

**STOCK OPTION VALUATION REPORT**

**OF**

**CITY UNION BANK LIMITED**

**Done by**

**M.ALAGAR**

**Registered Valuer**

**IBBI Registration No. IBBI/RV/03/2018/10227**

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## CONTENTS

S.no	Content	Page. No
01	Terms of Reference	4
02	Information relied upon by us	4
03	Methods of Valuation	5
05	Method adopted for Valuation of Stock Option	6
06	Valuation of Options	7
07	Notice	7
08	Annexure I	9
09	Annexure II	10
10	Annexure III	11



## I. TERMS OF REFERENCE

- a) "City Union Bank Limited (hereinafter referred as "**the Bank**" or "**the Client**") has implemented an Employee Stock Option Scheme called '**CUB ESOS 2008**' and vide Nomination and Remuneration Committee has granted 46,09,500 stock options to its eligible employees on December 15, 2018 during the year 2018-19, which would entitle the option holders to acquire equity shares under the ESOS scheme as per the terms and conditions laid down thereunder.
- b) For the purpose of disclosure of diluted earnings and disclosure of difference in employee compensation cost using "Intrinsic Value" method and "The Fair Value" method in the Company's Directors Report for the year ending March 31, 2019 as per SEBI (Share Based Employee Benefits) Regulations, 2014, the Bank has appointed me vide engagement letter dated May 30, 2019 for valuation of stock options issued during the year 2018-19.

## II. INFORMATION RELIED UPON BY US

- a) We have prepared our Valuation Report on the basis of the following information:
  - i. A detailed note on the options scheme "CUB ESOS 2008" provided to us by the Bank
  - ii. Historical financials provided to us by the bank.
  - iii. Bank Website.
  - iv. Stock Price (on the **NSE**) performance over the last 1 year one day preceding the date of grant.
  - v. Yield on the Government of India (GOI) notes.
  - vi. Option adjustment report issued Karvy Investor Services Limited dated November 01, 2018 for adjusting price and additional entitlement of shares pursuant to bonus issue.
  - vii. Details of stock options outstanding provided by the Bank.
  - viii. Copy of Nomination and Remuneration Committee resolution dated December 15, 2018 issuing stock options to the employees.
  - ix. Discussions with and explanations given by the management / senior executives of City Union Bank on various issues



### **III. METHODS OF VALUATION**

There are two principal methods for valuing options:

- a) Black-Scholes Model
- b) Binomial Model

Each of the above two methods has its suitability, depending upon the facts of the case and the objectives of the valuation. However, for the purpose of ready reference, these methods are explained below in brief.

#### **a) Black-Scholes Model**

The Black-Scholes model is a single formula with six fixed input factors that computes an estimate of an option's fair value. The factors are, Exercise Price of the option, Market Price of the underlying share on the date of issue, Expected Term of the option, Expected Volatility of the price of the underlying share for the expected term of the option, Expected dividends on the underlying share for the expected term of the option and Risk-free interest rate for the expected term of the option

It assumes that option exercises occur at the end of an option's contractual term, and that expected volatility, expected dividends, and risk-free interest rates are constant over the option's term.

#### **b) Binomial Model**

The Binomial Model incorporates multiple and variable assumptions of expected volatility and dividends over the option's contractual term, and estimates of expected option exercise patterns during the option's contractual term, including the effect of blackout periods.

The design of the binomial model requires more inputs and judgments to be made by management, but may more fully reflect the substantive characteristics of a particular employee share option or similar instrument.

The binomial model also requires extensive calculations, which require very complex computer-based models.

The Binomial model is both time-consuming and costly. Many public companies find it difficult to perform binomial calculations without external assistance and many do not have the required data, at least initially, needed for inputs into a binomial model. Hence many companies choose the Black-Scholes model as it easy to use and less time consuming. Owing to its inherent benefits we have used the Black-Scholes model to value the options of City Union Bank.

#### IV. METHOD ADOPTED FOR VALUATION OF STOCK OPTIONS

I have adopted Black-Scholes Model to arrive fair value of stock options granted during the year 2018-19 using the following formula and based on following assumptions;

Formula:

$$C = \eta(SN(\eta d1)e^{-qt} - Ke^{-rt}N(\eta d2))$$

Where,

C = theoretical value of an option

S = price of the underlying

K = exercise price

t = time to expiration in years

$\sigma$  = annual volatility in percent

r = risk free interest rate

q = continuous dividend yield

e = base of the natural logarithm

ln = natural logarithm

$N(x)$  = cumulative normal distribution function

$N'(x)$  = normal density function

$\eta$  = positive one for call options and negative one for put options

$$d1 = \frac{\ln(S/K) + ((r-q) + 1/2 \sigma^2)t}{\sigma\sqrt{t}}$$

$$d2 = d1 - \sigma\sqrt{t}$$

#### **Assumptions & Values**

- i. Risk Free Rate – Yield on the appropriate period Government Securities has been considered as the risk-free rate as on date of grant.
- ii. Expected Volatility – Standard Deviation of the stock returns of City union Bank over the trailing one year period from the date of grant of options has been considered.
- iii. Expected Dividend – Based on the last annual dividend payout by the Bank

## V. VALUATION OF OPTIONS

- a. During the financial year 2018-19, the Bank has granted stock options to its employees under ESOS 2008 as detailed below;

Particulars	ESOS 2008
Date of Grant	December 15, 2018
No. of Options Granted	46,09,500
Vesting Period	5 Years
Exercise Price	Rs.179.00
Market Price at the time of grant	Rs.179.00
Expected Life	5 Years
Risk Free Rate*	7.35%
Expected Dividend (annualized)	0.17%
Annualized Standard Deviation (Stock Variance)	5%

\*Source: www.marketwatch.com

- b. We hereby certify that fair value of options granted during the financial year 2018-19 are as follows;

Particulars	ESOS 2008
Fair value of option	Rs.53.56 per option
*Intrinsic Value of option	Rs.0.00 per option

\*Difference between market price and grant price at the time of grant.

## VI. NOTICE

- a. This Report is furnished solely for purpose of disclosure of diluted earnings and disclosure of difference in employee compensation cost using "Intrinsic Value" method and "The Fair Value" method in the Company's Directors Report for the year ending March 31, 2019 as per SEBI (Share Based Employee Benefits) Regulations, 2014.
- b. The Bank shall not use this report for any other purpose other than stated above.



- c. The report is to be read in totality, and not in parts, in conjunction with the relevant documents referred to herein.
- d. My work does not constitute an audit or certification of the subject Bank's financial. Accordingly, I am unable to and do not express any opinion on the accuracy of information referred to in this report. I assume no responsibility for any errors in the information submitted by the management and their impact on the present exercise.
- e. This valuation report is issued on the understanding that the Bank has drawn my attention to all the relevant matters, of which it was aware, concerning the Bank's financial projection and business which may have an impact on my Report.

Thanking you,

Yours faithfully



**M. Alagar**

**Registered Valuer**

**M. No. IBBI/RV/03/2018/10227**



**Date: June 04, 2019**

**Place: Chennai**

**ANNEXURE I**

**City Union Bank Limited Stock Options - Computation of employees compensation cost for FY 2018-19**

Computation of impact on profits of the Company - ESOS 2008 - FY 18-19							
Date of grant	06.12.08	25.05.10	05.10.10	29.07.13	24.01.15	21.09.15	15.12.18
No of options granted in force as on 01.04.2018	0	9979	131522	1256172	6044644	1296241	0
<b>Add:</b> Options granted during the year due to corporate action	0	0	6141	115473	558431	119702	4609500
<b>Less:</b> Options Lapsed during the year	0	9979	11934	30223	213683	14190	0
<b>Options granted (net of employee separation) as on 31.03.2019 (A)</b>	<b>0</b>	<b>0</b>	<b>125729</b>	<b>1341422</b>	<b>6389392</b>	<b>1401753</b>	<b>5E+06</b>
Less: Options exercised during the year	0	0	125729	927570	1898154	284888	0
<b>Options Outstanding as on 31.03.2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>413852</b>	<b>4491238</b>	<b>1116865</b>	<b>5E+06</b>
Vesting Period	5 Years - 15%, 15%, 15%, 25% and 30%						
Market Price at the time of grant (B)	13.00	32.00	47.00	46.95	93.2	88.05	179.00
Exercise Price (C)	13.00	32.00	47.00	46.95	93.2	88.05	179.00
Intrinsic Value (B-C=D)	0	0	0	0	0	0	0
Fair value of stock options (as per Black-Scholes - Model (E))	10.71	6.95	12.15	9.88	29.99	22.83	53.56
<b>Employee Compensation Cost using Intrinsic Value of Option</b>							
Amortised ECC for FY 18-19, over relevant vesting period	0	0	0	0	0	0	0
Less: Credit provided for lapsed options	0	0	0	0	0	0	0
Net impact on profits, for FY 18-19	0	0	0	0	0	0	0
<b>Total impact on profits, for FY 18-19</b>	<b>0</b>						
<b>Employee Compensation Cost using Fair Value of Option</b>							
Amortised ECC for FY 18-19, over relevant vesting period	0	0	0	0	5748536	8000505	0
Less: Credit provided for lapsed options	0	69354	144998	298603	4485847	145781	0
Net Impact to the profits for FY 18-19	0	-69354	-144998	-298603	5299951	7854724	0
<b>Total impact on profits, for FY 18-19</b>	<b>60341281</b>						

\*4609500 was granted by NRC vide resolution dated December 15, 2018 to the eligible employees





**ANNEXURE II**

**City Union Bank Limited Stock Options - Computation of Weighted Average Information FY 2018-19**

Date of Grant	06.12.08	25.05.10	05.10.10	29.07.13	24.01.15	21.09.15	15.12.18
Total number of options granted (Including additional grant upon rights issue & bonus issue)	22781250	370071	3168056	4678936	10945549	1755378	4609500
Less: Options lapsed (Cumulative for all years)	1930342	87771	911007	1027608	1418428	66615	0
Less: Options exercised (Cumulative for all years)	20850908	282300	2257049	3237476	5035883	571898	0
<b>Total Options outstanding as on 31.03.2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>413852</b>	<b>4491238</b>	<b>1116865</b>	<b>4609500</b>
Cumulative Options outstanding	10631455						
Market Price as on date prior to the date of grant	13.00	32.00	47.00	46.95	93.2	88.05	179.00
<b>Weighted Avg Market Price</b>	<b>128.06</b>						
Exercise price as on date of grant	13.00	32.00	47.00	46.95	93.20	88.05	179.00
Weighted Exercise Price	0	0	0	19430351	41858338 2	98339963.2 5	82510050 0
Cumulative Weighted Exercise Price	1361454196						
<b>Weighted Avg Exercise Price</b>	<b>128.06</b>						
*Risk free interest rate (%)	4.51	7.20	7.20	7.44	7.8	7.7	7.35
<b>Weighted Avg Risk Free Interest Rate</b>	<b>7.58</b>						
**Expected stock volatility, based on historical deviation (%)	0.035	0.0195	0.040	0.0035	0.0438	0.0036	0.0022
<b>Weighted Avg Stock Volatility</b>	<b>0.0200</b>						
Fair Value as on date of grant (in Rs)	10.71	6.95	12.15	9.88	29.99	22.83	53.56
Wiegths	0	0	0	4088857.8	13469222 8	25498027.9 5	24688482 0
Cumulative Weights	411163933						
<b>Weighted Avg Fair Value</b>	<b>38.67</b>						

\*5 years G. Sec rate at time of every grant of stock options

\*\*Expected stock volatility, based one year share price movement preceding every grant

**ANNEXURE TO DIRECTOR'S REPORT**

The Shareholders of the City Union Bank Ltd. ("the Bank") had approved the Employees Stock Options Scheme at the Extraordinary General Meeting held on April 26, 2008. As per the Scheme, a total of 5,00,00,000 stock options were available for grant to the eligible employees of the Bank, through Primary Source.

The vested options are exercisable over a period of 5 years from the respective dates of vesting. Further, Nomination and Remuneration Committee of the Bank vide its resolution dated 15 December 2018, considered and approved fresh grant of Employee stock options under CUB ESOS Scheme 2008 - Series VII, to the eligible employees of the Bank as detailed hereunder.

Particulars	ESOS 2008						
	Series I	Series II	Series III	Series IV	Series V	Series VI	Series VII
Total number of options granted (Including additional grant upon rights & bonus issue)	2,27,81,250	3,70,071	31,68,056	46,78,936	1,09,45,549	17,55,378	46,09,500
Pricing Formula	Rs. 13.00	Rs. 32.00	Rs. 47.00	Rs. 46.95	Rs. 93.20	Rs. 88.05	Rs.179.00
Revised price due to rights & bonus issue	Rs.10.55	Rs.26.91	Rs.34.38	Rs.38.80	Rs.77.03	Rs.72.77	--
No of options outstanding as on 01.04.2018	0	9,979	1,31,522	12,56,172	60,44,644	12,96,241	0
No of additional options granted pursuant to Bonus Issue during the year	0	0	6,141	1,15,473	5,58,431	1,19,702	0
No. of fresh options granted during the year	0	0	0	0	0	0	46,09,500
No of options lapsed during the year	0	9,979	11,934	30,223	2,13,683	14,190	0
No of options exercised during the year	0	0	1,25,729	9,27,570	18,98,154	2,84,888	0
No of shares arising as a result of exercise of option during the year	0	0	1,25,729	9,27,570	18,98,154	2,84,888	0
Variation in terms of Options	Not Applicable						
Vesting Period	1 <sup>st</sup> year - 15%, 2 <sup>nd</sup> year - 15%, 3 <sup>rd</sup> year - 15%, 4 <sup>th</sup> year - 25% and 5 <sup>th</sup> year - 30%.						
Money realized by exercise of Options during the year	0	0	104,99,248	390,98,337	18,61,83,923	1,33,49,858	0
Loan repaid by the Trust during the year from the exercise price received	Not applicable						



Total Number of Options outstanding at the end of the year 31.03.2019	0	0	0	4,13,852	44,91,238	11,16,865	46,09,500
Employee wise details of Options granted							
i) Senior Management Personnel	NIL						
ii) Any other employee who received a grant in any one year of the options amounting to 5% or more of the options granted during the year	NIL						
iii) Identified employees who were granted options during any one year equal to or exceeding 1% of the issued capital (excluding outstanding warrants and conversions) of the Bank at the time of grant	NIL						
Allotment of shares made during the Financial Year under ESOS							
Employee wise details of the shares allotted to							
<b>i) Senior Managerial Personnel</b>							
Shri. R Venkatasubramanian	-	-	-	-	16,500	-	-
Shri. K P Sridhar	-	-	-	-	9,075	-	-
Shri. V Ramesh	-	-	-	-	1,650	1,650	-
Shri. K Maharajan	-	-	-	-	-	1,815	-
Shri. K Jayaraman	-	-	-	-	7,425	-	-
Shri. V Gopalakrishnan	-	-	-	-	1,560	-	-
Shri. G Sankaran	-	-	-	-	5,775	-	-
Shri. R K Lakshminarayanan	-	-	-	-	-	1,815	-
Shri. J Sridharan	-	-	-	-	1,650	3,630	-
Shri. V Ganesan	-	-	-	-	6,930	-	-
Shri. S Ramesh	-	-	-	-	13,310	-	-
Shri. R Subramanian	-	-	-	-	-	1,815	-



ii) Any other employee who received a grant in any one year of the options amounting to 5% or more of the options granted during the year	NIL
iii) Identified employees who were granted options during any one year equal to or exceeding 1% of the issued capital (excluding outstanding warrants and conversions) of the Bank at the time of grant	NIL

Employee compensation cost calculated as per the intrinsic value method for the financial year 2018- 19 is NIL. If the Employee compensation cost was calculated as per fair value method as prescribed under SEBI (Share Based Employee Benefits) Regulations, 2014, the total cost to be recognized in the financial statement for the Financial Year 2018-19 would be Rs. 6,03,41,281/-. Consequently, net profit would have been reduced by Rs. 6,03,41,281/-and EPS would have been reduced by Re. 0.082 per share.

#### Weighted Average Details

Weighted Avg Market Price (In Rs.)	128.06
Weighted Avg Exercise Price (In Rs.)	128.06
Weighted Avg Risk Free Interest Rate (%)	7.58
Weighted Avg Stock Volatility	0.022
Weighted Avg Fair Value of Options (In Rs.)	38.67

The Company has adopted Black-Scholes model to arrive value of options granted under ESOS 2008 based on the following assumptions.

1. Risk Free Rate – Yield on the appropriate period Government Securities has been considered as the risk-free rate.
2. Expected Volatility – Standard Deviation of the stock returns of City Union Bank over the trailing one year period prior to the date of grant of options has been considered.
3. Expected Dividend – Based on the last dividend pay-out by the Bank.

