

A Comparative Study on Depository and Depository Participants with Reference ROI and ROA

Dr.B.Venu Gopal ¹, Dr. Ch.Rama Prasada Rao²

¹ UGC Post Doctoral Fellow, Department of SKIM, S.K.University, Email ID:vgopal.phd@gmail.com

² Dean & Professor in Department of Management, Madanapalli Institute of Technology,
Email : rajobaski@gmail.com

Abstract

Depository is an institution or a kind of organization which holds securities with it, in which trading is done among shares, debentures, mutual funds, derivatives, F&O and commodities. The intermediaries perform their actions in variety of securities at Depository on the behalf of their clients. These intermediaries are known as Depositories Participants. Fundamentally, there are two sorts of depositories in India. One is the National Securities Depository Limited (NSDL) and the other is the Central Depository Service (India) Limited (CDSL). In this research paper attempt to be made objectives (i) To analyze proportional study on ROI of CDSL and NSDL. (ii) To study return on assets of KBSL(Karvey), IIFL(Indiainfoline), PCS and NSBL(Net worth). that F-cal (0.006) is less than F-table (11.26) at 0.01 level of significance for degrees of freedom $\gamma_1 = 1$ and $\gamma_2 = 8$. Alternative hypothesis (H1) is rejected and hence, Ho is accepted. Therefore it is concluded that there is uniformity in Return on Investment (ROI) earning of CDSL and NSDL and it is not significant statistically. To test whether there is significance difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBCL or not. The F-test / Anova is conducted and result is given in the table 5.3 It reveals that F-cal (1.139) is less than F-table (7.59) at 0.01 level of significance for degrees of freedom $\gamma_1 = 3$ and $\gamma_2 = 8$. Alternative hypothesis (H1) is rejected and hence, Ho is accepted. Therefore it is concluded that there is no significant difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBCL.

Keywords: Depository, Depository Participants, ROI, ROA,

Introduction

A Depository is an organization where the securities of share holders are held in the electronic format the request of the share holder through the medium of a depository participant. In September, 1995 the Government have accepted in principle the proposed law for settling up of depositories and of a central depository for immobilization of physical certificates. The central depository is to be set up as trust to hold the physical custody of

shared and effect transfers by book entries without the need to deal and transfer the physical certificates between parties. This is to be sponsored by public financial institutions and banks and will have a minimum net worth of Rs. 50-100 Crores as proposed by the SEBI. A national securities depository corporation was set up in November, 1996. In the Depository system, the Depository extends its services to investors through intermediaries called depository participants (DP)

who as per SEBI regulations could be organizations implicated in the business of providing financial services like banks, broker, custodians and financial institutions. The admission of the DPs involve an evaluation by Depository of their capability to meet with the strict services standards of Depository and a further evaluation and approval by SEBI. Towards, the end of the twentieth century there were two interesting prognostications about India's potential. The first was by a professor of business management in the United States (Rosenweig, 1998). He estimated that by 2025, India would be the third largest economy in the world (After the US and China). The second projection was by a well-known Indian Economist (Parikh, 1999). It was projected that India would reach a per capita income of U.S. \$ 30,000 or higher by 2047, making it one of the fastest growing countries in the world. Indian capital market has been linked to the International Financial Market, and the standard has been increased in terms of efficiency and transparency through Dematerialization of the Indian Capital Market. In this context dematerialization is one of the right steps taken by the Government to make the share transfer process easier and on other hand the earlier demerits of the paper transfer process can be rectified. Dematerialization is a process in which the company takes the physical certificates of an investor back and equivalent number of shares is credited in the electronic holdings of the investor.

Review of Literature

This section covers the review of literature of some of the important studies, research papers and articles on the various aspects of depository system.

Shah (1996)¹ highlighted that resolution of the single vs. multiple depositories, immobilization vs. dematerialization and role of capital adequacy norms for the custodians which is helpful in quick implementation of depository system in India.

Aggarwal and Dixit (1996)² expressed their views about the legal framework for depository

system in India. They also explained the benefits of the paperless trading, responsibilities of depository or participants and eligibility criteria, etc.

Sarkar (1996)³ analyzed the implications of the scrip less trading and share transfer based on book entry merely due to the existence of the depository ordinance 1995.

George (1996)⁴ explained the role of the NSDL in revolutionizing the paperless stock settlement system of the country. He also examined the steps taken by the depository to ensure that the scrip less trading system is a success and stressed on the importance of the role of the regulator in making the depository system successful.

Gurusamy (1996)⁵ explained that the introduction of depository system would help in transfer of securities in the capital market by a mere book entry. He also pointed out the advantages of depository system such as delay in transfer, registration, fake certificates, soaring cost of transactions, more paper work, non availability of depositories in when the transfer of securities take place by physical delivery.

Hurkat and Ved (1999)⁶ discussed the role of depository system in many advanced countries in the stock and capital markets the world over. They also analyzed the services offered by NSDL, dematerialization, re-materialization, trading and fee or charges, comparison of a bank and a depository for the benefits of the depository.

Ravi Shah (2002)⁷ highlighted that NSDL and CDSL have changed the face of the Indian capital market. The move from an account period settlement in paper form only to a T+3 settlement in pure electronic form has been achieved in a record span of few years, whereas it took anywhere between 10-20 years in most of the developed countries.

Schmiedel et. al. (2006)⁸ analyzed the existence and extent of economies of scale in depository and

settlement systems. The study indicated the existence of significant economies of scale but degree of such economies differs by settlement, institution and region.

Kanan (2008)⁹ highlighted that dematerialization has certainly brought about lot of improvement in the investment habits in our country and is bane for the companies and has created havoc in maintaining the members register and in conducting the members meeting.

Sultan Sing (2011)¹⁰ tried to study the factors affecting the decision making of the investors in depository system. Most of the investors are of the view that shorter settlement period, safety of securities with the depositories, attitude of the staff available with the DPs, timely services provided by the DPs to the investors, reduction in transaction cost, repatriation of sales proceeds of shares/debentures by NRIs are some of the factors which affects the decision making of the investors in depository system.

Dr. Dhiraj jain,P.Mehta (2012)¹¹ The investors level of awareness about services offered by depository participants and about closing and termination of demat account is moderate through the vary in their education qualification will be a sort of feedback for the investor, brokers and regulatory bodies as to what extent have the investors educate programme reached.

The earlier studies covered the depository system and environment, which mainly pertain to depository legislation, how a viable alternative of depository, implications of depositories ordinance, internal audit of depository participants, an overview of the Depositories Act, responsibilities of auditing profession, role of depository in stock and capital market, SEBI guidelines in the depository system, services provided by different depositories or accessibility of depositories to retail investors. But it is very important to study the Role and performance of depositories itself. Therefore, the

present study is an attempt to fill this gap.

Need for the Study

Indian stock exchanges nowadays are following screen based trading and electronic settlement system. The market width are also enlarged, quantity of investors spread to various distance places from trading and settlement place. There are some problems arising in the settlement and transfer system, in stock and share trading. In this circumstance there are a limited number of studies in this area. Hence there is a need for evaluation of depository system with in the area of investor's perspective. The present study is in this direction of research analysis covering role and performance of depository participants and the factors affecting the decision making of investor towards depository participant.

Scope of the Study

The present study covers the role and performance of the DP's and investor's Factors, attitudes towards depository participants and the four listed depository participants with special reference to a Rayalaseema region of Andhra Pradesh. The scope of the study is very wide and deep of a role of depository participants and investors factors affecting and comparative analysis among listed four depository participants, impacts of concept as far as Indian Capital market is concerned. Further, globalization has given a new fillip into financial markets and varied financial competitive Environment.

Statement of the Problem

The studies have explored the various aspects in the depository system like cost aspects. Difficulties faced by the investor and others of the benefits available to the investor. The Indian capital market has witnessed numerous changes in the recent past as seen earlier. Traditionally stock market booms and decline have resulted in a number of problems for the lay investor. A close introspection

of these problems will reveal that most of them are due to intrinsic nature of the paper based trading and settlement system. The capital market exposed the limitation of handling and dealing in securities in physical/paper mode. The short learning's of the market became manifest in terms of bad deliveries, delays in transfer and irregular settlement. The remedial measure for this may be the system of dematerialization (also called demat) under depository system. Hence it is an attempt to study about The Role of Depository Participants and Present scenario Working Frame work of NSDL(national securities depository limited)and CDSL(central depository system limited), factors affecting to investors perception towards depository participants, performance, comparative analysis among listed depository participants in Rayalaseema Region.

The Objectives of the Study Are

- To analyze comparative study on ROI of CDSL and NSDL
- To study return on assets of KBSL (Karvey), IIFL(India infloline), PCS and NSBL(Net worth)

Research Hypotheses

The main hypotheses formulated for the study are as given below.

- **H8:** There is significance difference in the return on investment (ROI) of CDSL and NSDL.
- **H9:** There is significant difference in the return on assets (ROA) of KSBL (Karvy),

IIFL (India Info line), PCS and NSBL (Networth). .

Research Methodology

In order to achieve the objectives stated above data and information have been collected from both the primary and secondary sources. The primary data have been collected through two structured questionnaires to investors (Annexure-I) and

intermediaries (Annexure-II). Apart from the questionnaires, discussions have been undertaken with the stock market specialists to elicit their opinion on various matters relating to depository system and investment decisions. Secondary data have been collected from reports, bulletins of RBI, bulletins of SEBI, books, journals, magazines, conference papers etc.

Sampling

Four listed depository participant companies are selected purposively for the study via. 1. Karvy Securities Ltd. 2. India Infoline Finance Ltd. 3. PCS Securities Ltd. 4. Net Worth Securities Ltd. Rayalaseema region is taken for the study. All the four districts via. Anantapuramu, Kurnool, Kadapa and Chittoore districts are covered for the study. In order to understand the attitude of the investors towards depository system, depository participants and investment, a sample of 300 investors are taken for the study on the basis of simple random sampling method covering 160 investors in four urban areas, 100 investors in four semi urban areas and 40 investors in four rural areas in all the four districts of rayalaseema region. The places covered are Anantapuram, Dharmavaram, Kalyandurgam, Kurnool, Nandyal, Arlagadha, Kadapa, Prodhutture, Mydhukure, Tirupathi, Chittoore, and Madanapalli.

A sample of 50 branches and franchises of the select four depository participants in urban, semi-urban and rural areas are taken for the study to understand the attitude of DPs on depository system.

The data and information collected through questionnaire and from all the available sources are properly analyzed and inferred to identify the problems in depository system to the investors and stock brokers by using the following statistical tools.

Statistical Tools Used

The data is analyzed based on the following statistical Tools

- ANOVA, SD, Ratio, Covariance.

Limitations of the Study

Any research by its inherent nature is bound to have some limitations and this study is not an exception to that rule. The major limitation of the study is that it is restricted to the Rayalaseema Region only and the size of the sample is also limited. However an effort is being made to minimize the impact of this limitation by selecting investors from different areas of all the districts of rayalaseema region. As this study is based on the responses of the investors and intermediaries there is a possibility of personal bias. Care has taken to bring down the impact by asking cross reference questions. Some of the investors could not relate themselves to the role of depository participants, depository services as they were new entrants to the market. The investment activity is the outcome of innumerable factors. Where as in this study only a limited number of factors are considered. With all these limitations all the efforts are made to evaluate the situation as accurately and objectively as possible.

Return on Investment Ratio of CDSL and NSDL

This ratio shows the percentage return received by depositories on their total share holder's fund during the study period. This ratio helps to assess depositories' Profitability from the view point of share holder's fund. Higher ratio affects positively to the profitability of depositories' income earning capacity. Total share holder fund includes share capital and reserve and surplus during one financial year. The formula of the ratio is as under.

$$ROI = \frac{\text{Profit after Tax}}{\text{Total Share Holders Fund}} * 100$$

Table 1 Return on Investment Ratio of CDSL and NSDL

(Figures in %)

Year	CDSL	NSDL
2007-2008	20.83	20.36
2008-2009	17.17	9.54
2009-2010	20.58	22.01
2010-2011	18.16	19.51
2011-2012	16.16	20.52
Average	18.58	18.39
Standard deviation	1.85	4.49
Co-efficient variance	9.94	24.45

Source: calculated from the Published Annual Reports of the Depositories

Return on Investment is an important measure of performance of any organization. ROI is important for the owners of the organization. The table 1 shows that Return on Investment ratio of CDSL and NSDL during the period under review. This ratio reveals that returns earned by depositories on their investment during study period. The profit which is taken as post tax. It reveals from the above table that CDSL ratio represents fluctuating trend during the study period of 2007-12 except in 2008-09 which shows that its profitability was not stable. CDSL has achieved its highest level of 20.83 % in the financial year 2007-08. The average ROI of CDSL obtained during the study is 18.58%. The NSDL also registered fluctuating trend during the study period which also affects negatively to its profitability. The Return on Investment ratio recorded 9.54% which was the lowest during the period 2007-12 which affects negatively to company's operational efficiency. NSDL achieved highest ROI of 22.01 % in the year 2009-10 .Comparing the CV of CDSL and NSDL; the CDSL has registered with lower CV than NSDL which shows that NSDL has less stability in term of Return on Investment ratio during the study period. It is

found that both the depositories have almost earned equally to the extent of 18 % of ROI during the study from 2007-12 and more over CDSL has more consistency in ROI when compared with NSDL. NSDL has high business risk due to fluctuating trend in ROI and but its ROI is increased to 20.52 % in

2011-12 from 19.51 in 2010-11. In this regard, it is suggested to the depositories to improve their operating and other incomes and simultaneously control the total expenses and thus enhances the consistency in ROI.

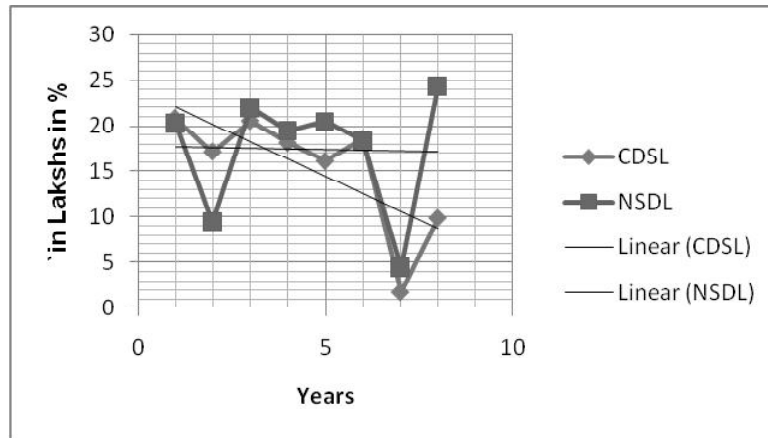


Fig 1 Return on Investment Ratio of CDSL and NSDL

- **H0:** There is no significance difference in the return on investment (ROI) of CDSL and NSDL.
- **H1:** There is no significance difference in the return on investment (ROI) of CDSL and NSDL.

Table 2: Return on Investment (One Way ANOVA)

	Sum of Squares	Df	Mean Square	F-Cal	Sig.	F-table @0.01 L.O.S	Decision
Between Groups	.092	1	.92	.006	.939 ^{ns}	11.26	H ₀ is Accepted and H ₁ is Rejected
Within Groups	118.182	8	14.773				
Total	118.275	9					

Source: SPSS and ns- not significant at 0.01 level of significance.

The table 5.2 indicates that F-cal (0.006) is less than F-table (11.26) at 0.01 level of significance for degrees of freedom $\eta_1 = 1$ and $\eta_2 = 8$. Alternative hypothesis (H1) is rejected and hence, H₀ is accepted. Therefore it is concluded that there is uniformity in Return on Investment (ROI) earning of CDSL and NSDL and it is not significant statistically. Both

the depositories have earned equally to the extent of 18 % only. It is suggested to depositories of CDSL and NSDL to enhance their efforts in improving the operating incomes and other incomes and by simultaneously the controlling expenses and that improves the consistency in Return on Investment ratio.

Table 3 Return on Assets (One Way ANOVA)

Source	Sum of Squares	Df	Mean Square	F-Cal	Sig.	F-table @0.01 L.O.S	Decision
Between Groups	72.780	3	24.260	1.139	.390 ^{ns}	7.59	H ₀ is Accepted and H ₁ is Rejected
Within Groups	170.342	8	21.293				
Total	243.122	11					

Source : SPSS and ns - not significant at 0.01 level of significance

- **H₀**: There is no significant difference in the return on assets (ROA) of KSBL, IIFL, PCS and NSBL.
- **H₁**: There is significant difference in the return on assets (ROA) of KSBL, IIFL, PCS and NSBL.

The return on total assets (ROA) / return on investment (ROI), measures the overall effectiveness of the management in generating profits with its available assets. The return on assets (ROA) ratio of IIFL and PCS were in fluctuating trend and the ROA ratio of NSBL and KSBCLs were in declining trend during the study from 2009-12. The average return on Assets (ROA) of IIFL, PCS, NSBL and KSBCL during the study were 1.44 %, 3.69, 8.2 % and 3.9 % respectively. All the depository participants have not earned satisfactory return on assets (ROA) / ROI. To test whether there is significance difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBL or not. The F-test / Anova is conducted and result is given in the table 5.3 It reveals that F-cal (1.139) is less than F-table (7.59) at 0.01 level of significance for degrees of freedom $\alpha=3$ and $\beta=2$ = Alternative hypothesis (H₁) is rejected and hence, H₀ is accepted. Therefore it is concluded that there is no significant difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBCL. It is suggested that all the depository participants have to optimize the utilization of assets and operating efficiency to achieve the satisfactory return on Assets (ROA) which satisfies

the shareholders of the company or enhances the market value of the company.

It can be concluded from the above that the depositories and select depository participants (IIFL, NSBL, PCS and KSBCL) are providing wide range of services. All are interested in knowing the financial performance of depositories, CDSL and NSDL and depository participants of IIFL, PCS, NSBL and KSBCL as earning returns from the services rendered is essential for survival in the market. Operating Income to Total Income ratio helps to assess the operational efficiency of the unit compare to total income of the depositories. It is found that NSDL is performing well when compared with CDSL as mean ratio of Other Income to TI (Total Income) is high and also CV is low. It is suggested to CDSL to reduce its business risk and enhance its operating efficiency so that it can achieve maximum Operating Income to Total Income ratio.

From the point of view of ratio of Other Income to Total Income earned, it is observed that CDSL is not performing its operations well even though it has high mean of OI/TI when compared with NSDL and more over NSDL has lesser business risk than CDSL. From the point of view of Total expenses to Total Income, it is found that CDSL is controlling its total expenses to total income consistently and its trend is in decreasing from 2008-12. The NSDL has high level of Total expenses to Total income as

its mean ratio is 70.14 and CV of 9.23. In this regard, it is suggested to the NSDL to control its total expenses effectively so that it can improve its consistency in total expenses to total income. It is found that both the depositories have almost earned equally to the extent of 18 % of ROI during the study from 2007-12 and more over CDSL has more consistency in ROI when compared with NSDL. It is also proved statistically that two depositories have same ROI. NSDL has high business risk due to fluctuating trend in ROI and but its ROI is increased to 20.52 % in 2011-12 from 19.51 in 2010-11.

Depository Participants are rendering wide range of services to investing community. It is necessary to understand the service charges charged by select depository participants as it has impact on the performance of the firms. It is observed that Network Stock Broking Ltd and Karvey Stock Broking Co.Ltd are charging less for various services offered to the investors when compared with other depository participants. The service charges charged by select depository participants for the services of security custody, equity transaction sale and transaction statement are competitive. Among select the depository participants, only PCS securities is charging to the extent of 170 rupees others are providing the accounting opening service for free of cost. IIFL is charging to the extent of 750 rupees for account maintenance service where as the remaining DP's are charging 450 rupees only..The average current ratios of IIFL, PCS, NSBL and KSBCL were 1.44, 2.24, 6.29 and 1.57 respectively. IIFL and KSBCL liquidity position is not satisfactory and PCS and NSBL maintained satisfactory liquidity position. When Anova / F-test is conducted to know whether there is significance difference in liquidity position of selected depository participants or not?. From result, it is concluded that the liquidity position of IIFL, PCS, NSBL and KSBCL or Current ratio position of IIFL, PCS, NSBL and KSBCL does not differ significantly. All the depository participants

have to maintain standard norm level of liquidity so that they remain competitive and can discharge their short term obligations effectively.

The return on total assets (ROA) / return on investment (ROI), measures the overall effectiveness of the management in generating profits with its available assets. The return on assets (ROA) ratio of IIFL and PCS were in fluctuating trend and the ROA ratio of NSBL and KSBCLs were in declining trend during the study from 2009-12. The average return on Assets (ROA) of IIFL, PCS, NSBL and KSBCL during the study were 1.44 %, 3.69, 8.2 % and 3.9 % respectively. All the depository participants have not earned satisfactory return on assets (ROA) / ROI. To test whether there is significance difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBCL or not. When F-test / Anova is conducted .From the result , it is concluded that there is no significant difference in the return on assets (ROA) of IIFL, PCS, NSBL and KSBCL. It is suggested that all the depository participants have to optimize the utilization of assets and operating efficiency to achieve the satisfactory return on Assets (ROA) which satisfies the shareholders of the company or enhances the market value of the company. From this it is clear that Net worth Stock Broking Company Ltd has performed well when compared with other depository participants.

References

1. Shah, Mahesh (1996), "A Care for Depositories in India", *The Management Accountant*, April, pp. 259-261.
2. Aggarwal, V. K. and Dixit, S. K. (1996), "The Depositories Legislation: A Critical Evaluation," *Chartered Secretary*, April, pp. 367-376.
3. Sarkar, A. K. (1996), "Implications of Depositories Ordinance, 1995," *The Management Accountant*, June-July, pp. 473-477.
4. George, Philip (1996), "Towards a Paperless Settlement System", *Business World*, October, pp. 134-135.
5. Gurusamy, S. (1996), "Depository System-How a Viable Alternative", *The Management Accountant*, July, pp. 478-482.
6. Hurkat, Manoj and Ved, Umesh (1999), "Depository-An Inevitable Institution", *Chartered Secretary*, September, pp. 991-993.

7. Ravi, Shah (2002), "Understanding Dematerialization", The Management Accountant, pp. 434.
8. Schmiedel, HeiKo, Malkamaki, Markku and Tarkka, Juha (2006), "Economies of Scale and Technological Development Securities Depositories and Settlement System", Journal of Banking and Finance, Vol. 30, Issue-6, pp.1783-1806
9. S. Kanan (2008), "Market Comparable Approach", Journal of Financial Services Research, Vol. 24, No.2-3, pp. 121-148.
10. Prof. Sultan Sing and Sakshi Goyal (July 2011), "Analysis Factor Affecting the decision making of the investors in Depository system", Journal of Banking, Financial Services and Insurance Research, Vol. 1, pp. 13-38.

Websites

1. www.stockholding.com
2. www.cdslindia.com
3. www.nsdl.co.in