



INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION AND MANAGEMENT

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	CORPORATE GOVERNANCE IN INDIA: TOWARDS INTROSPECTION AND SOLUTIONS ANJANEY PANDEY, MAHESWAR SATPATHY & GOVIND SINGH	1
2.	QUALITY FUNCTION DEPLOYMENT FOR SERVICE DEVELOPMENT OF SELECTED PRIVATE COLLEGES/UNIVERSITIES MA. TEODORA E. GUTIERREZ	4
3.	CULTURAL APTITUDE & ADJUSTMENT - THE IMPACT OF THE EXPECTED TENURE OF A CROSS CULTURAL PROJECT SHAHZAD GHAFOR & UZAIR FAROOQ KHAN	9
4.	REPORTING ENVIRONMENTAL ISSUES AND INFORMATION DISCLOSURES IN FINANCIAL STATEMENTS DR. TAIWO ASAOLU & DR. JOHN A. ENAHORO	15
5.	ISLAMIC MICRO-FINANCE AND POVERTY ALLEVIATION: A CASE OF PAKISTAN DR. WAHEED AKHTER, DR. NADEEM AKHTAR & KHURAM ALI JAFRI	24
6.	AN OBJECTIVE ASSESSMENT OF CONTEMPORARY OPTION PRICING MODELS DIPTI RANJAN MOHANTY & DR. SUSANTA KUMAR MISHRA	28
7.	E-LEARNING: THE DIGITIZATION STRATEGY RAFI AHMED KHAN & DR. ISHTIAQ HUSSAIN QURESHI	31
8.	FINANCIAL PERFORMANCE OF MILK UNIONS – A STUDY AT KARNATAKA MILK FEDERATION DR. M. JEYARATHNAM & GEETHA. M. RAJARAM	35
9.	INVESTORS PERCEPTION TOWARDS INVESTMENT IN MUTUAL FUNDS DR. R. NANDAGOPAL, M. SATHISH, K. J. NAVEEN & V. JEEVANANTHAM	40
10.	BUSINESS IN GEMSTONE POLISHING: AN EMERGING INDUSTRIAL TRAINING & ENTREPRENEURSHIP OPTION FOR INCLUSIVE GROWTH IN EASTERN INDIA DR. S. P. RATH, PROF. BISWAJIT DAS, DR. SHIVSHANKAR K. MISHRA & PROF. SATISH JAYARAM	45
11.	A COMPARITIVE STUDY BETWEEN HOTEL GOLD & NIRULA'S – PANIPAT CITY DR. PUJA WALIA MANN & MANISH JHA	49
12.	IMPROVEMENT OF WORKPLACE CHARACTERISTICS THROUGH SPIRITUAL INCLINATION DR. R. KRISHNAVENI & G. NATARAJAN	54
13.	MEASURING THE SERVICE QUALITY OF SERVICE SECTOR - A CASE OF COMMERCIAL BANK OF ETHIOPIA R. RENJITH KUMAR	59
14.	SUPPLY CHAIN MANAGEMENT IN AN AUTOMOBILE COMPANY: A CASE STUDY ARVIND JAYANT & V. PATEL	62
15.	INFORMATION CONTENT OF DIVIDENDS: EMPIRICAL STUDY OF BSE LISTED COMPANIES DR. KARAMJEET KAUR	69
16.	NEED FOR CONVERGING TO IFRS: THE NEW GLOBAL REPORTING LANGUAGE DR. AMARJEET KAUR MALHOTRA	77
17.	ALLEVIATION OF POVERTY THROUGH RURAL DEVELOPMENT- AN ANALYSIS DR. PAWAN KUMAR DHIMAN	81
18.	FORECASTING MONTHLY FOREIGN INSTITUTIONAL INVESTMENTS IN BSE AND NSE EQUITY MARKET USING ARIMA MODEL DR. S. SUDALAIMUTHU & ANBUKARASI	86
19.	A STEP FORWARD: FROM FUZZY TO NEURO-FUZZY APOORVI SOOD & SWATI AGGARWAL	92
20.	USAGE OF E-RESOURCES BY ACADEMICS – A STUDY (WITH REFERENCE TO AFFILIATED BHARATHIAR UNIVERISTY COLLEGES, COIMBATORE CITY) DR. M. MEENAKSHI SARATHA & DR. D. MAHESH	96
21.	A STUDY ON IMPACT OF JOB SATISFACTION ON QUALITY OF WORK LIFE AMONG EMPLOYEES IN HOTEL INDUSTRY (WITH REFERENCE TO CATEGORIZED HOTELS IN FARIDABAD REGION) VIJIT CHATURVEDI & DR. D. S. YADAV	101
22.	RURAL ENTREPRENEURSHIP: EXPLORING THE OPPORTUNITIES FROM WASTE PRODUCTS OF BANANAS PLANT IN KARNATAKA RASHMI S. B. & V. JYOTHSNA	105
23.	HUMAN RESOURCE ACCOUNTING (HRA) - A CONCEPTUAL FRAMEWORK AND INTERNATIONAL DEVELOPMENTS DR. AJAZ AKBAR MIR & MANMEET SINGH	108
24.	MICROFINANCE USING INFORMATION & COMMUNICATION TECHNOLOGIES S. KUMAR CHANDAR	115
25.	FUNDAMENTAL & TECHNICAL ANALYSIS OF REAL ESTATE SECTOR: AN INDIAN PERSPECTIVE PUNEET KUMAR	119
	REQUEST FOR FEEDBACK	130

CHIEF PATRON**PROF. K. K. AGGARWAL**

Chancellor, Lingaya's University, Delhi
Founder Vice-Chancellor, Guru Gobind Singh Indraprastha University, Delhi
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

PATRON**SH. RAM BHAJAN AGGARWAL**

Ex. State Minister for Home & Tourism, Government of Haryana
Vice-President, Dadri Education Society, Charkhi Dadri
President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

CO-ORDINATOR**MOHITA**

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

ADVISORS**PROF. M. S. SENAM RAJU**

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

PROF. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR**PROF. R. K. SHARMA**

Dean (Academics), Tecnia Institute of Advanced Studies, Delhi

CO-EDITOR**MOHITA**

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

EDITORIAL ADVISORY BOARD**DR. AMBIKA ZUTSHI**

Faculty, School of Management & Marketing, Deakin University, Australia

DR. VIVEK NATRAJAN

Faculty, Lomar University, U.S.A.

DR. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. PARVEEN KUMAR

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

PROF. H. R. SHARMA

Director, Chhatrapati Shivaji Institute of Technology, Durg, C.G.

PROF. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

PROF. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

DR. ASHWANI KUSH

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

DR. BHARAT BHUSHAN

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

DR. VIJAYPAL SINGH DHAKA

Head, Department of Computer Applications, Institute of Management Studies, Noida, U.P.

DR. SAMBHAVNA

Faculty, I.I.T.M., Delhi

DR. MOHINDER CHAND

Associate Professor, Kurukshetra University, Kurukshetra

DR. MOHENDER KUMAR GUPTA

Associate Professor, P. J. L. N. Government College, Faridabad

DR. SAMBHAV GARG

Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana

DR. SHIVAKUMAR DEENE

Asst. Professor, Government F. G. College Chitgappa, Bidar, Karnataka

DR. BHAVET

Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana

ASSOCIATE EDITORS**PROF. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida

PROF. NAWAB ALI KHAN

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

DR. ASHOK KUMAR

Head, Department of Electronics, D. A. V. College (Lahore), Ambala City

ASHISH CHOPRA

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

SAKET BHARDWAJ

Lecturer, Haryana Engineering College, Jagadhri

TECHNICAL ADVISORS**AMITA**

Faculty, E.C.C., Safidon, Jind

MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

FINANCIAL ADVISORS**DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS**JITENDER S. CHAHAL**

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

CHANDER BHUSHAN SHARMA

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT**SURENDER KUMAR POONIA**

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email addresses, **info@ijrcm.org.in** or **infoijrcm@gmail.com**.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

Dated: _____

The Editor

IJRCM

Subject: Submission of Manuscript in the Area of _____
(e.g. Computer/Finance/Marketing/HRM/General Management/other, please specify).

Dear Sir/Madam,

Please find my submission of manuscript titled ' _____ ' for possible publication in your journal.

I hereby affirm that the contents of this manuscript are original. Furthermore it has neither been published elsewhere in any language fully or partly, nor is it under review for publication anywhere.

I affirm that all author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if our/my manuscript is accepted, I/We agree to comply with the formalities as given on the website of journal & you are free to publish our contribution to any of your journals.

Name of Corresponding Author:

Designation:

Affiliation:

Mailing address:

Mobile & Landline Number (s):

E-mail Address (s):

2. **INTRODUCTION:** Manuscript must be in British English prepared on a standard A4 size paper setting. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 12 point Calibri Font with page numbers at the bottom and centre of the every page.
3. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.
4. **AUTHOR NAME(S) & AFFILIATIONS:** The author (s) full name, designation, affiliation (s), address, mobile/landline numbers, and email/alternate email address should be in 12-point Calibri Font. It must be centered underneath the title.
5. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain background, aims, methods, results and conclusion.

6. **KEYWORDS:** Abstract must be followed by list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
9. **MAIN TEXT:** The main text should be in a 8 point Calibri Font, single spaced and justified.
10. **FIGURES & TABLES:** These should be simple, centered, separately numbered & self explained, and titles must be above the tables/figures. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.
11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
12. **REFERENCES:** The list of all references should be alphabetically arranged. It must be single spaced, and at the end of the manuscript. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (ed.) for one editor, and (ed.s) for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- Use endnotes rather than footnotes.
- The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

Books

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio," Ohio State University.

Contributions to books

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

Journal and other articles

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

Conference papers

- Chandel K.S. (2009): "Ethics in Commerce Education." Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

Unpublished dissertations and theses

- Kumar S. (2006): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

Online resources

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

Website

- Kelkar V. (2009): Towards a New Natural Gas Policy, Economic and Political Weekly, Viewed on February 17, 2011 <http://epw.in/epw/user/viewabstract.jsp>

AN OBJECTIVE ASSESSMENT OF CONTEMPORARY OPTION PRICING MODELS

DIPTI RANJAN MOHANTY

BUSINESS ANALYST

SECURITIES AND CAPITAL MARKETS DOMAIN CONSULTING GROUP, WIPRO TECHNOLOGIES
BANGALORE

DR. SUSANTA KUMAR MISHRA

PROFESSOR

KRUPAJAL BUSINESS SCHOOL
BHUBANESWAR

ABSTRACT

There are several option pricing models available in the existing literature on financial derivatives. Most of them are numerically complex and difficult to comprehend. This paper is a literature review of the two most popular models, Binomial and Black-Scholes.

KEYWORDS

Option valuation models, Financial derivatives, Binomial, Black-Scholes.

SETTING THE CONTEXT

In the circuitous world of capital markets, options and measurements thereof are dependent on accurate mathematical estimates of fair price which are crucial for success. Many researchers prefer to use the traditional Black-Scholes model to price options. Most research projects deal with subjects that focus primarily on Black-Scholes, while occasionally discussing Cox-Ross-Rubinstein and other related models. Such models are based on informed assumptions. A common feature of these models is the assumption that, on a logarithmic scale, the distribution of returns (profits or losses) in the market is normal (Black-Scholes), something close to normal, or something that approaches normal in the limit (Cox-Ross-Rubinstein). Believers of "random walk"-proponents of the Efficient Market Hypothesis (EMH)—would argue that the assumption of normally distributed returns is justified by the Central Limit Theorem. Additionally, stock returns reflect the accumulation of large numbers of equally small, random movements. However, the fundamental question is "Do stock returns really follow the familiar bell-shaped curve of the normal distribution?"

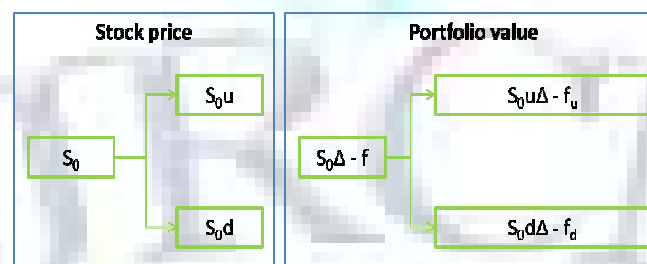
The study of option valuation models is an important consideration. Therefore, in this paper the objective is to undertake a study of the contemporary option valuation models.

In this paper, an overview of the two models which formed the groundwork for option valuation, i.e. the Binary option pricing model and the Black-Scholes model has been presented. This is then followed by an analysis which links the two models empirically using hypothetical data.

BINOMIAL OPTION PRICING MODEL

Cox, Ross and Rubinstein proposed a variant of this model in 1979. The model is based on certain assumptions, which are essentially straight forward and simple to understand. The first assumption is that the stock price (underlying) follows a random walk. A subsequent assumption which is a standard in a host of other valuations is that arbitrage opportunities do not exist. Further as the name suggests, there are only two possible outcomes for the stock price movement, up by a certain percentage or down by a certain percentage. A précis of the methodology is that it is possible to set up a portfolio consisting of some number of a particular stock and an option so that the value of the portfolio at the end of the time period is fixed, i.e. there is no uncertainty. Since, the portfolio carries no uncertainty, i.e. no risk about its value at the end of the period; it should earn only the risk free rate. Hence, we can calculate backwards to arrive at the option's price.

In the single period model, we consider a portfolio with long position in Δ shares. The portfolio also has a short position (sold) one unit of an option in the same stock. S_0 is the current stock price, S_{0u} is the stock price on the uptick and S_{0d} is the stock price on the downtick. Also, ' f ' is the current value of the option. Equating the value at the end of the period for both uptick and downtick and simplifying, we get;



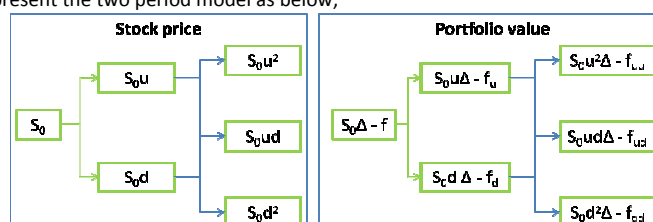
$$f = e^{-rT}[pf_u + (1-p)f_d]$$

where, the symbols have their usual meanings and

$$p = (e^{-rT} - d) / (u - d)$$

Where p is the portfolio value.

Similar to the single period model, we represent the two period model as below;



In this case, there is the second period which leads to 3 possibilities in the movement of the stock price as shown in the diagram. Extending similar logic as single period model, we simplify f as;

$$f = e^{-2r\Delta t}[p^2f_{uu} + 2p(1-p)f_{ud} + (1-p)^2f_{dd}]$$

Now that we have introduced the single period and two period binomial models, we can extend the number of steps to make the valuation more realistic. However, the essence of the argument remains the same.

BLACK-SCHOLES OPTION PRICING MODEL

The Black-Scholes model is arguably the most popular option pricing model. It was first published in "The pricing of corporate liabilities" by F. Black and M. Scholes in the Journal of Political Economy, 1973.

The model makes several key assumptions like being able to borrow and lend at constant risk free rate and absence of transaction costs and taxes. Further, it assumes that the underlying asset follows a geometric Brownian motion and hence the changes in the stock price in a short period are normally distributed. In addition to these, the absence of dividends and the 'no arbitrage opportunity' sum up most of the crucial assumptions of the Black-Scholes model. As per the model, the value of the call option on a non-dividend paying stock is;

$$c = S_0 N(d_1) - Ke^{-rT} N(d_2)$$

and the value of a put call option on a non-dividend paying stock is;

$$P = Ke^{-rT} N(-d_2) - S_0 N(-d_1)$$

Where

$$d_1 = [\ln(S_0/K) + (r + \sigma^2/2)T] / \sigma\sqrt{T}$$

$$d_2 = [\ln(S_0/K) + (r - \sigma^2/2)T] / \sigma\sqrt{T}$$

The symbols used in the equation above have their usual meanings. It is important here to note that $N(d_1)$ and $N(d_2)$ are cumulative probability distributions. Also, the distribution $N(d_2)$ refers to the probability that in a risk free world, the option will be exercised.

THE TWO MODELS SIDE BY SIDE

Binomial		Black Scholes	
1	Flexible	1	Limiting in implementation
2	Finite number of steps	2	Equivalent to infinite number of steps
3	Discrete steps	3	Continuous process for stock price
4	Can value American options	4	For American, use Black's approximation
5	Better suited to value complexities	5	Not so suited to value complexities
6	Intuitive simplicity	6	Non-intuitive (differential equation)

One of the primary reasons the Black Scholes model continues to be the preferred model is speed. It supports calculating a large number of option prices in a very short time.

The assumptions of the Binomial Option Pricing model help simplify the algorithm/ mathematics significantly. However, as always, this simplification comes at the cost of sacrificing some real world scenarios. But that does not make the binomial option pricing model any less realistic. The output of the BOP model converges to that of the Black Scholes model as the number of periods in the model increases to infinity. This implies that the discrete-time Binomial Option Pricing model ultimately becomes identical to the continuous time Black-Scholes model. The BOP model, being the simpler one to comprehend and implement with its less binding assumptions, serves as an approximation to the Black-Scholes model.

Further, in contrast to the Black Scholes model, the BOP model can be used to price a wider range of options, e.g., pricing an American option whose underlying is a stock with irregular dividends payout. Unlike Black Scholes, Binomial Option Pricing models can value American Options because it is possible to check at every node the possibility of early exercise.

Again, in contrast to the Black Scholes model, Binomial Option Pricing model is relevant to value options whose underlying assets' prices follow distribution of returns other than lognormal. This can be achieved by suitably tweaking the values for 'u' & 'd' in the equations.

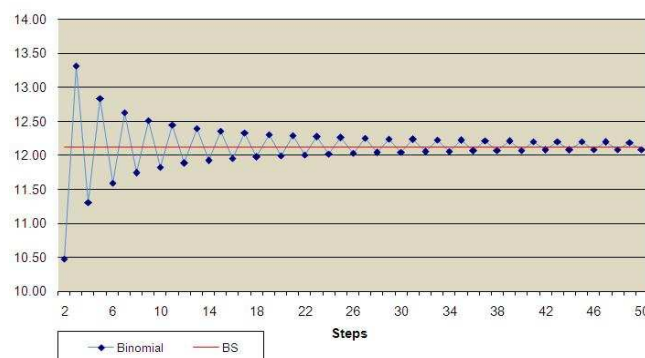
In order to improve the efficacy of the Binomial Option Pricing model, a trinomial method has been proposed. It is similar to the Binomial Option Pricing model with the addition of one more possible path. So, in the trinomial model there are 3 possible paths (Up, Down and Stable) at each node instead of two for binomial. As is intuitive, the trinomial model converges faster to the Black Scholes output than the binomial model.

CONVERGENCE OF BINOMIAL AND TRINOMIAL OUTPUT TO BLACK SCHOLES

In order to show the convergence of the binomial model output to Black Scholes output let us take some hypothetical data. Let us consider;

- Option type = European Put
- Current stock price (Underlying) = \$100
- Strike price = \$101
- Risk free interest rate = 5%
- No dividends
- Volatility = 30%
- Time to maturity = 2 years

Using this hypothetical data, let us see the behavior of the Binomial model vis-à-vis the Black Scholes. The option price suggested by the Black-Scholes for this data is a single value of \$12.1256. However, as per the definition of Binomial the value changes as per the number of steps that we chose for the iteration. The below chart plots the changing Binomial output for the above data with increasing number of steps. This output is the blue line in the chart. The constant Black-Scholes output (\$12.1256) is also given for reference by the red line.



As can be seen in the chart, the binomial output *converges* to the Black-Scholes output when the number of steps increases.

Number of steps	Black Scholes output	Binomial output	Absolute Difference
10	12.1256	11.8286	2.45%
15	12.1256	12.3597	1.93%
20	12.1256	11.9975	1.06%
25	12.1256	12.2640	1.14%
30	12.1256	12.0507	0.62%
35	12.1256	12.2232	0.80%
40	12.1256	12.0760	0.41%
45	12.1256	12.2005	0.62%
50	12.1256	12.0904	0.29%
100	12.1256	12.1165	0.08%
125	12.1256	12.1498	0.20%
150	12.1256	12.1235	0.02%
175	12.1256	12.1417	0.13%
200	12.1256	12.1264	0.01%

Also given above is the tabular representation of the output. It shows that when the number of steps is high (Say 200), the difference is only marginal (Around 0.01% in this case).

Number of steps	Black Scholes output	Trinomial output	Absolute Difference
10	12.1256	11.9975	1.06%
15	12.1256	12.0507	0.62%
20	12.1256	12.0760	0.41%
25	12.1256	12.0904	0.29%
30	12.1256	12.0996	0.21%
35	12.1256	12.2231	0.80%
40	12.1256	12.0759	0.41%
45	12.1256	12.2005	0.62%
50	12.1256	12.1165	0.08%

We also present similar values for the trinomial model for exactly the same set of data that we considered for binomial model. By definition, trinomial model is expected to converge to Black-Scholes faster than the binomial model. The table above presents exactly the same inference. Here at 50 steps the trinomial value is only 0.08% away from the Black Scholes value. As was seen earlier, at the same 50 steps, the binomial output was 0.29% away from the Black Scholes value. As is obvious and has been pointed numerous times, it would be gross oversimplification to prefer one model as superior to the others. As a quick summary, the Black Scholes model has inherent advantages like it being the more recognized model and being faster to calculate. On the other hand, the binomial (and by extension the trinomial) model is intuitive and easier to understand. The best part of all the chaos here is that on the average these models produce similar results. In addition there are at times scenarios which dictate a clear preference for a mode (For e.g. binomial to value American options).

REFERENCES

- [1] Black, Fischer; Myron Scholes (1973). "The Pricing of Options and Corporate Liabilities". Journal of Political Economy
- [2] Cox, John C., Stephen A. Ross, and Mark Rubinstein. 1979. "Option Pricing: A Simplified Approach." Journal of Financial Economics 7: 229-263

REQUEST FOR FEEDBACK

Esteemed & Most Respected Reader,

At the very outset, International Journal of Research in Commerce and Management (IJRCM) appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to take this opportunity to request to your good self to supply your critical comments & suggestions about the material published in this issue as well as on the journal as a whole, on our E-mails i.e. **info@ijrcm.org.in** or **infoijrcm@gmail.com** for further improvements in the interest of research.

If your good-self have any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

Hoping an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator