**Dissertation Report**

**On**

**An Empirical Investigation of the Black Scholes Model in pricing the Stock Call-Options of Banking sector stocks in India**

**Submitted By :**

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**Under the Guidance of :**

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**January -May 2013**

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**Dissertation Project Certificate**

This is to certify that Ms. Prerna Singh, Roll no. 2k11/MBA/36 student of MBA Batch 2011-13 Delhi School of Management, DTU has done her final dissertation project titled “” in Semester – IV as a partial fulfilment of the requirement for the programme. This is her original work to the best of my Knowledge.

 **Date: Signature:**

 **Mentor: Dr. Archana Singh**

 **Date: Signature:**

 **Co-Mentor: Mr. Nand Kumar**

**Declaration**

I Prerna Singh, 2K11/MBA/36, student of Delhi School of Management hereby declare that I have pursued **“An Empirical Investigation of the Black Scholes Model in pricing the Stock Call-Options of Banking sector stocks in India”** under the guidance of **Dr. Archana Singh, Asst Professor, Delhi School of Management** **and Mr. Nand Kumar Asst Professor, Department of Humanities, DTU** . I also declare that this work has not been submitted in part or full to this or any other organization/ institute as part of any project work by me.

 **Acknowledgement**

It is indeed a matter of great pleasure to present this project report on the topic **“An Empirical Investigation of the Black Scholes Model in pricing the Stock Call-Options of Banking sector stocks in India”** to The Head, Delhi School Of Management. I gratefully acknowledge my profound indebtedness towards my esteemed guide **, Dr. Archana Singh, Asst Professor, Delhi School of Management** **and Mr. Nand Kumar Asst Professor, Department of Humanities, DTU** for their invaluable guidance, excellent supervision and constant encouragement during the entire the project work.

 I also take the opportunity to thank **Prof. P.K.Suri, Head, Delhi School of Management** for being a constant support in deciding the framework of the research study

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**Executive Summary**

In India, the NSE commenced trading in derivative with the launch of index futures on June 12, 2000. Options are famous for their ability to cap the down side risk and keep the upside potential unlimited. In India we have only European options. Futures & Options segment of NSE has made a mark for itself globally. Although average daily turnover in F&O segment of exchange has increased from 410 cr. in 2001-02 to 123225.77 cr. in 2012-13 it is yet not fully traded.

Case study about option pricing will enlighten the academicians and investors about the practicability of the Black Scholes model and the relationship between theoretical and actual option price. Also they may understand the factors that affect the option price and the sensitivity of these factors.

The data used for analysis refer to European type call options covering a period of 2 years of Indian banking sector, which include 5 private and 5 public banks.

Our approach will be structured in two parts. The first will be dedicated to an estimate of daily implicit volatilities and comparison of model’s prediction with historical data to determine whether the predictions are accurate. Second, the assumptions made in developing the model have to be assessed to determine if they are consistent with observed behaviour or historical data.

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