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## 9. VERIFYING CAPITAL ASSET PRICING MODEL IN INDIAN PUBLIC AND PRIVATE BANKING SECTOR

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## Abstract:

The main two characteristics for an investment are return and risk. Every investors wish to reduce the risk of their investment. It is also challenging task for them to choose better stocks for investment. CAPM is a tool to identify cost of equity as company's point of view and expected return as investor's point of view. In this research article the effort is to make a test to verify that is CAPM model works for Indian stock market? This paper's prime objective is to find the better stocks among the selected companies and test the model works at present era. Data collection is based on secondary type, from the website of www.bscindia.com. The random sampling has been considered and selected ten banks each from public and private sector. This article identifies that model is working in the banking sector in India and tested for one month period from 2nd January 2017 to 31<sup>st</sup> January 2017 as per model selected banks, it is also found that for selected banks gives the mean returns of 18 57%.

Keywords: CAPM, Risk-free, Beta, overpriced or underpriced.

## INTRODUCTION

Capital Asset Pricing Model

The Capital Asset pricing model was introduced by Harry Markowitz in 1950's later on developed by Treynor in 1962, William F Sharp in 1964, Johen Linter in 1965 and Jan Mossion in 1966. Harry Markowitz made effective and gets the noble price in 1990, in economics for their greater contribution to financial market. CAPM is the model which is used to make a decision on choice buy, hold or sell securities. Capital Asset Pricing Model determines the relationship between the systematic risk and excepted return on securities, assets are investments.

 $Ri = R_f + \beta (R_m - R_f)$ 

Where Ri = Expected return by individual stock,  $\beta$  = Beta coefficient (slope), and Rm= Market returns.

Banking in India

Banking in India originated in the last decades of the 18th century. The first banks were Bank of Hindustan established in 1770 and liquidated in 1829, and The General Bank of India, which started in 1786 and failed in 1791, both are now defunct. The largest bank, and the oldest still in existence, is the State Bank of India, it initiated as the Bank of Calcutta in June 1806, and it was renamed as the Bank of Bengal in 1809. This was one of the three banks sponsored by a presidency government, along with Bank of Bombay and the Bank of Madras. In 1921 these three banks were merged to form the Imperial Bank of India, which became the State Bank of India in 1955. For few years the presidency banks were acted as quasi-central banks, until

the Reserve Bank of India was established in 1935, under the Reserve Bank of India Act, 1934.

## II. LITERATURE REVIEW

SherzodMustafakulov and Khurshid Khudoykulov (2015): The purpose of the research is to verify that CAPM would be appropriate for valuation of capital asset on Greek Stock Market. Research examined 32 listed companies' securities in Athens Stock Exchange (ASE) on weekly basis for the period from June 2009 to December 2013. Research tested Characteristic line, used regression to calculate beta and alpha of the stocks and analysed the CAPM. The research established that there is linier relationship between the risks and returns, to support this test verification of both individual securities and portfolios is done. Finally, the study determines that if the CAPM is applied in Athens Stock Market managers could able to analyse the size of cost of equity associated with cost of capital.

Mona A. Elbannan (2015): The paper described the significance of Capital Asset Pricing Model and frequently used theories to determine the required rate of return on securities in a particular market. Also it determines the evolution of CAPM, Concept of modern portfolio theory by Markowitz, uses of CAPM in Stock diversification and portfolio construction to maximize the portfolio return on securities with minimum risk portfolio. The paper describes the assumptions, limitations and criticisms of CAPM, Arbitrage Pricing Model, Security Market Line, Capital Market Line, relationship between risk and return, intersects and slope, proxy problems and extension of CAPM theory is discussed.

Liuling Li, QuanGan, Ziyue and Bruce Mizrach (2014): As per the study they have proposed new model for empirical test of CAPM theory, the new model is based on EGARCH- type of volatilities in Nelson (1991) and non-normal errors of SSAEPD in Zhu and Zinde Wash (2009). The portfolio returns of 25 Fama-French companies have been analysed using Likelihood Ratio test and Kolmogorov-Smirnov test to do model diagnostic.

The practical test shows that SSAEPD and EGARCH volatilities with normal, non-normal errors and the CAPM theory is not appropriate in this situation and the CAPM theory cannot be able to explain the US market well.

JosipaDzaja and ZdravkaAljinovic (2013): the research paper examines if the CAPM is acceptable for the capital asset valuation in emerging stock market of Central and