

Operational Performance of NSDL and CDSL with reference to Liquidity Ratio & R.O.I & others income & total income ratio

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Abstract

A depository is an enterprise which holds securities (like shares, debentures, bonds, authorities securities, mutual fund devices etc.) of investors in electronic shape at the request of the traders through a registered Depository Participant. It also affords services associated with transactions in securities. At present two Depositories viz. National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL) are registered with SEBI . This paper entitled makes a speciality of operational overall performance of NSDL and CDSL of India with regard to quick asset ratio and Return on investment Ratio other income & total income ratio. This look at is purely based totally on secondary facts and the period of the observe is 2009-10 to 2018-19 i.E. Ten consecutive economic years.

Keywords :- NSDL & CDSL , Depository System, Depositories, Operational Performance,

Introduction

There are two depositories in India.

(1):-National securities depositories limited

(2):-Central depository services (India) limited.

A depository is an administrative body that holds securities of investors in an electronic format whilst asked by using an investor through a registered Depository Participant (DP). So they're just like a financial institution, but whilst a bank holds your money, they preserve stocks, shares, bonds and so on.

In a depository, securities which include stocks, bonds, and debentures etc are held for safekeeping below their depository terms. When you purchase securities they're routinely credited to the depository account, and when you sell the securities they're automatically debited from your depository account.

So, when you open a demat account and buy any shares, your shares are held with the aid of those depositories. Moreover, whilst an organisation desires to know its shareholder detail to send dividend, rights or for another notification, it is able to ask for the facts from those two depositories in India (i.e. - CDSL and NSDL).

NSDL (National Securities Depository Limited)

NSDL is the oldest and biggest electronic depository of securities in India, which began its operation in the year 1996, primarily based in Mumbai, Maharashtra. It is the first depository in India to provide trading and agreement of securities in electronic or demat form.

The NSDL is promoted through the country's a few of the most important banks and institutions, i.e. IDBI Bank, UTI and National Stock Exchange (NSE). There are more than 1.5 crore lively investor's money owed in NSDL. NSDL is having around 26000 service centers masking approx 1900 cities.

CDSL (Central Depository Services Limited)

CDSL is another digital depository of securities in India, which started its operation in the year 1999 and also primarily based in Mumbai, Maharashtra. It is the second largest securities depository in India and facilitates a book-entry transfer.

It is promoted by way of some prominent banks and economic institutions of India, inclusive of State Bank of India (SBI), HDFC Bank, Bank of Baroda, Bank of India, Standard Chartered Bank, and Bombay Stock Exchange (BSE). It gives the equal characteristic as NSDL like conserving of securities in dematerialized shape and helps trading and agreement of securities in digital or demat form.

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) 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) 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) 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.

Primary objective

The primary objective of the study is to check the financial stability and profitability of the selected Depositories (NSDL and CDSL) in India.

Secondary Objective

- (1):-Operational performance of depositories.
- (2):- To check the ROI of selected depositories.
- (3):-To examine Overall profitability of NSDL and CDSL
- (4):- To examine the over all liquidity wealth of depositories.
- (5):- To examine the other income and total income of depositories.

Data collection and period of the observe :-

The primary source of records utilized for the have a look at is secondary, gotten from the posted annual reviews of both NSDL and CDSL. Present look at covers the operational overall performance of decided on Depositories for Ten successive years. The period of the observe can be 2009-10 to 2018-19.

Tools and Techniques of Analysis

Mean, Standard Deviation, Coefficient of Variation, T-Test and one-way ANOVA were utilized

Operating performance of depositories.

Liquidity ratio of NSDL & CDSL

It's a ratio which tells one's capability to repay its debt as and whilst they end up due. In other words, we can say this ratio tells how quickly a company can convert its present day property into coins so that it can repay its legal responsibility on a timely basis. Generally, Liquidity and short-time period solvency are used together.

Formula applied :-

Liquidity test ratio = Short Term Investments + Accounts Receivable + Cash / Current Liabilities.

Table :-1

Years	NSDL	CDSL
2009-10	1.35	0.54
2010-11	1.19	1.84
2011-12	1.11	8.4
2012-13	1.24	6.77
2013-14	0.91	5.7
2014-15	1.19	2.93
2015-16	1.52	3.43
2016-17	1.38	3.48
2017-18	1.49	1.12
2018-19	1.18	0.98
Average	1.256	3.519
S.D	0.1839	2.6542
Coefficient of variance	14.64	75.42

Interpretation:-

Table :-1

Table indicates Liquidity ratio test of NSDL and CDSL throughout the period under review. This ratio shows liquidity of depositories .nsdl recorded lowest ratio in year 2013-14 .cdsl recorded highest ratio in year 2011-12 . Both nsdl and cdsl have some significant difference in mean.NSDL have CV comparison to CDSL they shows major difference in values..

Mean & standard deviation of depositories (liquid test)

Table :-2

	Mean	N	Standard Deviations	Standard error mean
NSDL	1.256	10	0.1839	0.0581606
CDSL	3.519	10	2.6542	0.8393217

T - test

Table :-3

	Paired differences						
	Mean	Standard deviation	Standard error mean	95% confidence interval of the difference	T cal value	Df	T table value
NSDL & CDSL	-2.263	2.745	0.868	Lower -4.226 Upper -0.3	-2.607	9	2.262

Conclusion:-

Table :- 3

It is concluded that the null hypothesis H_0 is rejected ., at the 0.05 significance level.

One way ANOVA test

Table :-4

Source of Variation	Sum of squares	Degrees of freedom	Mean Square	F calculated Value	F table value
Between depositories	25.6058	1	25.6058	F = 7.23489	4.41387331
With in depositories	63.7059	18	3.5392		
Total	89.3118	19			

Table:-4

The f-ratio value is 7.23489. The p-value is .014973. The result is significant at $p < .05$.

Return on investment ratio :-

This ratio shows the proportion return acquired by way of depositories on their total share holder's fund throughout the examine period. This ratio allows to assess depositories' Profitability from the view factor of proportion holder's fund. Higher ratio influences definitely to the profitability of depositories' earnings incomes capacity. Total share holder fund includes percentage capital and reserve and surplus all through one economic year. The formula of the ratio is as under.

Return on investment ratio.

Overall profitability ratio = profit after tax / total share holder's fund \times 100

Table :-5

Year	NSDL	CDSL
2009-10	22.026	20.581
2010-11	19.528	18.172
2011-12	20.517	16.164
2012-13	7.154	13.247
2013-14	12.678	12.654
2014-15	12.671	10.392
2015-16	19.659	17.311
2016-17	17.075	14.676
2017-18	15.155	15.467
2018-19	14.481	15.552
Average	16.0944	15.4216
S.D	4.5584	2.9167
Coefficient of variance	28.32	18.91

Interpretation :-

Table :-5

Table indicates Return on Investment ratio of NSDL and CDSL throughout the period under review. This ratio shows Profit earned with the aid of depositories for the duration of examine period. NSDL The Return on Investment ratio recorded 7.154 which become the lowest at some stage in the period beneath evaluation which influences negatively to company's operational efficiency.the average ratio was 16.09 %.

It exhibits from the above desk that CDSL ratio represents fluctuating trend for the duration of the look at duration which shows that its profitability was now not stable. It has reached at its highest stage in the financial year 2009-10.the average ratio was 15.42 %

Mean and Standard Deviation of Depositories

Table :-6

	Mean	N	Standard Deviations	Standard error mean
NSDL	16.0944	10	4.5584	1.4414829
CDSL	15.4216	10	2.9167	0.9223487

Results of T - test statistic

Table :- 7

	Paired differences						
	Mean	Standard deviation	Standard error mean	95 % confidence interval of the difference	T cal value	DF	T table value
NSDL & CDSL	0.673	2.852	0.901	Lower -1.367 Upper 2.713	0.746	9	2.262

(5) Conclusion :-

It is concluded that the null hypothesis H_0 is not rejected. Therefore, there is not enough evidence to claim that the population mean NSDL is different than CDSL, at the 0.05 significance level.

One way ANOVA test :-

Table :-8

Source of variation	Sum of squares	Degrees of freedom	Mean square	F calculated value	F table value
Between depositories	2.2633	1	2.2633	F = 0.15457	4.41387331
With in depositories	263.574	18	14.643		
Total	265.8373	19			

Table :-8

The f-ratio value is 0.15457. The p-value is .698828. The result is not significant at $p < .05$.

Other income to total income ratio :-

This ratio indicates the Other Income to Total Income Ratio of decided on depositories during the take a look at period. This ratio helps to evaluate depository's way of working. The better the ratio the higher might be the profitability but it could be said that the depository is unable to paintings operationally well. The Other Income here consists of miscellaneous income, hobby or dividend income, income on sale of assets, etc. The system of the ratio is as under.

Other income to total income ratio :-

$$= \text{Other income} / \text{Total income} \times 100$$

Table :-9

Year	NSDL	CDSL
2009-10	8.3	19.897
2010-11	7.2	17.535
2011-12	5.9	23.457
2012-13	18.91	27.879
2013-14	19.4	28.459
2014-15	18.9	18.587
2015-16	18.1	12.355
2016-17	15.45	21.649
2017-18	15.15	13.810
2018-19	16.5	19.169
Average	14.381	20.2797
S.D	5.235	5.3026
Coefficient of variance	36.40	26.14

Interpretation :-

Table :-9

Other Income to Total Income ratio of CDSL and NSDL throughout the period below overview. This ratio shows income earned through depositories other than operational one. Other Income consists of miscellaneous income, interest or dividend earnings, profit on sale of assets, etc. It reveals from the above table that CDSL ratio represents decreasing trend besides financial year 2013-14 at some point of the examine period. It has reached at its highest level within the economic year 2013-14. The average ratio was 20.2797. NSDL show the highest level with in the economic year 2013-14. NSDL mean is less than CDSL.

Mean and Standard Deviation of Depositories

Table :-10

	Mean	N	Standard Deviation	Standard error mean
NSDL	14.381	10	5.235	1.655467
CDSL	20.2797	10	5.3026	1.676826

T - test

Table :-11

	Pairing differences						
	Mean	Standard deviation	Standard error mean	95% confidence interval of the difference	T cal value	DF	T table value
NSDL & CDSL	-5.899	7.028	2.222	Lower -10.926 Upper -0.871	-2.654	9	2.262

Conclusion :-

Table:-11

It is concluded that the null hypothesis H_0 is rejected. , at the 0.05 significance level.

One way ANOVA test

Table :12

Source of variation	Sum of squares	Degrees of freedom	Mean square	F calculated value	F table value
Between depositories	173.9733	1	173.9733	F = 6.26669	4.41387331
With in depositories	499.7086	18	27.7616		
Total	673.6819	19			

Table:- 12

The f-ratio value is 6.26669. The p-value is .022154. The result is significant at $p < .05$.

Conclusion

(1):-The acid test ratio show the liquidity of depositories and NSDL is less fluctuation comparison to cdsl .it's mean nsdl is show more stability in term it's proformance.

(2):-It is found that imply of liquidity test Ratio of depositories is greater in CDSL and it's also observed that the fluctuations are greater in CDSL.

(3):-There is some significant difference in the average values of the depositories' liquidity ratio test.

(4):-During the study period it's shows NSDL ROI coefficient of variance is more the CDSL value.

(5):-During the examin period ROI of NSDL mean is more then CDSL it show the profitability of depositories .

(6):-The other income and total income show the NSDL CV ratio is more then CDSL .

(7):-It was observed that there has been a small distinction in Operating Income to Total Income ratio of both the depositories during look at period.

Reference

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