Sep-16	29-Sep-16	522.20	522.80
MINDTREE	12-Sep-16	29-Sep-16	517.70	516.50
MINDTREE	14-Sep-16	29-Sep-16	515.30	513.50
MINDTREE	15-Sep-16	29-Sep-16	516.25	514.00
MINDTREE	16-Sep-16	29-Sep-16	513.90	512.20
MINDTREE	19-Sep-16	29-Sep-16	508.95	505.25
MINDTREE	20-Sep-16	29-Sep-16	503.55	502.10
MINDTREE	21-Sep-16	29-Sep-16	511.75	510.25
MINDTREE	22-Sep-16	29-Sep-16	511.60	509.75
MINDTREE	23-Sep-16	29-Sep-16	507.40	505.20
MINDTREE	26-Sep-16	29-Sep-16	499.10	497.75
MINDTREE	26-Sep-16	27-Oct-16	500.35	497.75
MINDTREE	27-Sep-16	29-Sep-16	494.80	493.00
MINDTREE	27-Sep-16	27-Oct-16	496.30	493.00
MINDTREE	28-Sep-16	29-Sep-16	494.45	-
MINDTREE	28-Sep-16	27-Oct-16	495.80	-
MINDTREE	29-Sep-16	29-Sep-16	481.60	481.60
MINDTREE	29-Sep-16	27-Oct-16	478.10	481.60
MINDTREE	30-Sep-16	27-Oct-16	479.25	482.15
MINDTREE	3-Oct-16	27-Oct-16	491.65	488.55
MINDTREE	4-Oct-16	27-Oct-16	498.70	495.95
MINDTREE	5-Oct-16	27-Oct-16	500.95	498.40
MINDTREE	6-Oct-16	27-Oct-16	492.40	491.20
MINDTREE	7-Oct-16	27-Oct-16	493.55	491.85
MINDTREE	10-Oct-16	27-Oct-16	504.15	500.90
MINDTREE	13-Oct-16	27-Oct-16	490.35	489.70
MINDTREE	14-Oct-16	27-Oct-16	503.50	501.05
MINDTREE	17-Oct-16	27-Oct-16	489.50	490.60
MINDTREE	18-Oct-16	27-Oct-16	478.30	476.85
MINDTREE	19-Oct-16	27-Oct-16	478.40	476.95

MINDTREE	20-Oct-16	27-Oct-16	480.55	479.05
MINDTREE	21-Oct-16	27-Oct-16	479.80	479.00
MINDTREE	24-Oct-16	27-Oct-16	457.60	456.00
MINDTREE	24-Oct-16	24-Nov-16	456.30	456.00
MINDTREE	25-Oct-16	27-Oct-16	455.75	454.90
MINDTREE	25-Oct-16	24-Nov-16	453.70	454.90
MINDTREE	26-Oct-16	27-Oct-16	450.80	450.20
MINDTREE	26-Oct-16	24-Nov-16	449.60	450.20
MINDTREE	27-Oct-16	27-Oct-16	441.50	441.50
MINDTREE	27-Oct-16	24-Nov-16	440.70	441.50
MINDTREE	28-Oct-16	24-Nov-16	438.10	435.95
MINDTREE	30-Oct-16	24-Nov-16	440.95	440.30
MINDTREE	1-Nov-16	24-Nov-16	442.00	439.55
MINDTREE	2-Nov-16	24-Nov-16	436.00	433.55
MINDTREE	3-Nov-16	24-Nov-16	427.25	428.35
MINDTREE	4-Nov-16	24-Nov-16	423.60	425.15
MINDTREE	7-Nov-16	24-Nov-16	427.90	429.25
MINDTREE	8-Nov-16	24-Nov-16	441.35	442.65
MINDTREE	9-Nov-16	24-Nov-16	434.55	436.15
MINDTREE	10-Nov-16	24-Nov-16	438.00	437.40
MINDTREE	11-Nov-16	24-Nov-16	423.10	423.55
MINDTREE	15-Nov-16	24-Nov-16	429.65	430.55
MINDTREE	16-Nov-16	24-Nov-16	436.80	437.90
MINDTREE	17-Nov-16	24-Nov-16	441.05	441.75
MINDTREE	18-Nov-16	24-Nov-16	441.95	442.25
MINDTREE	21-Nov-16	24-Nov-16	440.60	441.80
MINDTREE	22-Nov-16	24-Nov-16	453.80	453.15
MINDTREE	23-Nov-16	24-Nov-16	453.70	453.50
MINDTREE	24-Nov-16	24-Nov-16	462.85	462.85
MINDTREE	28-Nov-16	29-Dec-16	480.30	477.80
MINDTREE	29-Nov-16	29-Dec-16	475.40	473.65
MINDTREE	30-Nov-16	29-Dec-16	480.10	477.35
MINDTREE	1-Dec-16	29-Dec-16	468.70	466.60
MINDTREE	2-Dec-16	29-Dec-16	462.65	460.45
MINDTREE	5-Dec-16	29-Dec-16	451.10	448.35
MINDTREE	6-Dec-16	29-Dec-16	460.70	459.80
MINDTREE	7-Dec-16	29-Dec-16	459.90	457.75
MINDTREE	8-Dec-16	29-Dec-16	464.35	462.20
MINDTREE	9-Dec-16	29-Dec-16	472.95	470.65
MINDTREE	12-Dec-16	29-Dec-16	468.75	468.25
MINDTREE	13-Dec-16	29-Dec-16	494.75	492.50

MINDTREE	14-Dec-16	29-Dec-16	502.25	502.90
MINDTREE	15-Dec-16	29-Dec-16	496.80	495.30
MINDTREE	16-Dec-16	29-Dec-16	502.20	501.35
MINDTREE	19-Dec-16	29-Dec-16	501.95	500.10
MINDTREE	20-Dec-16	29-Dec-16	495.70	494.10
MINDTREE	21-Dec-16	29-Dec-16	495.45	493.95
MINDTREE	22-Dec-16	29-Dec-16	496.15	495.40
MINDTREE	23-Dec-16	29-Dec-16	498.50	496.90
MINDTREE	26-Dec-16	29-Dec-16	489.50	487.90
MINDTREE	26-Dec-16	25-Jan-17	489.85	487.90
MINDTREE	27-Dec-16	29-Dec-16	487.95	486.20
MINDTREE	27-Dec-16	25-Jan-17	487.60	486.20
MINDTREE	28-Dec-16	29-Dec-16	511.55	510.15
MINDTREE	28-Dec-16	25-Jan-17	513.25	510.15
MINDTREE	29-Dec-16	29-Dec-16	523.85	523.85
MINDTREE	29-Dec-16	25-Jan-17	522.65	523.85
MINDTREE	30-Dec-16	25-Jan-17	520.10	521.65
MINDTREE	2-Jan-17	25-Jan-17	517.55	516.70
MINDTREE	3-Jan-17	25-Jan-17	508.95	507.90
MINDTREE	4-Jan-17	25-Jan-17	526.65	526.40
MINDTREE	5-Jan-17	25-Jan-17	523.15	523.70
MINDTREE	6-Jan-17	25-Jan-17	496.30	500.20
MINDTREE	9-Jan-17	25-Jan-17	494.55	495.50
MINDTREE	10-Jan-17	25-Jan-17	486.40	487.15
MINDTREE	11-Jan-17	25-Jan-17	486.55	487.30
MINDTREE	12-Jan-17	25-Jan-17	490.90	491.30
MINDTREE	13-Jan-17	25-Jan-17	489.90	490.85
MINDTREE	16-Jan-17	25-Jan-17	483.75	484.95
MINDTREE	17-Jan-17	25-Jan-17	482.95	484.85
MINDTREE	18-Jan-17	25-Jan-17	495.35	495.50
MINDTREE	19-Jan-17	25-Jan-17	483.10	485.10
MINDTREE	20-Jan-17	25-Jan-17	473.30	475.25
MINDTREE	23-Jan-17	25-Jan-17	470.90	471.30
MINDTREE	23-Jan-17	23-Feb-17	470.75	471.30
MINDTREE	24-Jan-17	25-Jan-17	470.35	470.25
MINDTREE	24-Jan-17	23-Feb-17	470.75	470.25
MINDTREE	25-Jan-17	25-Jan-17	461.65	461.65
MINDTREE	25-Jan-17	23-Feb-17	464.05	461.65
MINDTREE	27-Jan-17	23-Feb-17	475.70	472.50
MINDTREE	30-Jan-17	23-Feb-17	467.90	465.55
MINDTREE	31-Jan-17	23-Feb-17	451.60	450.50

MINDTREE	1-Feb-17	23-Feb-17	458.45	459.85
MINDTREE	2-Feb-17	23-Feb-17	462.85	461.00
MINDTREE	3-Feb-17	23-Feb-17	461.75	459.35
MINDTREE	6-Feb-17	23-Feb-17	466.85	464.85
MINDTREE	7-Feb-17	23-Feb-17	454.80	452.80
MINDTREE	8-Feb-17	23-Feb-17	452.05	450.10
MINDTREE	9-Feb-17	23-Feb-17	459.35	457.60
MINDTREE	10-Feb-17	23-Feb-17	466.70	466.65
MINDTREE	13-Feb-17	23-Feb-17	469.50	468.15
MINDTREE	14-Feb-17	23-Feb-17	455.80	455.10
MINDTREE	15-Feb-17	23-Feb-17	457.35	457.65
MINDTREE	16-Feb-17	23-Feb-17	469.40	468.00
MINDTREE	17-Feb-17	23-Feb-17	476.15	475.15
MINDTREE	20-Feb-17	23-Feb-17	475.70	474.40
MINDTREE	21-Feb-17	23-Feb-17	474.75	474.40
MINDTREE	22-Feb-17	23-Feb-17	468.50	468.20
MINDTREE	23-Feb-17	23-Feb-17	469.90	469.90
MINDTREE	27-Feb-17	30-Mar-17	473.60	471.15
MINDTREE	28-Feb-17	30-Mar-17	475.90	474.30
MINDTREE	1-Mar-17	30-Mar-17	473.95	471.95
MINDTREE	2-Mar-17	30-Mar-17	462.10	460.30
MINDTREE	3-Mar-17	30-Mar-17	467.75	464.60
MINDTREE	6-Mar-17	30-Mar-17	462.10	460.25
MINDTREE	7-Mar-17	30-Mar-17	481.25	478.70
MINDTREE	8-Mar-17	30-Mar-17	471.80	469.25
MINDTREE	9-Mar-17	30-Mar-17	474.30	472.65
MINDTREE	10-Mar-17	30-Mar-17	475.50	474.80
MINDTREE	14-Mar-17	30-Mar-17	472.80	470.85
MINDTREE	15-Mar-17	30-Mar-17	468.65	466.55
MINDTREE	16-Mar-17	30-Mar-17	472.10	469.75
MINDTREE	17-Mar-17	30-Mar-17	474.75	473.45
MINDTREE	20-Mar-17	30-Mar-17	476.10	474.10
MINDTREE	21-Mar-17	30-Mar-17	476.25	474.85
MINDTREE	22-Mar-17	30-Mar-17	473.75	472.30
MINDTREE	23-Mar-17	30-Mar-17	474.05	472.20
MINDTREE	24-Mar-17	30-Mar-17	469.70	469.55
MINDTREE	27-Mar-17	30-Mar-17	462.10	461.30
MINDTREE	27-Mar-17	27-Apr-17	462.50	461.30
MINDTREE	28-Mar-17	30-Mar-17	461.40	459.95
MINDTREE	28-Mar-17	27-Apr-17	461.65	459.95
MINDTREE	29-Mar-17	30-Mar-17	457.35	456.10

MINDTREE	29-Mar-17	27-Apr-17	457.35	456.10
MINDTREE	30-Mar-17	30-Mar-17	453.20	453.20
MINDTREE	30-Mar-17	27-Apr-17	453.45	453.20
MINDTREE	31-Mar-17	27-Apr-17	453.05	452.95
MINDTREE	3-Apr-17	27-Apr-17	457.00	457.60
MINDTREE	5-Apr-17	27-Apr-17	453.45	454.45
MINDTREE	6-Apr-17	27-Apr-17	448.80	448.60
MINDTREE	7-Apr-17	27-Apr-17	448.85	446.65
MINDTREE	10-Apr-17	27-Apr-17	446.50	445.20
MINDTREE	11-Apr-17	27-Apr-17	452.40	450.85
MINDTREE	12-Apr-17	27-Apr-17	449.65	448.05
MINDTREE	13-Apr-17	27-Apr-17	443.90	442.90
MINDTREE	17-Apr-17	27-Apr-17	438.05	436.20
MINDTREE	18-Apr-17	27-Apr-17	440.95	440.75
MINDTREE	19-Apr-17	27-Apr-17	443.80	441.65
MINDTREE	20-Apr-17	27-Apr-17	444.50	442.60
MINDTREE	21-Apr-17	27-Apr-17	451.50	449.85
MINDTREE	24-Apr-17	27-Apr-17	451.65	450.45
MINDTREE	24-Apr-17	25-May-17	453.00	450.45
MINDTREE	25-Apr-17	27-Apr-17	472.60	470.55
MINDTREE	25-Apr-17	25-May-17	473.55	470.55
MINDTREE	26-Apr-17	27-Apr-17	479.25	478.40
MINDTREE	26-Apr-17	25-May-17	481.15	478.40
MINDTREE	27-Apr-17	27-Apr-17	490.35	490.35
MINDTREE	27-Apr-17	25-May-17	492.40	490.35
MINDTREE	28-Apr-17	25-May-17	488.95	485.30
MINDTREE	2-May-17	25-May-17	489.30	485.45
MINDTREE	3-May-17	25-May-17	488.90	486.05
MINDTREE	4-May-17	25-May-17	488.95	486.60
MINDTREE	5-May-17	25-May-17	499.15	495.95
MINDTREE	8-May-17	25-May-17	504.75	502.85
MINDTREE	9-May-17	25-May-17	507.80	505.10
MINDTREE	10-May-17	25-May-17	502.05	500.65
MINDTREE	11-May-17	25-May-17	507.55	505.75
MINDTREE	12-May-17	25-May-17	512.15	510.60

Cipla

Table 3: Cipla Future and Spot Prices

Symbol	Date	Expiry	Future Price	Spot Price
CIPLA	14-May-15	28-May-15	686.95	686.00

CIPLA	15-May-15	28-May-15	685.45	683.35
CIPLA	18-May-15	28-May-15	688.30	685.55
CIPLA	19-May-15	28-May-15	684.45	682.70
CIPLA	20-May-15	28-May-15	690.15	688.55
CIPLA	21-May-15	28-May-15	676.25	674.35
CIPLA	22-May-15	28-May-15	675.90	673.90
CIPLA	25-May-15	28-May-15	660.85	660.20
CIPLA	25-May-15	25-Jun-15	664.95	660.20
CIPLA	26-May-15	28-May-15	660.10	659.05
CIPLA	26-May-15	25-Jun-15	664.25	659.05
CIPLA	27-May-15	28-May-15	660.40	661.10
CIPLA	27-May-15	25-Jun-15	664.65	661.10
CIPLA	28-May-15	28-May-15	644.00	644.00
CIPLA	28-May-15	25-Jun-15	648.95	644.00
CIPLA	29-May-15	25-Jun-15	655.20	650.45
CIPLA	1-Jun-15	25-Jun-15	665.95	662.10
CIPLA	2-Jun-15	25-Jun-15	644.50	641.30
CIPLA	3-Jun-15	25-Jun-15	637.95	635.15
CIPLA	4-Jun-15	25-Jun-15	632.55	630.45
CIPLA	5-Jun-15	25-Jun-15	625.05	622.65
CIPLA	8-Jun-15	25-Jun-15	616.30	614.70
CIPLA	9-Jun-15	25-Jun-15	594.60	591.95
CIPLA	10-Jun-15	25-Jun-15	595.15	592.75
CIPLA	11-Jun-15	25-Jun-15	575.85	574.35
CIPLA	12-Jun-15	25-Jun-15	583.75	581.65
CIPLA	15-Jun-15	25-Jun-15	586.45	585.70
CIPLA	16-Jun-15	25-Jun-15	590.55	590.35
CIPLA	17-Jun-15	25-Jun-15	612.95	612.90
CIPLA	18-Jun-15	25-Jun-15	607.90	607.05
CIPLA	19-Jun-15	25-Jun-15	608.05	606.65
CIPLA	22-Jun-15	25-Jun-15	614.45	613.50
CIPLA	23-Jun-15	25-Jun-15	629.55	630.35
CIPLA	24-Jun-15	25-Jun-15	622.30	621.75
CIPLA	25-Jun-15	25-Jun-15	610.75	610.75
CIPLA	29-Jun-15	30-Jul-15	612.90	610.95
CIPLA	30-Jun-15	30-Jul-15	618.50	615.40
CIPLA	1-Jul-15	30-Jul-15	636.40	634.90
CIPLA	2-Jul-15	30-Jul-15	627.90	626.35
CIPLA	3-Jul-15	30-Jul-15	634.60	631.55
CIPLA	6-Jul-15	30-Jul-15	656.90	653.70
CIPLA	7-Jul-15	30-Jul-15	648.80	646.50

CIPLA	8-Jul-15	30-Jul-15	649.60	646.20
CIPLA	9-Jul-15	30-Jul-15	643.75	641.15
CIPLA	10-Jul-15	30-Jul-15	650.95	648.00
CIPLA	13-Jul-15	30-Jul-15	663.50	661.25
CIPLA	14-Jul-15	30-Jul-15	666.50	665.95
CIPLA	15-Jul-15	30-Jul-15	671.55	670.60
CIPLA	16-Jul-15	30-Jul-15	681.80	679.80
CIPLA	17-Jul-15	30-Jul-15	685.35	685.20
CIPLA	20-Jul-15	30-Jul-15	683.60	683.10
CIPLA	21-Jul-15	30-Jul-15	663.95	662.50
CIPLA	22-Jul-15	30-Jul-15	676.90	674.60
CIPLA	23-Jul-15	30-Jul-15	674.70	673.20
CIPLA	24-Jul-15	30-Jul-15	679.45	678.10
CIPLA	27-Jul-15	30-Jul-15	676.40	675.35
CIPLA	27-Jul-15	27-Aug-15	678.15	675.35
CIPLA	28-Jul-15	30-Jul-15	672.20	671.90
CIPLA	28-Jul-15	27-Aug-15	674.00	671.90
CIPLA	29-Jul-15	30-Jul-15	680.00	679.55
CIPLA	29-Jul-15	27-Aug-15	681.75	679.55
CIPLA	30-Jul-15	30-Jul-15	711.05	711.05
CIPLA	30-Jul-15	27-Aug-15	711.75	711.05
CIPLA	31-Jul-15	27-Aug-15	710.95	709.05
CIPLA	3-Aug-15	27-Aug-15	715.35	712.30
CIPLA	4-Aug-15	27-Aug-15	711.65	709.65
CIPLA	5-Aug-15	27-Aug-15	720.85	718.60
CIPLA	6-Aug-15	27-Aug-15	724.55	723.40
CIPLA	7-Aug-15	27-Aug-15	716.95	715.15
CIPLA	10-Aug-15	27-Aug-15	715.75	715.25
CIPLA	11-Aug-15	27-Aug-15	722.90	719.20
CIPLA	12-Aug-15	27-Aug-15	710.80	707.65
CIPLA	13-Aug-15	27-Aug-15	729.25	725.50
CIPLA	14-Aug-15	27-Aug-15	743.20	739.60
CIPLA	17-Aug-15	27-Aug-15	705.45	703.15
CIPLA	18-Aug-15	27-Aug-15	686.35	683.80
CIPLA	19-Aug-15	27-Aug-15	698.55	696.10
CIPLA	20-Aug-15	27-Aug-15	692.40	691.60
CIPLA	21-Aug-15	27-Aug-15	697.95	697.40
CIPLA	24-Aug-15	27-Aug-15	634.35	635.85
CIPLA	24-Aug-15	24-Sep-15	638.05	635.85
CIPLA	25-Aug-15	27-Aug-15	646.65	645.40
CIPLA	25-Aug-15	24-Sep-15	650.30	645.40

CIPLA	26-Aug-15	27-Aug-15	637.25	637.45
CIPLA	26-Aug-15	24-Sep-15	640.50	637.45
CIPLA	27-Aug-15	27-Aug-15	660.95	660.95
CIPLA	27-Aug-15	24-Sep-15	665.50	660.95
CIPLA	28-Aug-15	24-Sep-15	662.80	659.85
CIPLA	31-Aug-15	24-Sep-15	684.00	682.15
CIPLA	1-Sep-15	24-Sep-15	663.50	663.15
CIPLA	2-Sep-15	24-Sep-15	652.25	648.30
CIPLA	3-Sep-15	24-Sep-15	660.00	655.65
CIPLA	4-Sep-15	24-Sep-15	651.85	649.55
CIPLA	7-Sep-15	24-Sep-15	650.75	649.55
CIPLA	8-Sep-15	24-Sep-15	651.80	650.00
CIPLA	9-Sep-15	24-Sep-15	658.15	656.45
CIPLA	10-Sep-15	24-Sep-15	656.75	653.70
CIPLA	11-Sep-15	24-Sep-15	654.35	653.15
CIPLA	14-Sep-15	24-Sep-15	661.35	660.70
CIPLA	15-Sep-15	24-Sep-15	658.75	658.90
CIPLA	16-Sep-15	24-Sep-15	660.85	661.60
CIPLA	18-Sep-15	24-Sep-15	653.25	652.00
CIPLA	21-Sep-15	24-Sep-15	650.05	649.25
CIPLA	22-Sep-15	24-Sep-15	643.35	644.15
CIPLA	23-Sep-15	24-Sep-15	643.15	642.15
CIPLA	24-Sep-15	24-Sep-15	643.10	643.10
CIPLA	28-Sep-15	29-Oct-15	645.20	641.90
CIPLA	29-Sep-15	29-Oct-15	640.05	636.50
CIPLA	30-Sep-15	29-Oct-15	640.50	636.05
CIPLA	1-Oct-15	29-Oct-15	637.55	633.55
CIPLA	5-Oct-15	29-Oct-15	643.90	640.10
CIPLA	6-Oct-15	29-Oct-15	665.15	664.00
CIPLA	7-Oct-15	29-Oct-15	682.60	680.80
CIPLA	8-Oct-15	29-Oct-15	680.55	680.25
CIPLA	9-Oct-15	29-Oct-15	690.10	689.55
CIPLA	12-Oct-15	29-Oct-15	678.55	676.35
CIPLA	13-Oct-15	29-Oct-15	681.15	679.05
CIPLA	14-Oct-15	29-Oct-15	680.95	679.20
CIPLA	15-Oct-15	29-Oct-15	673.90	670.95
CIPLA	16-Oct-15	29-Oct-15	682.00	679.45
CIPLA	19-Oct-15	29-Oct-15	688.30	688.45
CIPLA	20-Oct-15	29-Oct-15	673.75	673.60
CIPLA	21-Oct-15	29-Oct-15	678.55	678.00
CIPLA	23-Oct-15	29-Oct-15	681.20	682.20

CIPLA	26-Oct-15	29-Oct-15	680.15	681.25
CIPLA	26-Oct-15	26-Nov-15	683.75	681.25
CIPLA	27-Oct-15	29-Oct-15	684.20	684.70
CIPLA	27-Oct-15	26-Nov-15	688.05	684.70
CIPLA	28-Oct-15	29-Oct-15	696.60	696.05
CIPLA	28-Oct-15	26-Nov-15	699.75	696.05
CIPLA	29-Oct-15	29-Oct-15	691.55	691.55
CIPLA	29-Oct-15	26-Nov-15	695.65	691.55
CIPLA	30-Oct-15	26-Nov-15	692.30	690.45
CIPLA	2-Nov-15	26-Nov-15	682.65	680.25
CIPLA	3-Nov-15	26-Nov-15	677.10	675.40
CIPLA	4-Nov-15	26-Nov-15	671.90	670.70
CIPLA	5-Nov-15	26-Nov-15	661.30	658.05
CIPLA	6-Nov-15	26-Nov-15	661.75	658.15
CIPLA	9-Nov-15	26-Nov-15	650.30	647.60
CIPLA	10-Nov-15	26-Nov-15	642.05	641.90
CIPLA	11-Nov-15	26-Nov-15	642.95	643.30
CIPLA	13-Nov-15	26-Nov-15	620.85	617.90
CIPLA	16-Nov-15	26-Nov-15	628.55	625.80
CIPLA	17-Nov-15	26-Nov-15	636.30	635.75
CIPLA	18-Nov-15	26-Nov-15	630.00	629.75
CIPLA	19-Nov-15	26-Nov-15	636.10	635.65
CIPLA	20-Nov-15	26-Nov-15	646.25	646.85
CIPLA	23-Nov-15	26-Nov-15	641.60	641.45
CIPLA	24-Nov-15	26-Nov-15	637.95	637.30
CIPLA	26-Nov-15	26-Nov-15	634.55	634.55
CIPLA	30-Nov-15	31-Dec-15	647.90	643.65
CIPLA	1-Dec-15	31-Dec-15	650.80	648.55
CIPLA	2-Dec-15	31-Dec-15	661.25	658.40
CIPLA	3-Dec-15	31-Dec-15	653.10	651.20
CIPLA	4-Dec-15	31-Dec-15	650.10	645.80
CIPLA	7-Dec-15	31-Dec-15	649.45	645.20
CIPLA	8-Dec-15	31-Dec-15	645.00	642.60
CIPLA	9-Dec-15	31-Dec-15	626.65	623.80
CIPLA	10-Dec-15	31-Dec-15	638.35	636.80
CIPLA	11-Dec-15	31-Dec-15	640.05	639.25
CIPLA	14-Dec-15	31-Dec-15	639.85	637.05
CIPLA	15-Dec-15	31-Dec-15	639.90	638.90
CIPLA	16-Dec-15	31-Dec-15	640.95	638.65
CIPLA	17-Dec-15	31-Dec-15	645.55	642.90
CIPLA	18-Dec-15	31-Dec-15	644.70	642.10

CIPLA	21-Dec-15	31-Dec-15	645.45	643.70
CIPLA	22-Dec-15	31-Dec-15	644.65	644.20
CIPLA	23-Dec-15	31-Dec-15	648.65	647.45
CIPLA	24-Dec-15	31-Dec-15	649.75	648.20
CIPLA	28-Dec-15	31-Dec-15	656.35	657.60
CIPLA	28-Dec-15	28-Jan-16	659.45	657.60
CIPLA	29-Dec-15	31-Dec-15	654.35	653.85
CIPLA	29-Dec-15	28-Jan-16	657.15	653.85
CIPLA	30-Dec-15	31-Dec-15	653.60	653.20
CIPLA	30-Dec-15	28-Jan-16	656.55	653.20
CIPLA	31-Dec-15	31-Dec-15	649.75	649.75
CIPLA	31-Dec-15	28-Jan-16	652.95	649.75
CIPLA	1-Jan-16	28-Jan-16	656.65	655.35
CIPLA	4-Jan-16	28-Jan-16	646.80	645.65
CIPLA	5-Jan-16	28-Jan-16	642.65	640.85
CIPLA	6-Jan-16	28-Jan-16	654.20	652.10
CIPLA	7-Jan-16	28-Jan-16	638.35	637.45
CIPLA	8-Jan-16	28-Jan-16	623.50	622.35
CIPLA	11-Jan-16	28-Jan-16	612.80	610.05
CIPLA	12-Jan-16	28-Jan-16	614.80	611.45
CIPLA	13-Jan-16	28-Jan-16	610.30	608.65
CIPLA	14-Jan-16	28-Jan-16	614.65	614.30
CIPLA	15-Jan-16	28-Jan-16	608.80	609.10
CIPLA	18-Jan-16	28-Jan-16	590.70	591.05
CIPLA	19-Jan-16	28-Jan-16	599.85	598.05
CIPLA	20-Jan-16	28-Jan-16	593.70	593.15
CIPLA	21-Jan-16	28-Jan-16	581.35	580.25
CIPLA	22-Jan-16	28-Jan-16	583.40	581.90
CIPLA	25-Jan-16	28-Jan-16	580.85	580.60
CIPLA	25-Jan-16	25-Feb-16	583.00	580.60
CIPLA	27-Jan-16	28-Jan-16	581.20	580.50
CIPLA	27-Jan-16	25-Feb-16	583.15	580.50
CIPLA	28-Jan-16	28-Jan-16	577.80	577.80
CIPLA	28-Jan-16	25-Feb-16	580.15	577.80
CIPLA	29-Jan-16	25-Feb-16	588.50	585.10
CIPLA	1-Feb-16	25-Feb-16	600.10	599.45
CIPLA	2-Feb-16	25-Feb-16	574.50	574.00
CIPLA	3-Feb-16	25-Feb-16	564.70	562.05
CIPLA	4-Feb-16	25-Feb-16	552.35	550.40
CIPLA	5-Feb-16	25-Feb-16	572.05	570.15
CIPLA	8-Feb-16	25-Feb-16	566.90	566.85

CIPLA	9-Feb-16	25-Feb-16	557.50	555.85
CIPLA	10-Feb-16	25-Feb-16	540.30	538.60
CIPLA	11-Feb-16	25-Feb-16	543.10	540.85
CIPLA	12-Feb-16	25-Feb-16	529.05	528.60
CIPLA	15-Feb-16	25-Feb-16	539.95	539.70
CIPLA	16-Feb-16	25-Feb-16	525.65	524.05
CIPLA	17-Feb-16	25-Feb-16	520.95	519.10
CIPLA	18-Feb-16	25-Feb-16	526.05	524.40
CIPLA	19-Feb-16	25-Feb-16	525.50	524.65
CIPLA	22-Feb-16	25-Feb-16	531.80	530.50
CIPLA	23-Feb-16	25-Feb-16	522.75	522.60
CIPLA	24-Feb-16	25-Feb-16	514.15	513.95
CIPLA	25-Feb-16	25-Feb-16	519.00	519.00
CIPLA	29-Feb-16	31-Mar-16	516.15	514.15
CIPLA	1-Mar-16	31-Mar-16	519.55	516.35
CIPLA	2-Mar-16	31-Mar-16	527.55	525.60
CIPLA	3-Mar-16	31-Mar-16	530.00	527.10
CIPLA	4-Mar-16	31-Mar-16	539.55	537.70
CIPLA	8-Mar-16	31-Mar-16	534.65	532.35
CIPLA	9-Mar-16	31-Mar-16	532.35	529.30
CIPLA	10-Mar-16	31-Mar-16	536.85	533.95
CIPLA	11-Mar-16	31-Mar-16	536.75	534.60
CIPLA	14-Mar-16	31-Mar-16	539.50	537.60
CIPLA	15-Mar-16	31-Mar-16	526.00	525.05
CIPLA	16-Mar-16	31-Mar-16	534.20	531.00
CIPLA	17-Mar-16	31-Mar-16	525.35	524.55
CIPLA	18-Mar-16	31-Mar-16	528.50	528.25
CIPLA	21-Mar-16	31-Mar-16	536.80	535.85
CIPLA	22-Mar-16	31-Mar-16	536.90	535.30
CIPLA	23-Mar-16	31-Mar-16	534.35	532.80
CIPLA	28-Mar-16	31-Mar-16	525.70	524.20
CIPLA	28-Mar-16	28-Apr-16	528.70	524.20
CIPLA	29-Mar-16	31-Mar-16	505.80	503.50
CIPLA	29-Mar-16	28-Apr-16	508.65	503.50
CIPLA	30-Mar-16	31-Mar-16	512.80	512.35
CIPLA	30-Mar-16	28-Apr-16	515.25	512.35
CIPLA	31-Mar-16	31-Mar-16	511.95	511.95
CIPLA	31-Mar-16	28-Apr-16	515.10	511.95
CIPLA	1-Apr-16	28-Apr-16	516.55	514.55
CIPLA	4-Apr-16	28-Apr-16	517.25	514.30
CIPLA	5-Apr-16	28-Apr-16	505.45	503.00

CIPLA	6-Apr-16	28-Apr-16	507.70	504.95
CIPLA	7-Apr-16	28-Apr-16	509.05	506.40
CIPLA	8-Apr-16	28-Apr-16	507.00	504.45
CIPLA	11-Apr-16	28-Apr-16	504.60	502.15
CIPLA	12-Apr-16	28-Apr-16	504.50	501.95
CIPLA	13-Apr-16	28-Apr-16	513.40	511.90
CIPLA	18-Apr-16	28-Apr-16	524.25	524.10
CIPLA	20-Apr-16	28-Apr-16	527.90	527.20
CIPLA	21-Apr-16	28-Apr-16	532.00	532.00
CIPLA	22-Apr-16	28-Apr-16	531.60	531.35
CIPLA	25-Apr-16	28-Apr-16	526.15	526.50
CIPLA	25-Apr-16	26-May-16	528.90	526.50
CIPLA	26-Apr-16	28-Apr-16	539.75	540.50
CIPLA	26-Apr-16	26-May-16	542.10	540.50
CIPLA	27-Apr-16	28-Apr-16	540.10	540.20
CIPLA	27-Apr-16	26-May-16	542.35	540.20
CIPLA	28-Apr-16	28-Apr-16	528.25	528.25
CIPLA	28-Apr-16	26-May-16	531.95	528.25
CIPLA	29-Apr-16	26-May-16	540.80	537.00
CIPLA	2-May-16	26-May-16	541.90	540.65
CIPLA	3-May-16	26-May-16	538.30	536.85
CIPLA	4-May-16	26-May-16	534.25	533.20
CIPLA	5-May-16	26-May-16	543.50	541.80
CIPLA	6-May-16	26-May-16	538.50	537.35
CIPLA	9-May-16	26-May-16	538.70	536.55
CIPLA	10-May-16	26-May-16	539.15	537.05
CIPLA	11-May-16	26-May-16	537.35	536.60
CIPLA	12-May-16	26-May-16	537.75	536.30
CIPLA	13-May-16	26-May-16	531.65	531.70
CIPLA	16-May-16	26-May-16	523.95	521.80
CIPLA	17-May-16	26-May-16	525.55	523.75
CIPLA	18-May-16	26-May-16	525.65	524.55
CIPLA	19-May-16	26-May-16	512.80	512.70
CIPLA	20-May-16	26-May-16	507.25	507.10
CIPLA	23-May-16	26-May-16	497.20	497.40
CIPLA	24-May-16	26-May-16	495.50	494.05
CIPLA	25-May-16	26-May-16	470.50	469.80
CIPLA	26-May-16	26-May-16	467.95	467.95
CIPLA	30-May-16	30-Jun-16	476.60	473.55
CIPLA	31-May-16	30-Jun-16	476.30	472.65
CIPLA	1-Jun-16	30-Jun-16	467.75	464.90

CIPLA	2-Jun-16	30-Jun-16	471.75	468.10
CIPLA	3-Jun-16	30-Jun-16	467.25	465.20
CIPLA	6-Jun-16	30-Jun-16	469.65	466.65
CIPLA	7-Jun-16	30-Jun-16	471.35	468.35
CIPLA	8-Jun-16	30-Jun-16	474.60	472.15
CIPLA	9-Jun-16	30-Jun-16	481.55	479.10
CIPLA	10-Jun-16	30-Jun-16	477.85	476.45
CIPLA	13-Jun-16	30-Jun-16	470.65	468.70
CIPLA	14-Jun-16	30-Jun-16	483.55	482.70
CIPLA	15-Jun-16	30-Jun-16	490.60	490.05
CIPLA	16-Jun-16	30-Jun-16	487.20	486.65
CIPLA	17-Jun-16	30-Jun-16	486.55	486.45
CIPLA	20-Jun-16	30-Jun-16	489.55	488.25
CIPLA	21-Jun-16	30-Jun-16	483.80	483.40
CIPLA	22-Jun-16	30-Jun-16	483.05	482.45
CIPLA	23-Jun-16	30-Jun-16	477.65	475.75
CIPLA	24-Jun-16	30-Jun-16	477.60	476.55
CIPLA	27-Jun-16	30-Jun-16	490.50	489.05
CIPLA	27-Jun-16	28-Jul-16	493.25	489.05
CIPLA	28-Jun-16	30-Jun-16	497.95	497.35
CIPLA	28-Jun-16	28-Jul-16	500.85	497.35
CIPLA	29-Jun-16	30-Jun-16	502.65	502.45
CIPLA	29-Jun-16	28-Jul-16	505.70	502.45
CIPLA	30-Jun-16	30-Jun-16	501.00	501.00
CIPLA	30-Jun-16	28-Jul-16	504.40	501.00
CIPLA	1-Jul-16	28-Jul-16	511.85	508.60
CIPLA	4-Jul-16	28-Jul-16	512.65	510.20
CIPLA	5-Jul-16	28-Jul-16	510.05	507.00
CIPLA	7-Jul-16	28-Jul-16	516.35	514.30
CIPLA	8-Jul-16	28-Jul-16	521.50	520.30
CIPLA	11-Jul-16	28-Jul-16	524.10	522.00
CIPLA	12-Jul-16	28-Jul-16	518.05	515.70
CIPLA	13-Jul-16	28-Jul-16	516.95	514.60
CIPLA	14-Jul-16	28-Jul-16	513.35	511.95
CIPLA	15-Jul-16	28-Jul-16	517.85	516.40
CIPLA	18-Jul-16	28-Jul-16	508.55	506.95
CIPLA	19-Jul-16	28-Jul-16	506.80	505.80
CIPLA	20-Jul-16	28-Jul-16	519.55	517.85
CIPLA	21-Jul-16	28-Jul-16	516.00	515.85
CIPLA	22-Jul-16	28-Jul-16	521.60	520.40
CIPLA	25-Jul-16	28-Jul-16	525.00	524.60

CIPLA	25-Jul-16	25-Aug-16	526.15	524.60
CIPLA	26-Jul-16	28-Jul-16	524.00	523.55
CIPLA	26-Jul-16	25-Aug-16	524.95	523.55
CIPLA	27-Jul-16	28-Jul-16	522.65	523.15
CIPLA	27-Jul-16	25-Aug-16	523.65	523.15
CIPLA	28-Jul-16	28-Jul-16	520.65	520.65
CIPLA	28-Jul-16	25-Aug-16	522.55	520.65
CIPLA	29-Jul-16	25-Aug-16	529.10	527.40
CIPLA	1-Aug-16	25-Aug-16	525.90	524.05
CIPLA	2-Aug-16	25-Aug-16	519.60	517.90
CIPLA	3-Aug-16	25-Aug-16	528.80	529.45
CIPLA	4-Aug-16	25-Aug-16	527.30	526.95
CIPLA	5-Aug-16	25-Aug-16	533.55	533.25
CIPLA	8-Aug-16	25-Aug-16	535.50	535.40
CIPLA	9-Aug-16	25-Aug-16	532.05	532.95
CIPLA	10-Aug-16	25-Aug-16	521.30	521.25
CIPLA	11-Aug-16	25-Aug-16	522.70	523.95
CIPLA	12-Aug-16	25-Aug-16	516.00	515.95
CIPLA	16-Aug-16	25-Aug-16	553.95	554.15
CIPLA	17-Aug-16	25-Aug-16	551.35	549.85
CIPLA	18-Aug-16	25-Aug-16	553.50	552.65
CIPLA	19-Aug-16	25-Aug-16	556.40	556.80
CIPLA	22-Aug-16	25-Aug-16	557.80	557.60
CIPLA	23-Aug-16	25-Aug-16	555.60	555.65
CIPLA	24-Aug-16	25-Aug-16	566.85	567.20
CIPLA	25-Aug-16	25-Aug-16	562.90	562.90
CIPLA	29-Aug-16	29-Sep-16	568.85	568.00
CIPLA	30-Aug-16	29-Sep-16	578.90	576.10
CIPLA	31-Aug-16	29-Sep-16	574.95	572.95
CIPLA	1-Sep-16	29-Sep-16	578.90	579.15
CIPLA	2-Sep-16	29-Sep-16	577.60	577.95
CIPLA	6-Sep-16	29-Sep-16	578.10	578.60
CIPLA	7-Sep-16	29-Sep-16	581.20	580.75
CIPLA	8-Sep-16	29-Sep-16	594.25	595.15
CIPLA	9-Sep-16	29-Sep-16	581.20	580.50
CIPLA	12-Sep-16	29-Sep-16	570.65	570.10
CIPLA	14-Sep-16	29-Sep-16	578.65	577.50
CIPLA	15-Sep-16	29-Sep-16	587.00	585.40
CIPLA	16-Sep-16	29-Sep-16	594.55	593.55
CIPLA	19-Sep-16	29-Sep-16	600.55	597.80
CIPLA	20-Sep-16	29-Sep-16	604.10	602.85

CIPLA	21-Sep-16	29-Sep-16	602.60	601.35
CIPLA	22-Sep-16	29-Sep-16	611.40	609.10
CIPLA	23-Sep-16	29-Sep-16	612.65	611.55
CIPLA	26-Sep-16	29-Sep-16	605.45	604.50
CIPLA	26-Sep-16	27-Oct-16	608.85	604.50
CIPLA	27-Sep-16	29-Sep-16	608.80	607.20
CIPLA	27-Sep-16	27-Oct-16	612.10	607.20
CIPLA	28-Sep-16	29-Sep-16	607.50	-
CIPLA	28-Sep-16	27-Oct-16	611.10	-
CIPLA	29-Sep-16	29-Sep-16	602.85	602.85
CIPLA	29-Sep-16	27-Oct-16	604.55	602.85
CIPLA	30-Sep-16	27-Oct-16	583.70	580.05
CIPLA	3-Oct-16	27-Oct-16	592.70	588.85
CIPLA	4-Oct-16	27-Oct-16	601.10	597.80
CIPLA	5-Oct-16	27-Oct-16	595.05	591.65
CIPLA	6-Oct-16	27-Oct-16	582.00	578.80
CIPLA	7-Oct-16	27-Oct-16	573.45	570.05
CIPLA	10-Oct-16	27-Oct-16	583.05	580.65
CIPLA	13-Oct-16	27-Oct-16	583.10	582.00
CIPLA	14-Oct-16	27-Oct-16	587.40	587.00
CIPLA	17-Oct-16	27-Oct-16	586.15	586.00
CIPLA	18-Oct-16	27-Oct-16	593.10	592.75
CIPLA	19-Oct-16	27-Oct-16	596.65	596.35
CIPLA	20-Oct-16	27-Oct-16	596.30	596.60
CIPLA	21-Oct-16	27-Oct-16	583.15	583.25
CIPLA	24-Oct-16	27-Oct-16	586.10	584.70
CIPLA	24-Oct-16	24-Nov-16	588.80	584.70
CIPLA	25-Oct-16	27-Oct-16	585.75	584.50
CIPLA	25-Oct-16	24-Nov-16	588.55	584.50
CIPLA	26-Oct-16	27-Oct-16	577.85	577.65
CIPLA	26-Oct-16	24-Nov-16	580.60	577.65
CIPLA	27-Oct-16	27-Oct-16	585.75	585.75
CIPLA	27-Oct-16	24-Nov-16	587.15	585.75
CIPLA	28-Oct-16	24-Nov-16	578.40	575.15
CIPLA	30-Oct-16	24-Nov-16	579.65	578.75
CIPLA	1-Nov-16	24-Nov-16	574.25	571.75
CIPLA	2-Nov-16	24-Nov-16	561.10	560.10
CIPLA	3-Nov-16	24-Nov-16	561.25	560.00
CIPLA	4-Nov-16	24-Nov-16	546.30	544.70
CIPLA	7-Nov-16	24-Nov-16	548.20	545.75
CIPLA	8-Nov-16	24-Nov-16	537.65	535.30

CIPLA	9-Nov-16	24-Nov-16	528.40	526.30
CIPLA	10-Nov-16	24-Nov-16	566.35	563.70
CIPLA	11-Nov-16	24-Nov-16	550.50	547.95
CIPLA	15-Nov-16	24-Nov-16	553.15	552.40
CIPLA	16-Nov-16	24-Nov-16	538.65	538.15
CIPLA	17-Nov-16	24-Nov-16	545.55	545.70
CIPLA	18-Nov-16	24-Nov-16	550.95	550.95
CIPLA	21-Nov-16	24-Nov-16	544.45	545.10
CIPLA	22-Nov-16	24-Nov-16	550.25	550.50
CIPLA	23-Nov-16	24-Nov-16	551.60	552.80
CIPLA	24-Nov-16	24-Nov-16	553.65	553.65
CIPLA	28-Nov-16	29-Dec-16	572.45	570.55
CIPLA	29-Nov-16	29-Dec-16	571.55	569.15
CIPLA	30-Nov-16	29-Dec-16	569.45	566.60
CIPLA	1-Dec-16	29-Dec-16	570.50	568.20
CIPLA	2-Dec-16	29-Dec-16	571.95	571.20
CIPLA	5-Dec-16	29-Dec-16	576.10	573.00
CIPLA	6-Dec-16	29-Dec-16	576.60	574.85
CIPLA	7-Dec-16	29-Dec-16	572.25	570.85
CIPLA	8-Dec-16	29-Dec-16	583.45	582.75
CIPLA	9-Dec-16	29-Dec-16	580.75	578.90
CIPLA	12-Dec-16	29-Dec-16	575.05	574.80
CIPLA	13-Dec-16	29-Dec-16	578.75	578.85
CIPLA	14-Dec-16	29-Dec-16	569.50	568.00
CIPLA	15-Dec-16	29-Dec-16	563.45	563.15
CIPLA	16-Dec-16	29-Dec-16	566.85	566.20
CIPLA	19-Dec-16	29-Dec-16	570.35	569.15
CIPLA	20-Dec-16	29-Dec-16	562.30	563.10
CIPLA	21-Dec-16	29-Dec-16	564.25	562.80
CIPLA	22-Dec-16	29-Dec-16	561.55	561.40
CIPLA	23-Dec-16	29-Dec-16	583.75	582.30
CIPLA	26-Dec-16	29-Dec-16	554.65	554.95
CIPLA	26-Dec-16	25-Jan-17	557.00	554.95
CIPLA	27-Dec-16	29-Dec-16	563.20	563.65
CIPLA	27-Dec-16	25-Jan-17	565.40	563.65
CIPLA	28-Dec-16	29-Dec-16	561.85	562.40
CIPLA	28-Dec-16	25-Jan-17	563.80	562.40
CIPLA	29-Dec-16	29-Dec-16	564.85	564.85
CIPLA	29-Dec-16	25-Jan-17	565.55	564.85
CIPLA	30-Dec-16	25-Jan-17	570.10	568.80
CIPLA	2-Jan-17	25-Jan-17	568.45	566.00

CIPLA	3-Jan-17	25-Jan-17	574.30	573.65
CIPLA	4-Jan-17	25-Jan-17	569.25	568.25
CIPLA	5-Jan-17	25-Jan-17	581.45	579.85
CIPLA	6-Jan-17	25-Jan-17	584.80	582.85
CIPLA	9-Jan-17	25-Jan-17	578.40	576.70
CIPLA	10-Jan-17	25-Jan-17	576.80	574.90
CIPLA	11-Jan-17	25-Jan-17	579.05	576.95
CIPLA	12-Jan-17	25-Jan-17	586.50	586.25
CIPLA	13-Jan-17	25-Jan-17	585.05	583.40
CIPLA	16-Jan-17	25-Jan-17	589.20	588.80
CIPLA	17-Jan-17	25-Jan-17	587.00	587.25
CIPLA	18-Jan-17	25-Jan-17	581.30	580.80
CIPLA	19-Jan-17	25-Jan-17	580.00	580.35
CIPLA	20-Jan-17	25-Jan-17	577.60	577.60
CIPLA	23-Jan-17	25-Jan-17	576.55	575.75
CIPLA	23-Jan-17	23-Feb-17	578.60	575.75
CIPLA	24-Jan-17	25-Jan-17	580.25	579.90
CIPLA	24-Jan-17	23-Feb-17	582.50	579.90
CIPLA	25-Jan-17	25-Jan-17	585.65	585.65
CIPLA	25-Jan-17	23-Feb-17	585.20	585.65
CIPLA	27-Jan-17	23-Feb-17	584.15	580.15
CIPLA	30-Jan-17	23-Feb-17	585.05	582.25
CIPLA	31-Jan-17	23-Feb-17	576.15	575.35
CIPLA	1-Feb-17	23-Feb-17	575.15	572.15
CIPLA	2-Feb-17	23-Feb-17	586.70	584.35
CIPLA	3-Feb-17	23-Feb-17	610.75	607.90
CIPLA	6-Feb-17	23-Feb-17	604.45	601.60
CIPLA	7-Feb-17	23-Feb-17	600.15	597.55
CIPLA	8-Feb-17	23-Feb-17	605.85	603.20
CIPLA	9-Feb-17	23-Feb-17	588.25	587.65
CIPLA	10-Feb-17	23-Feb-17	580.30	579.95
CIPLA	13-Feb-17	23-Feb-17	582.45	582.65
CIPLA	14-Feb-17	23-Feb-17	577.45	576.05
CIPLA	15-Feb-17	23-Feb-17	574.20	574.25
CIPLA	16-Feb-17	23-Feb-17	584.65	584.60
CIPLA	17-Feb-17	23-Feb-17	594.20	593.25
CIPLA	20-Feb-17	23-Feb-17	593.25	592.75
CIPLA	21-Feb-17	23-Feb-17	593.75	593.10
CIPLA	22-Feb-17	23-Feb-17	587.55	589.25
CIPLA	23-Feb-17	23-Feb-17	592.40	592.40
CIPLA	27-Feb-17	30-Mar-17	588.15	585.25

CIPLA	28-Feb-17	30-Mar-17	587.15	583.70
CIPLA	1-Mar-17	30-Mar-17	590.25	586.30
CIPLA	2-Mar-17	30-Mar-17	589.95	589.25
CIPLA	3-Mar-17	30-Mar-17	591.65	588.60
CIPLA	6-Mar-17	30-Mar-17	592.80	590.10
CIPLA	7-Mar-17	30-Mar-17	591.40	588.05
CIPLA	8-Mar-17	30-Mar-17	593.40	591.85
CIPLA	9-Mar-17	30-Mar-17	592.10	589.20
CIPLA	10-Mar-17	30-Mar-17	590.00	589.10
CIPLA	14-Mar-17	30-Mar-17	601.15	600.20
CIPLA	15-Mar-17	30-Mar-17	601.60	600.20
CIPLA	16-Mar-17	30-Mar-17	602.75	601.40
CIPLA	17-Mar-17	30-Mar-17	597.75	597.30
CIPLA	20-Mar-17	30-Mar-17	598.90	596.30
CIPLA	21-Mar-17	30-Mar-17	593.40	591.85
CIPLA	22-Mar-17	30-Mar-17	596.30	595.20
CIPLA	23-Mar-17	30-Mar-17	598.50	596.25
CIPLA	24-Mar-17	30-Mar-17	595.30	593.95
CIPLA	27-Mar-17	30-Mar-17	593.35	592.10
CIPLA	27-Mar-17	27-Apr-17	595.70	592.10
CIPLA	28-Mar-17	30-Mar-17	594.65	594.15
CIPLA	28-Mar-17	27-Apr-17	597.10	594.15
CIPLA	29-Mar-17	30-Mar-17	593.10	593.15
CIPLA	29-Mar-17	27-Apr-17	595.35	593.15
CIPLA	30-Mar-17	30-Mar-17	598.35	598.35
CIPLA	30-Mar-17	27-Apr-17	600.50	598.35
CIPLA	31-Mar-17	27-Apr-17	594.30	592.95
CIPLA	3-Apr-17	27-Apr-17	593.45	592.65
CIPLA	5-Apr-17	27-Apr-17	593.35	593.05
CIPLA	6-Apr-17	27-Apr-17	590.15	590.30
CIPLA	7-Apr-17	27-Apr-17	590.05	590.00
CIPLA	10-Apr-17	27-Apr-17	590.85	589.65
CIPLA	11-Apr-17	27-Apr-17	580.95	580.05
CIPLA	12-Apr-17	27-Apr-17	579.05	579.40
CIPLA	13-Apr-17	27-Apr-17	578.25	577.25
CIPLA	17-Apr-17	27-Apr-17	577.75	576.50
CIPLA	18-Apr-17	27-Apr-17	574.95	575.80
CIPLA	19-Apr-17	27-Apr-17	576.15	575.40
CIPLA	20-Apr-17	27-Apr-17	575.25	574.05
CIPLA	21-Apr-17	27-Apr-17	564.40	564.45
CIPLA	24-Apr-17	27-Apr-17	557.35	557.05

CIPLA	24-Apr-17	25-May-17	559.30	557.05
CIPLA	25-Apr-17	27-Apr-17	553.30	552.95
CIPLA	25-Apr-17	25-May-17	555.55	552.95
CIPLA	26-Apr-17	27-Apr-17	554.90	556.75
CIPLA	26-Apr-17	25-May-17	556.50	556.75
CIPLA	27-Apr-17	27-Apr-17	561.70	561.70
CIPLA	27-Apr-17	25-May-17	563.65	561.70
CIPLA	28-Apr-17	25-May-17	560.40	557.45
CIPLA	2-May-17	25-May-17	557.45	555.35
CIPLA	3-May-17	25-May-17	557.15	556.05
CIPLA	4-May-17	25-May-17	550.85	549.95
CIPLA	5-May-17	25-May-17	551.65	549.95
CIPLA	8-May-17	25-May-17	553.95	551.55
CIPLA	9-May-17	25-May-17	554.00	552.95
CIPLA	10-May-17	25-May-17	561.55	561.05
CIPLA	11-May-17	25-May-17	562.40	561.95
CIPLA	12-May-17	25-May-17	568.80	567.95

DR Reddy

Table 4: Dr Reddy Future and Spot Price

Symbol	Date	Expiry	Future Price	Spot Price
DRREDDY	25-May-15	28-May-15	3592.65	3585.45
DRREDDY	25-May-15	25-Jun-15	3614.85	3585.45
DRREDDY	26-May-15	28-May-15	3553.80	3547.25
DRREDDY	26-May-15	25-Jun-15	3574.80	3547.25
DRREDDY	27-May-15	28-May-15	3587.60	3586.65
DRREDDY	27-May-15	25-Jun-15	3608.25	3586.65
DRREDDY	28-May-15	28-May-15	3527.95	3527.95
DRREDDY	28-May-15	25-Jun-15	3552.30	3527.95
DRREDDY	29-May-15	25-Jun-15	3562.70	3535.25
DRREDDY	1-Jun-15	25-Jun-15	3556.80	3538.45
DRREDDY	2-Jun-15	25-Jun-15	3492.15	3473.75
DRREDDY	3-Jun-15	25-Jun-15	3445.70	3428.05
DRREDDY	4-Jun-15	25-Jun-15	3431.70	3422.00
DRREDDY	5-Jun-15	25-Jun-15	3426.85	3415.60
DRREDDY	8-Jun-15	25-Jun-15	3417.35	3407.05
DRREDDY	9-Jun-15	25-Jun-15	3336.70	3321.90

DRREDDY	10-Jun-15	25-Jun-15	3374.70	3366.60
DRREDDY	11-Jun-15	25-Jun-15	3320.30	3312.75
DRREDDY	12-Jun-15	25-Jun-15	3329.65	3317.55
DRREDDY	15-Jun-15	25-Jun-15	3325.15	3320.60
DRREDDY	16-Jun-15	25-Jun-15	3296.00	3286.60
DRREDDY	17-Jun-15	25-Jun-15	3347.20	3347.20
DRREDDY	18-Jun-15	25-Jun-15	3383.55	3377.45
DRREDDY	19-Jun-15	25-Jun-15	3380.95	3384.75
DRREDDY	22-Jun-15	25-Jun-15	3422.10	3425.90
DRREDDY	23-Jun-15	25-Jun-15	3436.55	3443.35
DRREDDY	24-Jun-15	25-Jun-15	3427.20	3434.55
DRREDDY	25-Jun-15	25-Jun-15	3485.45	3485.45
DRREDDY	29-Jun-15	30-Jul-15	3515.20	3521.15
DRREDDY	30-Jun-15	30-Jul-15	3549.45	3559.45
DRREDDY	1-Jul-15	30-Jul-15	3564.35	3573.60
DRREDDY	2-Jul-15	30-Jul-15	3538.75	3547.70
DRREDDY	3-Jul-15	30-Jul-15	3571.40	3587.75
DRREDDY	6-Jul-15	30-Jul-15	3700.55	3716.70
DRREDDY	7-Jul-15	30-Jul-15	3720.50	3739.95
DRREDDY	8-Jul-15	30-Jul-15	3716.90	3720.85
DRREDDY	9-Jul-15	30-Jul-15	3729.85	3732.05
DRREDDY	10-Jul-15	30-Jul-15	3760.00	3750.50
DRREDDY	13-Jul-15	30-Jul-15	3776.55	3758.15
DRREDDY	14-Jul-15	30-Jul-15	3792.55	3772.95
DRREDDY	15-Jul-15	30-Jul-15	3827.20	3815.00
DRREDDY	16-Jul-15	30-Jul-15	3874.60	3866.50
DRREDDY	17-Jul-15	30-Jul-15	3889.75	3877.05
DRREDDY	20-Jul-15	30-Jul-15	3934.45	3930.25
DRREDDY	21-Jul-15	30-Jul-15	3861.55	3853.15
DRREDDY	22-Jul-15	30-Jul-15	3858.50	3847.75
DRREDDY	23-Jul-15	30-Jul-15	3912.45	3913.40
DRREDDY	24-Jul-15	30-Jul-15	3906.15	3908.90
DRREDDY	27-Jul-15	30-Jul-15	3855.15	3854.85
DRREDDY	27-Jul-15	27-Aug-15	3874.90	3854.85
DRREDDY	28-Jul-15	30-Jul-15	3760.10	3749.10
DRREDDY	28-Jul-15	27-Aug-15	3778.90	3749.10
DRREDDY	29-Jul-15	30-Jul-15	3715.75	3712.35
DRREDDY	29-Jul-15	27-Aug-15	3733.90	3712.35
DRREDDY	30-Jul-15	30-Jul-15	3913.10	3913.10
DRREDDY	30-Jul-15	27-Aug-15	3932.05	3913.10
DRREDDY	31-Jul-15	27-Aug-15	4087.75	4076.10

DRREDDY	3-Aug-15	27-Aug-15	4148.75	4143.90
DRREDDY	4-Aug-15	27-Aug-15	4168.95	4161.75
DRREDDY	5-Aug-15	27-Aug-15	4196.90	4191.80
DRREDDY	6-Aug-15	27-Aug-15	4289.90	4266.60
DRREDDY	7-Aug-15	27-Aug-15	4272.70	4258.85
DRREDDY	10-Aug-15	27-Aug-15	4260.00	4259.70
DRREDDY	11-Aug-15	27-Aug-15	4240.05	4223.85
DRREDDY	12-Aug-15	27-Aug-15	4278.90	4275.00
DRREDDY	13-Aug-15	27-Aug-15	4293.65	4291.75
DRREDDY	14-Aug-15	27-Aug-15	4276.50	4257.75
DRREDDY	17-Aug-15	27-Aug-15	4196.20	4181.45
DRREDDY	18-Aug-15	27-Aug-15	4196.10	4191.35
DRREDDY	19-Aug-15	27-Aug-15	4246.10	4231.30
DRREDDY	20-Aug-15	27-Aug-15	4302.15	4295.60
DRREDDY	21-Aug-15	27-Aug-15	4247.10	4244.05
DRREDDY	24-Aug-15	27-Aug-15	4049.15	4043.25
DRREDDY	24-Aug-15	24-Sep-15	4073.90	4043.25
DRREDDY	25-Aug-15	27-Aug-15	4104.05	4105.35
DRREDDY	25-Aug-15	24-Sep-15	4125.65	4105.35
DRREDDY	26-Aug-15	27-Aug-15	4068.05	4061.20
DRREDDY	26-Aug-15	24-Sep-15	4087.80	4061.20
DRREDDY	27-Aug-15	27-Aug-15	4130.10	4130.10
DRREDDY	27-Aug-15	24-Sep-15	4160.25	4130.10
DRREDDY	28-Aug-15	24-Sep-15	4191.50	4180.75
DRREDDY	31-Aug-15	24-Sep-15	4319.45	4302.65
DRREDDY	1-Sep-15	24-Sep-15	4264.90	4249.10
DRREDDY	2-Sep-15	24-Sep-15	4211.35	4200.15
DRREDDY	3-Sep-15	24-Sep-15	4231.50	4209.20
DRREDDY	4-Sep-15	24-Sep-15	4071.80	4052.85
DRREDDY	7-Sep-15	24-Sep-15	3964.80	3946.50
DRREDDY	8-Sep-15	24-Sep-15	3994.70	3977.55
DRREDDY	9-Sep-15	24-Sep-15	4054.05	4041.05
DRREDDY	10-Sep-15	24-Sep-15	3991.55	3973.55
DRREDDY	11-Sep-15	24-Sep-15	4017.10	4014.20
DRREDDY	14-Sep-15	24-Sep-15	4048.20	4042.70
DRREDDY	15-Sep-15	24-Sep-15	4015.70	4005.50
DRREDDY	16-Sep-15	24-Sep-15	4013.75	4010.40
DRREDDY	18-Sep-15	24-Sep-15	4013.50	4005.85
DRREDDY	21-Sep-15	24-Sep-15	3959.45	3957.30
DRREDDY	22-Sep-15	24-Sep-15	3925.60	3929.70
DRREDDY	23-Sep-15	24-Sep-15	3937.60	3934.50

DRREDDY	24-Sep-15	24-Sep-15	3970.25	3970.25
DRREDDY	28-Sep-15	29-Oct-15	4213.65	4191.25
DRREDDY	29-Sep-15	29-Oct-15	4094.20	4081.45
DRREDDY	30-Sep-15	29-Oct-15	4178.40	4162.35
DRREDDY	1-Oct-15	29-Oct-15	4244.85	4232.95
DRREDDY	5-Oct-15	29-Oct-15	4189.05	4180.25
DRREDDY	6-Oct-15	29-Oct-15	4259.60	4246.50
DRREDDY	7-Oct-15	29-Oct-15	4214.55	4195.55
DRREDDY	8-Oct-15	29-Oct-15	4236.20	4225.20
DRREDDY	9-Oct-15	29-Oct-15	4261.95	4257.85
DRREDDY	12-Oct-15	29-Oct-15	4187.70	4187.50
DRREDDY	13-Oct-15	29-Oct-15	4233.65	4228.05
DRREDDY	14-Oct-15	29-Oct-15	4213.80	4196.85
DRREDDY	15-Oct-15	29-Oct-15	4225.15	4207.45
DRREDDY	16-Oct-15	29-Oct-15	4270.25	4264.95
DRREDDY	19-Oct-15	29-Oct-15	4344.05	4347.60
DRREDDY	20-Oct-15	29-Oct-15	4318.85	4319.70
DRREDDY	21-Oct-15	29-Oct-15	4184.10	4173.60
DRREDDY	23-Oct-15	29-Oct-15	4192.50	4188.40
DRREDDY	26-Oct-15	29-Oct-15	4210.55	4200.75
DRREDDY	26-Oct-15	26-Nov-15	4230.55	4200.75
DRREDDY	27-Oct-15	29-Oct-15	4188.20	4179.10
DRREDDY	27-Oct-15	26-Nov-15	4204.40	4179.10
DRREDDY	28-Oct-15	29-Oct-15	4114.05	4113.65
DRREDDY	28-Oct-15	26-Nov-15	4131.50	4113.65
DRREDDY	29-Oct-15	29-Oct-15	4221.35	4221.35
DRREDDY	29-Oct-15	26-Nov-15	4229.30	4221.35
DRREDDY	30-Oct-15	26-Nov-15	4292.30	4279.90
DRREDDY	2-Nov-15	26-Nov-15	4306.05	4296.30
DRREDDY	3-Nov-15	26-Nov-15	4344.65	4335.15
DRREDDY	4-Nov-15	26-Nov-15	4331.00	4322.90
DRREDDY	5-Nov-15	26-Nov-15	4265.90	4249.40
DRREDDY	6-Nov-15	26-Nov-15	3650.45	3630.65
DRREDDY	9-Nov-15	26-Nov-15	3516.05	3501.15
DRREDDY	10-Nov-15	26-Nov-15	3337.65	3330.70
DRREDDY	11-Nov-15	26-Nov-15	3362.00	3360.05
DRREDDY	13-Nov-15	26-Nov-15	3394.25	3389.60
DRREDDY	16-Nov-15	26-Nov-15	3510.65	3509.20
DRREDDY	17-Nov-15	26-Nov-15	3439.75	3441.30
DRREDDY	18-Nov-15	26-Nov-15	3374.25	3366.95
DRREDDY	19-Nov-15	26-Nov-15	3296.00	3281.10

DRREDDY	20-Nov-15	26-Nov-15	3356.25	3353.10
DRREDDY	23-Nov-15	26-Nov-15	3406.45	3409.25
DRREDDY	24-Nov-15	26-Nov-15	3383.25	3387.70
DRREDDY	26-Nov-15	26-Nov-15	3100.75	3100.75
DRREDDY	30-Nov-15	31-Dec-15	3129.75	3107.80
DRREDDY	1-Dec-15	31-Dec-15	3220.05	3210.90
DRREDDY	2-Dec-15	31-Dec-15	3259.50	3251.65
DRREDDY	3-Dec-15	31-Dec-15	3229.20	3223.65
DRREDDY	4-Dec-15	31-Dec-15	3201.05	3195.50
DRREDDY	7-Dec-15	31-Dec-15	3198.45	3179.90
DRREDDY	8-Dec-15	31-Dec-15	3078.80	3063.20
DRREDDY	9-Dec-15	31-Dec-15	3002.65	2995.20
DRREDDY	10-Dec-15	31-Dec-15	3002.00	2995.30
DRREDDY	11-Dec-15	31-Dec-15	2976.30	2969.00
DRREDDY	14-Dec-15	31-Dec-15	3012.90	3010.40
DRREDDY	15-Dec-15	31-Dec-15	3001.85	2994.20
DRREDDY	16-Dec-15	31-Dec-15	3007.70	3004.50
DRREDDY	17-Dec-15	31-Dec-15	3032.05	3017.95
DRREDDY	18-Dec-15	31-Dec-15	2985.90	2974.20
DRREDDY	21-Dec-15	31-Dec-15	3014.05	3009.45
DRREDDY	22-Dec-15	31-Dec-15	3002.70	3001.10
DRREDDY	23-Dec-15	31-Dec-15	3025.00	3024.60
DRREDDY	24-Dec-15	31-Dec-15	3016.05	3010.00
DRREDDY	28-Dec-15	31-Dec-15	3114.45	3120.70
DRREDDY	28-Dec-15	28-Jan-16	3125.55	3120.70
DRREDDY	29-Dec-15	31-Dec-15	3101.35	3100.50
DRREDDY	29-Dec-15	28-Jan-16	3114.60	3100.50
DRREDDY	30-Dec-15	31-Dec-15	3119.95	3121.15
DRREDDY	30-Dec-15	28-Jan-16	3132.95	3121.15
DRREDDY	31-Dec-15	31-Dec-15	3108.60	3108.60
DRREDDY	31-Dec-15	28-Jan-16	3119.05	3108.60
DRREDDY	1-Jan-16	28-Jan-16	3113.00	3108.60
DRREDDY	4-Jan-16	28-Jan-16	3057.65	3056.00
DRREDDY	5-Jan-16	28-Jan-16	3071.90	3070.65
DRREDDY	6-Jan-16	28-Jan-16	3058.30	3046.25
DRREDDY	7-Jan-16	28-Jan-16	2990.90	2991.80
DRREDDY	8-Jan-16	28-Jan-16	3009.45	3010.70
DRREDDY	11-Jan-16	28-Jan-16	2940.85	2931.50
DRREDDY	12-Jan-16	28-Jan-16	2928.70	2923.25
DRREDDY	13-Jan-16	28-Jan-16	2898.20	2890.95
DRREDDY	14-Jan-16	28-Jan-16	2919.45	2915.00

DRREDDY	15-Jan-16	28-Jan-16	2933.80	2935.90
DRREDDY	18-Jan-16	28-Jan-16	2877.60	2874.90
DRREDDY	19-Jan-16	28-Jan-16	2920.25	2915.50
DRREDDY	20-Jan-16	28-Jan-16	2868.30	2870.10
DRREDDY	21-Jan-16	28-Jan-16	2763.80	2757.10
DRREDDY	22-Jan-16	28-Jan-16	2888.05	2882.35
DRREDDY	25-Jan-16	28-Jan-16	2901.15	2903.25
DRREDDY	25-Jan-16	25-Feb-16	2911.20	2903.25
DRREDDY	27-Jan-16	28-Jan-16	2968.50	2973.00
DRREDDY	27-Jan-16	25-Feb-16	2976.60	2973.00
DRREDDY	28-Jan-16	28-Jan-16	3011.20	3011.20
DRREDDY	28-Jan-16	25-Feb-16	3011.90	3011.20
DRREDDY	29-Jan-16	25-Feb-16	3097.95	3105.40
DRREDDY	1-Feb-16	25-Feb-16	3057.00	3050.50
DRREDDY	2-Feb-16	25-Feb-16	3052.20	3048.50
DRREDDY	3-Feb-16	25-Feb-16	3015.90	3008.30
DRREDDY	4-Feb-16	25-Feb-16	3007.00	3008.65
DRREDDY	5-Feb-16	25-Feb-16	3123.40	3109.10
DRREDDY	8-Feb-16	25-Feb-16	3076.95	3070.35
DRREDDY	9-Feb-16	25-Feb-16	2973.65	2959.60
DRREDDY	10-Feb-16	25-Feb-16	2899.85	2885.05
DRREDDY	11-Feb-16	25-Feb-16	2893.15	2885.35
DRREDDY	12-Feb-16	25-Feb-16	2850.80	2847.45
DRREDDY	15-Feb-16	25-Feb-16	2863.20	2859.05
DRREDDY	16-Feb-16	25-Feb-16	2864.55	2855.65
DRREDDY	17-Feb-16	25-Feb-16	2970.50	2960.70
DRREDDY	18-Feb-16	25-Feb-16	3103.00	3103.60
DRREDDY	19-Feb-16	25-Feb-16	3067.05	3058.80
DRREDDY	22-Feb-16	25-Feb-16	3109.85	3108.00
DRREDDY	23-Feb-16	25-Feb-16	3080.70	3080.90
DRREDDY	24-Feb-16	25-Feb-16	3013.55	3013.20
DRREDDY	25-Feb-16	25-Feb-16	2994.45	2994.45
DRREDDY	29-Feb-16	31-Mar-16	3049.00	3036.25
DRREDDY	1-Mar-16	31-Mar-16	3042.95	3024.55
DRREDDY	2-Mar-16	31-Mar-16	3034.90	3015.25
DRREDDY	3-Mar-16	31-Mar-16	3184.65	3188.15
DRREDDY	4-Mar-16	31-Mar-16	3231.30	3252.75
DRREDDY	8-Mar-16	31-Mar-16	3212.25	3219.55
DRREDDY	9-Mar-16	31-Mar-16	3233.75	3219.95
DRREDDY	10-Mar-16	31-Mar-16	3199.75	3184.25
DRREDDY	11-Mar-16	31-Mar-16	3228.30	3210.85

DRREDDY	14-Mar-16	31-Mar-16	3251.55	3233.65
DRREDDY	15-Mar-16	31-Mar-16	3145.85	3133.35
DRREDDY	16-Mar-16	31-Mar-16	3167.95	3154.30
DRREDDY	17-Mar-16	31-Mar-16	3136.70	3125.50
DRREDDY	18-Mar-16	31-Mar-16	3172.25	3171.30
DRREDDY	21-Mar-16	31-Mar-16	3188.85	3182.25
DRREDDY	22-Mar-16	31-Mar-16	3064.15	3057.95
DRREDDY	23-Mar-16	31-Mar-16	3054.60	3047.90
DRREDDY	28-Mar-16	31-Mar-16	3046.30	3035.65
DRREDDY	28-Mar-16	28-Apr-16	3064.20	3035.65
DRREDDY	29-Mar-16	31-Mar-16	2952.55	2941.30
DRREDDY	29-Mar-16	28-Apr-16	2971.20	2941.30
DRREDDY	30-Mar-16	31-Mar-16	3017.40	3015.65
DRREDDY	30-Mar-16	28-Apr-16	3033.55	3015.65
DRREDDY	31-Mar-16	31-Mar-16	3035.20	3035.20
DRREDDY	31-Mar-16	28-Apr-16	3054.30	3035.20
DRREDDY	1-Apr-16	28-Apr-16	2998.25	2979.95
DRREDDY	4-Apr-16	28-Apr-16	3029.65	3011.75
DRREDDY	5-Apr-16	28-Apr-16	3006.50	2999.90
DRREDDY	6-Apr-16	28-Apr-16	3008.40	3001.45
DRREDDY	7-Apr-16	28-Apr-16	3041.15	3035.75
DRREDDY	8-Apr-16	28-Apr-16	3044.45	3039.15
DRREDDY	11-Apr-16	28-Apr-16	3045.20	3029.25
DRREDDY	12-Apr-16	28-Apr-16	3090.45	3082.75
DRREDDY	13-Apr-16	28-Apr-16	3105.00	3099.50
DRREDDY	18-Apr-16	28-Apr-16	3097.85	3091.05
DRREDDY	20-Apr-16	28-Apr-16	3117.05	3108.75
DRREDDY	21-Apr-16	28-Apr-16	3128.50	3131.20
DRREDDY	22-Apr-16	28-Apr-16	3143.25	3141.95
DRREDDY	25-Apr-16	28-Apr-16	3122.10	3116.15
DRREDDY	25-Apr-16	26-May-16	3138.55	3116.15
DRREDDY	26-Apr-16	28-Apr-16	3129.20	3120.25
DRREDDY	26-Apr-16	26-May-16	3144.05	3120.25
DRREDDY	27-Apr-16	28-Apr-16	3132.30	3130.75
DRREDDY	27-Apr-16	26-May-16	3147.60	3130.75
DRREDDY	28-Apr-16	28-Apr-16	3083.35	3083.35
DRREDDY	28-Apr-16	26-May-16	3103.30	3083.35
DRREDDY	29-Apr-16	26-May-16	3110.50	3088.70
DRREDDY	2-May-16	26-May-16	3020.25	3011.80
DRREDDY	3-May-16	26-May-16	2977.95	2959.35
DRREDDY	4-May-16	26-May-16	2940.90	2933.30

DRREDDY	5-May-16	26-May-16	2938.65	2929.55
DRREDDY	6-May-16	26-May-16	2874.50	2866.30
DRREDDY	9-May-16	26-May-16	2855.65	2840.05
DRREDDY	10-May-16	26-May-16	2937.50	2924.45
DRREDDY	11-May-16	26-May-16	2873.70	2868.70
DRREDDY	12-May-16	26-May-16	2975.40	2971.45
DRREDDY	13-May-16	26-May-16	2918.85	2917.20
DRREDDY	16-May-16	26-May-16	2999.15	3002.40
DRREDDY	17-May-16	26-May-16	3019.45	3017.75
DRREDDY	18-May-16	26-May-16	3026.20	3025.30
DRREDDY	19-May-16	26-May-16	3024.45	3025.60
DRREDDY	20-May-16	26-May-16	3033.40	3033.80
DRREDDY	23-May-16	26-May-16	3028.20	3029.80
DRREDDY	24-May-16	26-May-16	3028.80	3025.15
DRREDDY	25-May-16	26-May-16	3055.45	3051.55
DRREDDY	26-May-16	26-May-16	3090.70	3090.70
DRREDDY	30-May-16	30-Jun-16	3175.35	3170.25
DRREDDY	31-May-16	30-Jun-16	3202.45	3183.10
DRREDDY	1-Jun-16	30-Jun-16	3191.05	3183.15
DRREDDY	2-Jun-16	30-Jun-16	3198.65	3177.05
DRREDDY	3-Jun-16	30-Jun-16	3181.65	3160.10
DRREDDY	6-Jun-16	30-Jun-16	3170.85	3151.20
DRREDDY	7-Jun-16	30-Jun-16	3174.70	3155.95
DRREDDY	8-Jun-16	30-Jun-16	3148.30	3137.95
DRREDDY	9-Jun-16	30-Jun-16	3089.50	3070.95
DRREDDY	10-Jun-16	30-Jun-16	3073.90	3065.80
DRREDDY	13-Jun-16	30-Jun-16	3092.95	3088.25
DRREDDY	14-Jun-16	30-Jun-16	3102.75	3097.30
DRREDDY	15-Jun-16	30-Jun-16	3099.95	3086.75
DRREDDY	16-Jun-16	30-Jun-16	3053.45	3048.25
DRREDDY	17-Jun-16	30-Jun-16	3004.30	3002.95
DRREDDY	20-Jun-16	30-Jun-16	3067.05	3056.95
DRREDDY	21-Jun-16	30-Jun-16	3055.20	3049.05
DRREDDY	22-Jun-16	30-Jun-16	3113.85	3105.10
DRREDDY	23-Jun-16	30-Jun-16	3180.25	3171.55
DRREDDY	24-Jun-16	30-Jun-16	3156.25	3153.25
DRREDDY	27-Jun-16	30-Jun-16	3254.80	3246.60
DRREDDY	27-Jun-16	28-Jul-16	3250.10	3246.60
DRREDDY	28-Jun-16	30-Jun-16	3276.20	3273.05
DRREDDY	28-Jun-16	28-Jul-16	3273.30	3273.05
DRREDDY	29-Jun-16	30-Jun-16	3282.20	3274.70

DRREDDY	29-Jun-16	28-Jul-16	3281.15	3274.70
DRREDDY	30-Jun-16	30-Jun-16	3381.70	3381.70
DRREDDY	30-Jun-16	28-Jul-16	3384.90	3381.70
DRREDDY	1-Jul-16	28-Jul-16	3473.10	3484.10
DRREDDY	4-Jul-16	28-Jul-16	3439.05	3435.00
DRREDDY	5-Jul-16	28-Jul-16	3451.95	3450.55
DRREDDY	7-Jul-16	28-Jul-16	3528.95	3524.80
DRREDDY	8-Jul-16	28-Jul-16	3553.65	3561.25
DRREDDY	11-Jul-16	28-Jul-16	3612.35	3626.45
DRREDDY	12-Jul-16	28-Jul-16	3588.35	3596.35
DRREDDY	13-Jul-16	28-Jul-16	3601.85	3615.60
DRREDDY	14-Jul-16	28-Jul-16	3578.00	3583.20
DRREDDY	15-Jul-16	28-Jul-16	3585.35	3588.00
DRREDDY	18-Jul-16	28-Jul-16	3571.15	3567.75
DRREDDY	19-Jul-16	28-Jul-16	3587.55	3585.90
DRREDDY	20-Jul-16	28-Jul-16	3688.50	3676.65
DRREDDY	21-Jul-16	28-Jul-16	3619.85	3617.00
DRREDDY	22-Jul-16	28-Jul-16	3610.55	3599.85
DRREDDY	25-Jul-16	28-Jul-16	3479.40	3482.35
DRREDDY	25-Jul-16	25-Aug-16	3497.10	3482.35
DRREDDY	26-Jul-16	28-Jul-16	3327.60	3319.65
DRREDDY	26-Jul-16	25-Aug-16	3349.40	3319.65
DRREDDY	27-Jul-16	28-Jul-16	2986.80	2980.20
DRREDDY	27-Jul-16	25-Aug-16	3003.70	2980.20
DRREDDY	28-Jul-16	28-Jul-16	2959.75	2959.75
DRREDDY	28-Jul-16	25-Aug-16	2977.40	2959.75
DRREDDY	29-Jul-16	25-Aug-16	2954.15	2935.35
DRREDDY	1-Aug-16	25-Aug-16	2997.80	2980.50
DRREDDY	2-Aug-16	25-Aug-16	2986.70	2977.35
DRREDDY	3-Aug-16	25-Aug-16	2953.85	2939.15
DRREDDY	4-Aug-16	25-Aug-16	2973.00	2962.45
DRREDDY	5-Aug-16	25-Aug-16	3015.00	3008.70
DRREDDY	8-Aug-16	25-Aug-16	3040.40	3036.20
DRREDDY	9-Aug-16	25-Aug-16	3041.20	3038.30
DRREDDY	10-Aug-16	25-Aug-16	3004.35	2999.65
DRREDDY	11-Aug-16	25-Aug-16	3011.65	3010.85
DRREDDY	12-Aug-16	25-Aug-16	3011.50	3011.15
DRREDDY	16-Aug-16	25-Aug-16	3010.90	3006.85
DRREDDY	17-Aug-16	25-Aug-16	3008.20	3004.65
DRREDDY	18-Aug-16	25-Aug-16	3028.65	3027.20
DRREDDY	19-Aug-16	25-Aug-16	3013.00	3010.15

DRREDDY	22-Aug-16	25-Aug-16	3008.50	3013.00
DRREDDY	23-Aug-16	25-Aug-16	3010.95	3009.20
DRREDDY	24-Aug-16	25-Aug-16	3039.90	3039.80
DRREDDY	25-Aug-16	25-Aug-16	3050.30	3050.30
DRREDDY	29-Aug-16	29-Sep-16	3062.70	3052.15
DRREDDY	30-Aug-16	29-Sep-16	3111.70	3090.75
DRREDDY	31-Aug-16	29-Sep-16	3112.50	3089.85
DRREDDY	1-Sep-16	29-Sep-16	3106.50	3097.65
DRREDDY	2-Sep-16	29-Sep-16	3132.95	3123.05
DRREDDY	6-Sep-16	29-Sep-16	3140.35	3133.05
DRREDDY	7-Sep-16	29-Sep-16	3143.75	3138.85
DRREDDY	8-Sep-16	29-Sep-16	3193.80	3188.45
DRREDDY	9-Sep-16	29-Sep-16	3197.50	3193.30
DRREDDY	12-Sep-16	29-Sep-16	3139.55	3137.60
DRREDDY	14-Sep-16	29-Sep-16	3166.50	3157.80
DRREDDY	15-Sep-16	29-Sep-16	3146.45	3139.45
DRREDDY	16-Sep-16	29-Sep-16	3155.70	3150.15
DRREDDY	19-Sep-16	29-Sep-16	3160.60	3157.35
DRREDDY	20-Sep-16	29-Sep-16	3170.00	3157.80
DRREDDY	21-Sep-16	29-Sep-16	3166.15	3153.00
DRREDDY	22-Sep-16	29-Sep-16	3160.15	3149.30
DRREDDY	23-Sep-16	29-Sep-16	3190.90	3182.20
DRREDDY	26-Sep-16	29-Sep-16	3200.95	3199.65
DRREDDY	26-Sep-16	27-Oct-16	3219.25	3199.65
DRREDDY	27-Sep-16	29-Sep-16	3194.95	3190.70
DRREDDY	27-Sep-16	27-Oct-16	3212.35	3190.70
DRREDDY	28-Sep-16	29-Sep-16	3204.85	-
DRREDDY	28-Sep-16	27-Oct-16	3220.05	-
DRREDDY	29-Sep-16	29-Sep-16	3135.40	3135.40
DRREDDY	29-Sep-16	27-Oct-16	3154.55	3135.40
DRREDDY	30-Sep-16	27-Oct-16	3118.70	3107.40
DRREDDY	3-Oct-16	27-Oct-16	3181.00	3160.55
DRREDDY	4-Oct-16	27-Oct-16	3168.00	3148.35
DRREDDY	5-Oct-16	27-Oct-16	3141.15	3123.15
DRREDDY	6-Oct-16	27-Oct-16	3086.85	3077.15
DRREDDY	7-Oct-16	27-Oct-16	3058.70	3054.30
DRREDDY	10-Oct-16	27-Oct-16	3080.60	3078.65
DRREDDY	13-Oct-16	27-Oct-16	3050.45	3050.15
DRREDDY	14-Oct-16	27-Oct-16	3043.80	3031.25
DRREDDY	17-Oct-16	27-Oct-16	3033.60	3028.95
DRREDDY	18-Oct-16	27-Oct-16	3056.40	3045.35

DRREDDY	19-Oct-16	27-Oct-16	3074.90	3065.50
DRREDDY	20-Oct-16	27-Oct-16	3079.90	3078.80
DRREDDY	21-Oct-16	27-Oct-16	3110.90	3113.60
DRREDDY	24-Oct-16	27-Oct-16	3088.10	3089.25
DRREDDY	24-Oct-16	24-Nov-16	3101.85	3089.25
DRREDDY	25-Oct-16	27-Oct-16	3208.75	3200.60
DRREDDY	25-Oct-16	24-Nov-16	3221.00	3200.60
DRREDDY	26-Oct-16	27-Oct-16	3241.50	3242.30
DRREDDY	26-Oct-16	24-Nov-16	3254.35	3242.30
DRREDDY	27-Oct-16	27-Oct-16	3324.80	3324.80
DRREDDY	27-Oct-16	24-Nov-16	3339.50	3324.80
DRREDDY	28-Oct-16	24-Nov-16	3369.85	3363.45
DRREDDY	30-Oct-16	24-Nov-16	3329.40	3324.80
DRREDDY	1-Nov-16	24-Nov-16	3330.60	3326.60
DRREDDY	2-Nov-16	24-Nov-16	3268.05	3260.80
DRREDDY	3-Nov-16	24-Nov-16	3268.50	3262.35
DRREDDY	4-Nov-16	24-Nov-16	3082.55	3079.70
DRREDDY	7-Nov-16	24-Nov-16	3112.45	3106.65
DRREDDY	8-Nov-16	24-Nov-16	3119.45	3119.00
DRREDDY	9-Nov-16	24-Nov-16	3283.95	3282.55
DRREDDY	10-Nov-16	24-Nov-16	3282.95	3278.25
DRREDDY	11-Nov-16	24-Nov-16	3269.50	3256.25
DRREDDY	15-Nov-16	24-Nov-16	3322.05	3310.70
DRREDDY	16-Nov-16	24-Nov-16	3223.50	3210.95
DRREDDY	17-Nov-16	24-Nov-16	3214.80	3207.15
DRREDDY	18-Nov-16	24-Nov-16	3216.35	3214.85
DRREDDY	21-Nov-16	24-Nov-16	3140.65	3134.40
DRREDDY	22-Nov-16	24-Nov-16	3124.75	3121.65
DRREDDY	23-Nov-16	24-Nov-16	3120.90	3128.60
DRREDDY	24-Nov-16	24-Nov-16	3111.70	3111.70
DRREDDY	28-Nov-16	29-Dec-16	3175.25	3172.90
DRREDDY	29-Nov-16	29-Dec-16	3197.55	3188.25
DRREDDY	30-Nov-16	29-Dec-16	3213.65	3196.90
DRREDDY	1-Dec-16	29-Dec-16	3239.10	3238.75
DRREDDY	2-Dec-16	29-Dec-16	3179.95	3180.50
DRREDDY	5-Dec-16	29-Dec-16	3182.40	3168.15
DRREDDY	6-Dec-16	29-Dec-16	3201.80	3195.90
DRREDDY	7-Dec-16	29-Dec-16	3189.35	3183.80
DRREDDY	8-Dec-16	29-Dec-16	3208.15	3211.70
DRREDDY	9-Dec-16	29-Dec-16	3184.85	3186.40
DRREDDY	12-Dec-16	29-Dec-16	3158.50	3147.90

DRREDDY	13-Dec-16	29-Dec-16	3173.70	3166.85
DRREDDY	14-Dec-16	29-Dec-16	3149.65	3147.70
DRREDDY	15-Dec-16	29-Dec-16	3117.55	3107.50
DRREDDY	16-Dec-16	29-Dec-16	3113.45	3107.80
DRREDDY	19-Dec-16	29-Dec-16	3077.60	3068.85
DRREDDY	20-Dec-16	29-Dec-16	3058.65	3046.50
DRREDDY	21-Dec-16	29-Dec-16	3046.45	3036.85
DRREDDY	22-Dec-16	29-Dec-16	3022.50	3012.35
DRREDDY	23-Dec-16	29-Dec-16	3000.15	2998.55
DRREDDY	26-Dec-16	29-Dec-16	2986.20	2986.00
DRREDDY	26-Dec-16	25-Jan-17	2997.30	2986.00
DRREDDY	27-Dec-16	29-Dec-16	3033.90	3034.95
DRREDDY	27-Dec-16	25-Jan-17	3044.05	3034.95
DRREDDY	28-Dec-16	29-Dec-16	3067.15	3069.55
DRREDDY	28-Dec-16	25-Jan-17	3077.25	3069.55
DRREDDY	29-Dec-16	29-Dec-16	3066.25	3066.25
DRREDDY	29-Dec-16	25-Jan-17	3078.35	3066.25
DRREDDY	30-Dec-16	25-Jan-17	3064.30	3060.40
DRREDDY	2-Jan-17	25-Jan-17	3092.50	3083.40
DRREDDY	3-Jan-17	25-Jan-17	3082.40	3072.40
DRREDDY	4-Jan-17	25-Jan-17	3104.90	3091.30
DRREDDY	5-Jan-17	25-Jan-17	3144.75	3136.25
DRREDDY	6-Jan-17	25-Jan-17	3171.90	3159.15
DRREDDY	9-Jan-17	25-Jan-17	3074.15	3060.20
DRREDDY	10-Jan-17	25-Jan-17	3053.80	3041.85
DRREDDY	11-Jan-17	25-Jan-17	3054.25	3042.45
DRREDDY	12-Jan-17	25-Jan-17	3016.45	3008.50
DRREDDY	13-Jan-17	25-Jan-17	2991.45	2979.75
DRREDDY	16-Jan-17	25-Jan-17	2993.55	2985.30
DRREDDY	17-Jan-17	25-Jan-17	2984.45	2976.55
DRREDDY	18-Jan-17	25-Jan-17	2955.85	2948.05
DRREDDY	19-Jan-17	25-Jan-17	2945.75	2940.25
DRREDDY	20-Jan-17	25-Jan-17	2956.50	2947.40
DRREDDY	23-Jan-17	25-Jan-17	2928.55	2923.65
DRREDDY	23-Jan-17	23-Feb-17	2940.35	2923.65
DRREDDY	24-Jan-17	25-Jan-17	2973.70	2973.35
DRREDDY	24-Jan-17	23-Feb-17	2984.80	2973.35
DRREDDY	25-Jan-17	25-Jan-17	2996.30	2996.30
DRREDDY	25-Jan-17	23-Feb-17	3008.70	2996.30
DRREDDY	27-Jan-17	23-Feb-17	3013.80	2994.55
DRREDDY	30-Jan-17	23-Feb-17	3037.35	3017.05

DRREDDY	31-Jan-17	23-Feb-17	3032.35	3018.80
DRREDDY	1-Feb-17	23-Feb-17	3013.45	3001.20
DRREDDY	2-Feb-17	23-Feb-17	3109.45	3097.05
DRREDDY	3-Feb-17	23-Feb-17	3155.60	3144.55
DRREDDY	6-Feb-17	23-Feb-17	3101.30	3096.80
DRREDDY	7-Feb-17	23-Feb-17	3066.55	3065.10
DRREDDY	8-Feb-17	23-Feb-17	3028.20	3015.45
DRREDDY	9-Feb-17	23-Feb-17	3031.30	3023.10
DRREDDY	10-Feb-17	23-Feb-17	2982.40	2976.05
DRREDDY	13-Feb-17	23-Feb-17	2976.00	2966.95
DRREDDY	14-Feb-17	23-Feb-17	2949.25	2941.45
DRREDDY	15-Feb-17	23-Feb-17	2918.45	2911.35
DRREDDY	16-Feb-17	23-Feb-17	2931.75	2923.20
DRREDDY	17-Feb-17	23-Feb-17	2919.70	2912.70
DRREDDY	20-Feb-17	23-Feb-17	2904.65	2898.75
DRREDDY	21-Feb-17	23-Feb-17	2900.05	2894.05
DRREDDY	22-Feb-17	23-Feb-17	2901.05	2903.20
DRREDDY	23-Feb-17	23-Feb-17	2887.40	2887.40
DRREDDY	27-Feb-17	30-Mar-17	2871.10	2857.00
DRREDDY	28-Feb-17	30-Mar-17	2864.55	2849.95
DRREDDY	1-Mar-17	30-Mar-17	2935.70	2923.30
DRREDDY	2-Mar-17	30-Mar-17	2879.45	2870.50
DRREDDY	3-Mar-17	30-Mar-17	2884.15	2871.10
DRREDDY	6-Mar-17	30-Mar-17	2873.85	2858.85
DRREDDY	7-Mar-17	30-Mar-17	2868.40	2852.30
DRREDDY	8-Mar-17	30-Mar-17	2862.30	2846.80
DRREDDY	9-Mar-17	30-Mar-17	2718.80	2704.85
DRREDDY	10-Mar-17	30-Mar-17	2730.00	2715.85
DRREDDY	14-Mar-17	30-Mar-17	2747.15	2741.00
DRREDDY	15-Mar-17	30-Mar-17	2751.30	2739.60
DRREDDY	16-Mar-17	30-Mar-17	2762.30	2751.70
DRREDDY	17-Mar-17	30-Mar-17	2737.70	2736.25
DRREDDY	20-Mar-17	30-Mar-17	2742.75	2734.35
DRREDDY	21-Mar-17	30-Mar-17	2624.55	2623.25
DRREDDY	22-Mar-17	30-Mar-17	2635.10	2629.65
DRREDDY	23-Mar-17	30-Mar-17	2636.05	2631.20
DRREDDY	24-Mar-17	30-Mar-17	2627.95	2628.35
DRREDDY	27-Mar-17	30-Mar-17	2635.70	2631.95
DRREDDY	27-Mar-17	27-Apr-17	2644.75	2631.95
DRREDDY	28-Mar-17	30-Mar-17	2635.85	2637.75
DRREDDY	28-Mar-17	27-Apr-17	2644.40	2637.75

DRREDDY	29-Mar-17	30-Mar-17	2632.20	2633.65
DRREDDY	29-Mar-17	27-Apr-17	2642.70	2633.65
DRREDDY	30-Mar-17	30-Mar-17	2613.25	2613.25
DRREDDY	30-Mar-17	27-Apr-17	2628.85	2613.25
DRREDDY	31-Mar-17	27-Apr-17	2638.20	2632.35
DRREDDY	3-Apr-17	27-Apr-17	2747.50	2744.45
DRREDDY	5-Apr-17	27-Apr-17	2744.95	2741.35
DRREDDY	6-Apr-17	27-Apr-17	2721.70	2718.10
DRREDDY	7-Apr-17	27-Apr-17	2663.20	2661.35
DRREDDY	10-Apr-17	27-Apr-17	2649.30	2635.85
DRREDDY	11-Apr-17	27-Apr-17	2637.55	2628.10
DRREDDY	12-Apr-17	27-Apr-17	2649.35	2644.85
DRREDDY	13-Apr-17	27-Apr-17	2653.80	2640.95
DRREDDY	17-Apr-17	27-Apr-17	2672.20	2661.25
DRREDDY	18-Apr-17	27-Apr-17	2638.90	2628.45
DRREDDY	19-Apr-17	27-Apr-17	2617.80	2607.40
DRREDDY	20-Apr-17	27-Apr-17	2624.15	2612.50
DRREDDY	21-Apr-17	27-Apr-17	2620.10	2609.65
DRREDDY	24-Apr-17	27-Apr-17	2622.00	2612.80
DRREDDY	24-Apr-17	25-May-17	2631.10	2612.80
DRREDDY	25-Apr-17	27-Apr-17	2653.65	2645.95
DRREDDY	25-Apr-17	25-May-17	2664.65	2645.95
DRREDDY	26-Apr-17	27-Apr-17	2619.55	2610.65
DRREDDY	26-Apr-17	25-May-17	2627.75	2610.65
DRREDDY	27-Apr-17	27-Apr-17	2596.55	2596.55
DRREDDY	27-Apr-17	25-May-17	2606.35	2596.55
DRREDDY	28-Apr-17	25-May-17	2611.00	2599.15
DRREDDY	2-May-17	25-May-17	2596.00	2582.65
DRREDDY	3-May-17	25-May-17	2611.80	2595.60
DRREDDY	4-May-17	25-May-17	2615.95	2606.00
DRREDDY	5-May-17	25-May-17	2613.30	2603.00
DRREDDY	8-May-17	25-May-17	2615.05	2600.50
DRREDDY	9-May-17	25-May-17	2595.55	2581.15
DRREDDY	10-May-17	25-May-17	2608.75	2602.85
DRREDDY	11-May-17	25-May-17	2597.30	2594.00
DRREDDY	12-May-17	25-May-17	2592.60	2580.80

Data Analysis

The near month futures contract has been used for the study as they are heavily traded as compared to next month(1month) and far month(2-3 months) future contracts. All the required data information for the study has been retrieved from the National Stock Exchange of India(NSE) website.

As a preliminary investigation, Augmented Dickey Fuller tests was employed to test the stationarity of spot and future price series of selected stocks. And then Johansen's Cointegration test is performed to examine the long-run relationship between spot and future markets of selected stocks.

After identifying single cointegration vector between spot and future prices of the selected stocks, the Vector Error Correction Model (VECM) was employed to examine the causal nexus between future and spot market of the stocks. Besides, the vector error correction model is sensitive to the selection of optimal lag length and the necessary lag length of future and spot price series for the selected stocks are determined by the Schwarz Information Criterion (SC).

Preliminary Test (Augmented Dickey Fuller Test)

As a preliminary investigation, Augmented Dickey Fuller tests was employed to test the stationarity of Spot and Future price series. Results are shown below:

Table 5: Augmented Dickey Fuller Test Results

Stocks	Series		t-Statistics	Probability
TCS	Future Price	At Level	-2.604122	0.0929
		At First Difference	-18.73063	0.0000
TCS	Spot Price	At Level	-2.728302	0.0701
		At First Difference	-19.11210	0.0000
MindTree	Future Price	At Level	-1.0087120	0.7224
		At First Difference	-23.000954	0.0000
MindTree	Spot Price	At Level	-1.168101	0.6896
		At First Difference	-22.05641	0.0000
Cipla	Future Price	At Level	-2.079770	0.2531
		At First Difference	-26.08301	0.0000
Cipla	Spot Price	At Level	-2.071241	0.2566
		At First Difference	-25.24998	0.0000
Dr Reddy	Future Price	At Level	-1.235980	0.6603
		At First Difference	-14.39097	0.0000
Dr Reddy	Spot Price	At Level	-1.235245	0.6606
		At First Difference	-21.60798	0.0000

Result reveals that both the data series of future and spot price of TCS are stationary after first difference. Now Johansen's Cointegration test can be performed to examine the long-run relationship between spot and future markets

Johansen Co-integration Test

Table 6: Johansen Integration Test Results

Stock	Hypothesized	Eigen	Trace	Critical Value	Probability
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	No. of CE(s)	Value	Statistic		
TCS	None*	0.099797	52.67220	15.49471	0.0000
	At most 1*	0.018624	7.989955	3.841466	0.0047
MindTree	None*	0.222948	137.7336	15.49471	0.0001
	At most 1	0.002340	1.267673	3.841466	0.2602
Cipla	None*	0.128208	77.77631	15.49471	0.0000
	At most 1	0.006539	3.549015	3.841466	0.0596
Dr. Reddy	None*	0.163565	99.70243	15.049471	0.0001
	At most 1	0.004995	2.718902	3.841466	0.0992

Note : * denotes rejection of the hypothesis at the 0.05 level

The Table-II result reveals that presence of one co-integrating vector between Future and spot prices for MindTree, Cipla and Dr Reddy. But we have not found the co-integrating vector between future and spot price of TCS.

VECM Test

The Vector Error Correction Model (VECM) was employed to examine the causal nexus between future and spot market of the selected agricultural commodity and its results are presented in below table. Besides, the vector error correction model is sensitive to the selection of optimal lag length and the necessary lag length of future and spot price series for the selected agricultural commodities are determined by the Schwarz Information Criterion (SC).

Table 7:Long Run Causality Analysis

Stocks	Relationship		Coefficient	Std. Error	t-Statistic	Probability
MindTree	Future To Spot(+ve)	C(1)	-3.058046	0.251586	-12.15508	0.0000
	Spot to Future (-ve)	C(1)	2.746861	0.233802	11.74866	0.0000
Cipla	Future to Spot(-ve)	C(1)	-0.258284	0.424044	-0.609098	0.5427
	Spot to Future (-ve)	C(1)	-0.262844	0.423782	-0.620233	0.5354
Dr Reddy	Future To Spot (-ve)	C(1)	0.640444	0.474324	1.350224	0.1775
	Spot to Future (+ve)	C(1)	-1.090690	0.468111	-2.329982	0.0202

By and large, the above table results of vector error correction model reveal mixed findings. There is one-way causal linkage from future market to spot market prices for MindTree and Dr Reddy. This indicates that information gets reflected first in the future prices and then it transmitted to spot market prices of the MindTree and Dr Reddy. We found no causal relationship for Cipla in the long term.

Wald Test

Table 8:Short Run Causality Analysis

Stocks	Relationship	Test Statistic	Value	df	Probability
MindTree	Future To Spot(-ve)	F-statistic	56.027243	(3,533)	0.0000
		Chi-Square	168.8173	3	0.0000
	Spot to Future (-ve)	F-statistic	58.00474	(3,534)	0.0000
		Chi-Square	174.0142	3	0.0000

Cipla	Future To Spot(+ve)	F-statistic	2.318670	(3,533)	0.0746
		Chi-Square	6.956009	3	0.0733
	Spot to Future (+ve)	F-statistic	3.986624	(3,534)	0.0080
		Chi-Square	11.95987	3	0.0075
Dr Reddy	Future To Spot(+ve)	F-statistic	1.206896	(3,533)	0.3065
		Chi-Square	3.620689	3	0.3054
	Spot to Future (+ve)	F-statistic	1.533087	(3,534)	0.2049
		Chi-Square	4.599261	3	0.2036

In the short run we found unidirectional causality MindTree from Spot to Future. It is bidirectional in case of Cipla and Dr Reddy. This reveals that in case of MindTree spot price leads but in case of Cipla and Dr Reddy both the spot and future markets price of plays a leading role through price discovery process and is said to be efficient and reacts more quickly to each other.

Findings and Recommendations

There is one-way causal linkage from future market to spot market prices for MindTree and Dr Reddy. This indicates that information gets reflected first in the future prices and then it transmitted to spot market prices of the MindTree and Dr Reddy. We found no causal relationship for Cipla in the long term.

In the short run we found unidirectional causality MindTree from Spot to Future. It is bidirectional in case of Cipla and Dr Reddy. This reveals that in case of spot price leads but in case of Cipla and Dr Reddy both the spot and future markets price of plays a leading role through price discovery process and is said to be efficient and reacts more quickly to each other.

Limitation of the Study

Data used in this study is limited to the 1-month future and spot price, and only 2 year data is analyzed. Hence there is a possibility of the change in results with large duration data including 2 and 3 month futures data.

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