© JAN 2026 | IRE Journals | Volume 9 Issue 7 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I7-1723127

Growth and Transformation of India's Depository System: A Comparative Analysis of NSDL and CDSL

DR FARHANA ANJUM
Associate Professor, Department of Commerce, Government First Grade College, Magadi

Abstract- The Indian capital market has undergone significant structural and technological transformation with the development of the depository system. The establishment of the National Securities Depository Limited (NSDL) in 1996 and the Central Depository Services (India) Limited (CDSL) in 1999 marked a major shift from the traditional system of holding securities in physical form to an electronic and dematerialized system. The present study examines the growth and transformation of India's depository system through a comparative analysis of NSDL and CDSL during the period from 2020–21 to 2024–25. The study is based on secondary data obtained from the Securities and Exchange Board of India (SEBI), NSDL and CDSL annual reports and official statistical publications. The analysis considers investor accounts, securities value under custody, depository participants, service-center networks and market share. The findings indicate substantial growth in India's depository infrastructure during the study period. CDSL recorded particularly rapid growth in its investor-account base, increasing from 3.34 crore accounts in 2020–21 to approximately 15.30 crore in 2024–25. NSDL's investor accounts increased from 2.17 crore to approximately 3.95 crore during the same period. In contrast, NSDL continued to maintain a substantially higher value of securities under custody. Thus, while CDSL has emerged as the dominant depository in terms of the number of investor accounts and retail penetration, NSDL continues to occupy a dominant position in terms of the value of securities held and institutional depth. The study concludes that NSDL and CDSL have played complementary roles in the modernization, digitalization and expansion of India's capital market.

Keywords: Depository System, NSDL, CDSL, Dematerialization, Capital Market, Demat Accounts, Investor Participation, Securities Market, Digitalization.

I. INTRODUCTION

A strong capital market is important for mobilizing savings and directing funds towards productive investment. The efficiency of the securities market depends not only on stock exchanges but also on institutions that ensure the safe custody, transfer and settlement of securities.

Before the introduction of the depository system, securities in India were mainly held in physical form. This resulted in problems such as loss or damage of certificates, forgery, delays in transfer and difficulties in maintaining records. To overcome these problems, the Depositories Act, 1996 provided the legal framework for electronic holding and transfer of securities. NSDL commenced operations in 1996 as India's first depository, followed by CDSL in 1999.

The depository system brought major improvements in the Indian securities market by promoting dematerialization, faster settlement, greater transparency and safer securities transactions. The growth of online trading, digital KYC and mobile investment platforms has further increased the use of demat accounts.

During 2020–21 to 2024–25, India witnessed rapid growth in demat accounts and retail investor participation. By March 2025, the total number of demat accounts had reached about 19.2 crore.

Although NSDL and CDSL provide similar services, their growth patterns differ. CDSL has recorded faster growth in the number of investor accounts, while NSDL continues to hold a much larger value of securities under custody. Therefore, a comparative study of the two depositories is useful for understanding the changing structure of India's securities market.

The present study examines the growth and transformation of NSDL and CDSL during 2020–21 to 2024–25 using indicators such as investor accounts, value of securities under custody, depository participants and service-center networks.

© JAN 2026 | IRE Journals | Volume 9 Issue 7 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I7-1723127

Statement of the Problem

The Indian depository system has experienced rapid expansion, but the growth of NSDL and CDSL has not been uniform across all indicators. CDSL has recorded exceptionally rapid growth in the number of investor accounts, whereas NSDL continues to account for a substantially larger value of securities under custody.

Consequently, comparing the two depositories merely on the basis of the number of demat accounts does not provide a complete picture of their contribution to the Indian capital market. A comprehensive comparison requires consideration of multiple indicators including investor accounts, custody value, depository participants, service networks and market share.

The present study therefore attempts to examine the changing competitive and institutional position of NSDL and CDSL during the period 2020–21 to 2024–25.

Objectives of the Study

The study has the following objectives:

1. To analyse the growth of NSDL and CDSL during 2020–21 to 2024–25.
2. To compare NSDL and CDSL on the basis of selected performance indicators.
3. To examine the growth of Investor Demat Accounts.
4. To Analyse changes in the value of securities held under custody.
5. To compare the depository participant and service-center networks of NSDL and CDSL.
6. To examine the changing market position of the two depositories.
7. To draw the Summary of Findings from the study
8. To offer suggestions for improvement.

Research Methodology

i. Nature of the Study

The study is descriptive, analytical and comparative in nature.

ii. Period of Study

The study covers five financial years from 2020–21 to 2024–25.

This period has been selected because it captures the significant expansion of digital financial services and retail investor participation in India.

iii. Sources of Data

The study is based exclusively on secondary data collected from reliable institutional sources, including:

- Securities and Exchange Board of India (SEBI)
- National Securities Depository Limited (NSDL)
- Central Depository Services (India) Limited (CDSL)
- Annual reports of NSDL and CDSL
- SEBI statistical publications and annual reports
- Official depository statistics

iv. Tools of Analysis

The following analytical tools are used:

- Percentage growth
- Compound Annual Growth Rate (CAGR)
- Comparative analysis
- Trend analysis
- Tables and graphical presentation

Comparative Growth of NSDL and CDSL

1. Number of Investor Accounts

The number of investor accounts is one of the most important indicators of the expansion of India's depository system.

Table 1a: Growth of Investor Accounts

Financial Year	NSDL (crore)	CDSL (crore)	Combined (crore)
2020–21	2.17	3.34	5.51
2021–22	2.67	6.30	8.97
2022–23	3.15	8.30	11.45
2023–24	3.58	11.56	15.14
2024–25	3.95	15.30	19.25

Source: Compiled from SEBI, NSDL and CDSL annual reports and statistical publications

Analysis

The table reveals a substantial expansion in the investor-account base of both depositories.NSDL's accounts increased from 2.17 crore in 2020–21 to approximately 3.95 crore in 2024–25, representing growth of about 82 percent.CDSL recorded considerably faster growth. Its investor accounts increased from 3.34 crore to approximately 15.30 crore, representing growth of approximately 358 percent. The combined account base increased from 5.51 crore to approximately 19.25 crore during the study period. The data therefore demonstrate the

© JAN 2026 | IRE Journals | Volume 9 Issue 7 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I7-1723127

remarkable expansion of retail participation in India's securities market.

Compound Annual Growth Rate of Investor Accounts

Table 1b: CAGR of Investor Accounts

Depository	2020–21	2024–25	Approx. Growth	CAGR
NSDL	2.17 crore	3.95 crore	82%	16.2%
CDSL	3.34 crore	15.30 crore	358%	46.3%

Interpretation

The CAGR analysis provides strong evidence of the different growth trajectories of the two institutions .CDSL recorded a CAGR of approximately 46.3 percent, compared with approximately 16.2 percent for NSDL. Thus, during the study period, CDSL's investor-account base expanded almost three times as rapidly as that of NSDL. This rapid growth reflects the increasing participation of individual investors and the expansion of digital investment platforms.

2. Value of Securities under Custody

The number of investor accounts alone cannot measure the institutional importance of a depository. The value of securities held under custody provides another important indicator.

Table 2a: Value of Securities under Custody

Financial Year	NSDL₹ lakh crore	CDSL ₹ lakh crore
2020–21	243.75	27.44
2021–22	301.88	37.17
2022–23	322.43	39.71
2023–24	423.44	64.21
2024–25	464.16	70.52

Source: SEBI, NSDL and CDSL official publications/annual reports.

Analysis

The table reveals a striking contrast with the investor-account data.

NSDL's custody value increased from approximately ₹243.75 lakh crore in 2020–21 to ₹464.16 lakh crore in 2024–25, representing approximately 90 percent growth.CDSL's value increased from approximately ₹27.44 lakh crore to ₹70.52 lakh crore, representing approximately 157 percent growth. Despite CDSL's faster percentage growth, NSDL continued to maintain a substantially higher absolute custody value throughout the study period. This indicates the importance of considering both breadth of participation and value of assets held when assessing the performance of depositories.

3. Growth in Depository Participants

Depository Participants (DPs) act as intermediaries between investors and depositories.

Table 3a: Depository Participants

Financial Year	NSDL	CDSL
2020–21	276	592
2021–22	276	584
2022–23	283	588
2023–24	281	580
2024–25	294	574

Source: SEBI, NSDL and CDSL official publications.

Analysis

CDSL maintained a larger number of registered depository participants throughout the study period. However, the number of DPs should not be interpreted independently because the number of DP service centers differs substantially between the two institutions.

4. Depository Participant Service Centers

Table 4a: DP Service-Centre Network

Financial Year	NSDL	CDSL
2020–21	36,044	20,689
2021–22	57,026	21,728
2022–23	59,401	18,676
2023–24	61,665	17,487
2024–25	65,391	18,918

Source: NSDL and CDSL official statistics.

Analysis

The service-centre data reveal another dimension of the comparison.NSDL's service-centre network expanded considerably during the study period, increasing from approximately 36,044 in 2020–21 to 65,391 in 2024–25.CDSL's service-centre network remained considerably smaller. Therefore, the number

© JAN 2026 | IRE Journals | Volume 9 Issue 7 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I7-1723127

of registered DPs and the number of service centres should be treated as separate indicators when evaluating the accessibility and reach of the depository system.

5. Comparative Growth: NSDL and CDSL

Table 5a: Overall Comparative Growth

Indicator	NSDL 2020–21	NSDL 2024–25	Growth	CDSL 2020–21	CDSL 2024–25	Growth
Investor accounts (crore)	2.17	3.95	82%	3.34	15.30	358%
Custody value (₹ lakh crore)	243.75	464.16	90%	27.44	70.52	157%
DPs	276	294	6.5%	592	574	−3.0%
DP service centres	36,044	65,391	81.4%	20,689	18,918	−8.6%

Interpretation
The comparative data establish that the growth trajectories of NSDL and CDSL are substantially different. CDSL has achieved remarkable expansion in terms of investor accounts, while NSDL has retained a strong position in terms of custody value and institutional market depth. This suggests that the two institutions have developed different but complementary strengths within India's capital-market infrastructure.

Findings of the Study
The study produces the following major findings:
1. Rapid expansion of the Indian depository system
Both NSDL and CDSL experienced significant growth during 2020–21 to 2024–25.
2. CDSL recorded exceptionally rapid account growth
CDSL's investor-account base increased from approximately 3.34 crore to 15.30 crore, representing growth of approximately 358 percent.
3. NSDL retained its custody-value leadership
NSDL's securities under custody increased to approximately ₹464.16 lakh crore by 2024–25.
4. CDSL became dominant in account numbers
CDSL's market share by number of demat accounts reached approximately 79.5 percent in 2024–25.
5. NSDL remained dominant in value terms
NSDL retained a very large share of the value of securities held through the depository system.
6. Digitalization accelerated investor participation
The expansion of digital financial infrastructure contributed significantly to the increase in demat accounts.
7. The pandemic period acted as an important turning point
The period beginning in 2020 witnessed exceptionally rapid growth in retail investor participation and demat-account openings.

8. The two depositories have complementary roles
The evidence does not indicate a simple winner between NSDL and CDSL. Instead, their strengths differ according to the indicator used.

Suggestions
Based on the findings, the following suggestions are made:
1. Strengthen investor education: Financial literacy programmes should be expanded, particularly among first-time investors.
2. Promote regional-language services: Depository and investor-education information should be increasingly available in Indian regional languages.
3. Strengthen cyber security: Continuous investment in cyber security, data protection and system resilience is essential.
4. Improve grievance redressal: Investor complaints should be resolved through simple, transparent and time-bound mechanisms.

5. Promote responsible digital participation: New investors should be educated about investment risks before participating actively in securities markets.
6. Expand financial inclusion: Depository services should become more accessible to investors in rural and semi-urban areas.
7. Enhance technological resilience: Backup systems and disaster-recovery mechanisms should be continuously upgraded.

CONCLUSION

The Indian depository system has undergone a profound transformation during the last few decades, and the period from 2020–21 to 2024–25 represents one of its most dynamic phases. The growth of digital financial infrastructure, online investment platforms and retail participation has resulted in a substantial expansion of the demat-account base. The comparative analysis of NSDL and CDSL reveals that their development has followed different trajectories. CDSL has emerged as the dominant depository in terms of the number of investor accounts, with its account base increasing from approximately 3.34 crore in 2020–21 to 15.30 crore in 2024–25. Its market share by number of accounts reached approximately 79.5 percent. NSDL, however, continues to occupy a dominant position in terms of the value of securities under custody. Its custody value increased from approximately ₹243.75 lakh crore in 2020–21 to ₹464.16 lakh crore in 2024–25. This demonstrates the continued importance of NSDL in terms of the value and institutional depth of India's securities market.

The comparison therefore suggests that the two depositories should not be evaluated solely on the basis of one performance indicator. CDSL's strength lies particularly in its large and rapidly expanding investor base, while NSDL's strength lies in its high-value custody and institutional market presence.

The broader transformation is even more significant. NSDL and CDSL have collectively contributed to the transition from physical securities to electronic ownership, improved settlement efficiency, reduced operational risks and facilitated wider participation in India's capital market. The future development of the depository system will depend increasingly upon digital innovation, cyber security, investor protection, financial literacy and inclusive access.

Thus, the growth of NSDL and CDSL represents not merely the expansion of two financial institutions but an important component of the structural and technological transformation of India's capital-market ecosystem.

REFERENCES

[1] Bhatt, K. A., & Bhatt, K. (2012). Financial Performance Evaluation of Depositories in India: A Comparative Study of NSDL and CDSL. *International Journal of Scientific and Research Publications, 2*(2).

[2] Srivastava, A., & Arora, R. (2015). The Depository System in India – A Comparative Study Between NSDL & CDSL. *IMS Manthan: The Journal of Innovations, 10*(1). Crossref

[3] Babu, B. H., Rao, B. K. S. P., & Rao, B. S. (2016). Role of Depositories in Indian Capital Market – A Comparative Study Between NSDL and CDSL. *International Journal of Scientific and Research Publications, 6*(12), 135–141.

[4] Babu, B. H., Rao, B. K. S. P., & Rao, B. S. (2016). Financial Performance of Indian Depositories: A Comparative Study Between NSDL and CDSL. *International Journal of Advance Research in Computer Science and Management Studies, 4*(11), 65–81.

[5] Shacheendran, V. (2020). Dematerialisation of Securities in Indian Capital Market: A Paradigm Shift through Depository System. *ComFin Research, 8*(3). Crossref

[6] Gupta, L., Mohapatra, A. K., & Goel, T. (2021). Digitalization Progress of Depositories in India: Evidences and Outcome. *Indian Journal of Research in Capital Markets, 8*(1–2). Crossref

[7] Securities and Exchange Board of India (SEBI). *Annual Reports and Statistical Publications*. Mumbai: SEBI.

[8] Securities and Exchange Board of India (SEBI). *SEBI Bulletin*. Securities and Exchange Board of India.

[9] National Securities Depository Limited (NSDL). *Annual Reports, various years*. Mumbai: NSDL.

© JAN 2026 | IRE Journals | Volume 9 Issue 7 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I7-1723127

[10] National Securities Depository Limited (NSDL). *Depository Statistics*. Mumbai: NSDL.

[11] Central Depository Services (India) Limited (CDSL). *Annual Reports, various years*. Mumbai: CDSL.

[12] Central Depository Services (India) Limited (CDSL). *Depository Statistics and Periodic Statistics*. Mumbai: CDSL.

[13] Government of India. *The Depositories Act, 1996*. Ministry of Finance.