

Investor Protection Framework: Multifaceted Implications of the Digital Revolution in India

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INVESTOR PROTECTION FRAMEWORK: MULTIFACETED IMPLICATIONS OF THE DIGITAL REVOLUTION IN INDIA*

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Abstract

With the advent of digitalisation and expansion of the retail market in recent years, India has experienced a significant shift in its financial landscape, necessitating an increased emphasis on investor education and protection. This paper delves into the intricate relationship between investor education and investor protection, emphasising the pivotal role of the Government, regulators and financial institutions in framing protective measures for investors. With the rise of digitalisation, particularly fintech, the financial services sector has witnessed transformative changes, influencing access to investment opportunities. This exploratory article reviews the existing architecture for investor protection and stresses the need for a dynamic and well-coordinated approach, robust complaint resolution mechanism, and comprehensive research to enhance investor protection in this evolving financial ecosystem. It discusses notable initiatives, including the National Strategy on Financial Education (NSFE) and its 5C strategy, suggesting an additional “6th C” i.e. a class-oriented approach to serve as a key driver in creating a financially aware and empowered India. The strengthening of the regulatory framework with adequate cybersecurity measures, launch of an online portal for claim settlement, and the establishment of a Centralised Grievance Redressal system are highlighted as crucial steps in building a comprehensive investor protection framework. The authors also highlight that investor protection is a two-way approach involving the Government and regulatory bodies on the one hand and investors on the other, with both sides being equally accountable, alert, and watchful in the digital era.

Keywords: *Investor Protection, Investor Education, Digitalisation, Ombudsman, Grievance redressal, SEBI, RBI, DPDP Act, Financial Literacy, Financial Inclusion.*

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1. INTRODUCTION

Financial literacy is the gateway to understanding and effective application of financial skills, including personal financial management, budgeting, saving and investing. It helps individuals enhance their financial well-being. Financial literacy forms the basis of both investor education and investor protection, as individuals equipped with financial knowledge are able to understand various concepts, risks, and investment products. Investor education builds on this foundation by ensuring a comprehensive understanding of investment intricacies, facilitating informed decision-making, and promoting awareness of grievance redressal mechanisms. Informed investors are less vulnerable to fraudulent schemes and can make well-informed investment choices. In recent years, India has witnessed a transformative shift in its financial landscape, particularly in the realm of investor education and protection. However, it is a fact that only 27% of Indians are financially literate and efforts need to be made to improve this scenario (Annual Report, NCFE, 2022-23). Financial sector regulators such as the RBI, SEBI, PFRDA, and IRDAI have established rules and regulations to protect investors, coupled with multifarious investor awareness initiatives. The Investor Education and Protection Fund Authority, under the Ministry of Corporate Affairs, administers the Investor Education and Protection Fund and promotes, inter-alia, investor education and awareness and claim settlement measures. Key market infrastructure institutions such as the NSE, BSE, CDSL, NSDL and intermediaries play a vital role in conducting investor awareness programmes for the capital market.

With digitalisation gathering pace, the approach to investor education and investor protection has undergone a sea change. Public policies have further fuelled digitalisation initiatives in the financial markets, transforming the financial services sector. Digitalisation has reshaped banking and insurance, giving rise to fintech, which utilises technology to improve financial services. The impact of this rapid digitalisation is evident in alternative financial channels becoming a reality across economies, including India's. Fintech's influence has introduced innovations in banking and mobile payment systems, providing increased accessibility to investment opportunities. This development holds the potential to address wealth disparities by allowing individuals to participate in markets with lower fees and minimum investment requirements, contributing to wealth accumulation through assets such as stocks and bonds (Akerlof & Shiller, 2003).

Regulation is frequently viewed as a two-party relationship between a regulator (R) and the targets of its regulation (T). (Abbott, Faur and Snidal, 2017) The confluence of a robust regulatory framework and increasing digitalisation has redefined the way investors navigate the financial ecosystem. This paper delves into this evolving paradigm, highlighting the existing framework and underscoring the mounting criticality of digitalisation in investor welfare.

2. THE CURRENT REGULATORY PARADIGM: A STRONG FOUNDATION

India has made remarkable progress in incorporating its citizens into the formal financial system in recent years. Since the release of the initial National Strategy for Financial Education (NSFE) in 2013, the country's financial inclusion landscape has witnessed a significant change.

2.1 Financial Inclusion

The Government of India has undertaken a series of impactful initiatives to propel the digitalisation of the financial sector, aiming to enhance accessibility, transparency, and financial inclusion. The Pradhan Mantri Jan-Dhan Yojana (PMJDY), launched in 2014, has been

instrumental in providing widespread access to financial services, ensuring that every household has at least one bank account.

Other financial sector initiatives taken up by the Government and various social security schemes like Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Pradhan Mantri Kisan Maan Dhan Yojana (PM-KMY), Pradhan Mantri Shram Yogi Mann Dhan Yojana (PM-SYM), and Pradhan Mantri Mudra Yojana (PMMY) have further boosted financial inclusion. These initiatives have not only brought marginalised sections into the financial mainstream but also provided them access to essential financial services, including Basic Savings Bank Deposit Account (BSBDA), tailored credit, remittance facilities, insurance, and pension.

The Digital India campaign, initiated in 2015, encompasses various efforts to promote e-governance, digital literacy, and technology adoption in financial services. The BHIM app, National Electronic Funds Transfer (NEFT), Real-Time Gross Settlement (RTGS), micro ATMs, and Point of Sale (PoS) devices are vital components of this comprehensive drive toward a digital and financially inclusive economy. The implementation of the Goods and Services Tax (GST) in 2017 streamlined the taxation system and encouraged digital record-keeping. These initiatives collectively signify the government's commitment to leverage technology for the benefit of all citizens.

Despite witnessing a significant 30% surge in the proportion of adults with bank accounts following the implementation of PMJDY, several issues such as account duplication, inactivity, and an uneven rise in the count of borrowers remain concerns in realising comprehensive financial inclusion across the country (Sinha and Azad, 2018). As per Findex data, India experienced a remarkable increase of 26 percentage points in account ownership between 2014 and 2017, largely attributed to the implementation of the world's most extensive financial inclusion initiative, the Pradhan Mantri Jan Dhan Yojana. In comparison, global account ownership saw growth of 6.57 percentage points during the same period. One noteworthy trend, however, is the slight decrease in account ownership from 80% to 77% in India between 2017 and 2021, making it the sole comparator country experiencing an absolute decline in formal bank account ownership. A critical aspect here is that India exhibits the highest proportion of inactive accounts, with 35% of the adult population owning inactive accounts, a statistic that aligns with previous studies suggesting that the Pradhan Mantri Jan Dhan Yojana (PMJDY) contributed to dormant bank accounts. Notably, despite the impressive surge in account ownership, India still has the largest percentage of individuals without a formal bank account (17%). In 2014, India had the largest unbanked population of 423,563,808 (47%), whereas that in China was 233,868,992 (21%). After the launch of PMJDY in 2017, China became the country with the largest unbanked population (23.15 crore), followed by India (19.21 crore). However, 2021 data shows that post 2017 the process of financial inclusion in India slowed again, with it having the largest number of unbanked adults at 22.89 crore (22%) and China falling to the second place with 13.03 crore (11%). This points to the need for India to have a second round of intensive efforts to boost financial inclusion, with financial education being the cornerstone of such efforts.

2.2 Dedicated Funds for Investor Education and Protection

India's commitment to safeguard investor interests is evident from its well-established regulatory framework. The Government and regulators have funds earmarked for promoting investor education and protection activities. Besides, financial sector intermediaries such as stock exchanges, depositories clearing corporations, and brokers' financial institutions are engaged in investor awareness campaigns and investor protection efforts. As part of this agenda, the

Subscriber Education and Protection Fund (SEPF) was established to safeguard the interests of subscribers or investors in various financial instruments and schemes. This fund is typically associated with investment vehicles such as mutual funds, pension funds, and other subscriber-based financial products. The primary objectives of the fund include promoting financial literacy among investors, ensuring investor protection, and creating a safety net for their investments.

2.2.1 Investor Protection and Education Fund (IPEF), SEBI

The Securities and Exchange Board of India (SEBI) has played a pivotal role in shaping policies and guidelines to boost investor education and protection. SEBI's Investor Protection and Education Fund (IPEF) was created in 2007 with an initial corpus of ₹10 crore from SEBI General Fund. The purpose of SEBI IPEF is to protect the interests of investors and promote investor education and awareness. Besides SEBI IPEF, Investor Protection Funds are maintained by stock exchanges as well as depositories. The utilisation of the IPEF is detailed in Table 1:

Table 1: Utilisation of SEBI Investor Protection and Education Fund (in crore rupees)

IPEF Expenses	2019-20	2020-21	2021-22	2022-23
Financial Literacy	10.72	15.63	3.9	8.37
Seminar/Workshop by SMARTs	0	0	1.24	1.92
Seminar/Workshop by IA's	0.42	0.2	0.45	0.65
Investor Education	0.68	12.99	1.02	0.39
Seminar/Workshop by CoTs	0	0	0.13	0.22
Capital Grants	0	0.01	0.05	0.00
Committee Meeting	0.004	0.005	0.01	0.01
Others	0.02	0.002	0.01	0.38
Total	11.84	28.84	6.81	11.93

Source- Data compiled by authors from the Annual Reports of SEBI from 2019-20 to 2022-23

Note- IA: Investor Associations; SMARTs: Securities Market Trainers; CoTs: Commodities Derivatives Trainers

2.2.2 Depositor Education and Awareness Fund (DEAF), RBI

The RBI's "Depositor Education and Awareness Fund" stipulates that if any bank account in India remains inactive for ten years, any deposit or unclaimed amount in it must be transferred to the Fund within three months. The Fund, managed by the RBI, aims to promote depositors' interests and welfare. Despite the transfer, depositors retain the right to reclaim their funds, and banks must refund the transferred sum from the Fund if a claim is made. As of February 2023, public sector banks in India have transferred around ₹35,000 crore (approximately \$4.7 billion) in unclaimed deposits to the RBI's Depositor Education and Awareness Fund. These funds, transferred from 10.24 crore accounts inactive for a decade or more, include ₹8,086 crore from SBI, ₹5,340 crore from Punjab National Bank, and ₹4,558 crore from Canara Bank. Thus, dormant accounts which often hold funds represent a significant financial resource if rightfully claimed.

2.2.3 Deposit Insurance and Credit Guarantee Corporation (DICGC), RBI

The DICGC, a subsidiary of the RBI, plays a pivotal role in safeguarding the interests of depositors. As the designated deposit insurer, DICGC provides insurance coverage to depositors in the unfortunate event of a bank failure. The coverage extends to various types of deposits, including savings, fixed, recurring, and current deposits. In January 2022, the insurance limit stood at ₹5 lakh per depositor per bank. The DICGC plays a crucial role in instilling confidence among depositors by offering a safety net that mitigates risks associated with potential bank failures.

2.2.4 Investor Education and Protection Authority (IEPFA), Ministry of Corporate Affairs

The Investor Education and Protection Fund Authority (IEPFA) holds the mandate of overseeing the administration of the IEPF. It plays a crucial role in ensuring investor protection and education, complementing the efforts of other regulatory bodies. The IEPFA operates within the ambit of the Companies Act 2013 and has formulated rules and regulations to reinforce investor protection measures. Its functions are, inter alia, facilitation of refunds for shares, unclaimed dividends, matured deposits/debentures etc., ensuring their proper disbursement to investors, and fostering awareness among the investment community.

Table 2: Details of Investor Awareness Programmes (IAPs) conducted during the years 2019-20 to 2022-23 by IEPFA (in numbers)

Financial Year	By Professional Institutes	By CSC e-Governance	Total
2019-20	101	11,624	11,725
2020-21	997	4,034	5,031
2021-22	2,485	10,966	13,451

Source- Annual Report of IEPFA, 2021-22

The IEPFA has been instrumental in advancing financial literacy and investor awareness. Up to 2021-22, it had conducted over 65,000 investor awareness programmes, reaching more than 30 lakh citizens. Its key initiatives, such as the Gyandarshan series in collaboration with IGNOU and a number of Investor Awareness Programmes (IAPs) in collaboration with the Institute of Chartered Accountants of India (ICAI) and Institute of Company Secretaries (ICSI), have substantially boosted investor education efforts. Collaborative efforts with organisations like the India Post Payments Bank (IPPB) and CSC SPV e-Gov Services Ltd. have extended the reach of the programmes, with IPPB exceeding targets by 165%, conducting 7,324 camps for around 3 lakh citizens. The IEPFA Mobile App, featuring claim refund tracking and a learning management system, enhances citizen service delivery. The IEPF Chair at NCAER focuses on research to address the challenges in investor education and protection and is an indicator of IEPFA's commitment to change India's investor landscape. An impact analysis by IIT Delhi in 2018 revealed over 95% satisfaction levels among participants. An ASSOCHAM (Associated Chambers of Commerce and Industry of India) report in 2022 indicated a notable improvement in investor awareness, particularly among female investors, rising from 9% to 19%.

2.2.5 Subscriber Education and Protection Fund (SEPF), PFRDA

The SEPF of PFRDA plays a crucial role in educating subscribers about the intricacies of different financial products, the risks associated with investments, and the importance of making informed decisions. In addition to raising awareness, the fund serves as a protective mechanism for subscribers. It is envisaged to act as a resource pool that can be utilised to compensate subscribers in cases of fraud, mismanagement, or unforeseen circumstances that jeopardise their investments.

Its key functions include conducting sustainable awareness programmes, disseminating information about financial products, and facilitating the resolution of grievances or disputes between subscribers and financial institutions. The SEPF contributes to building of a resilient and informed community of investors, fostering trust and sustainability in the financial ecosystem.

2.2.6 State Insurance Plan (SIP), IRDAI

In the financial year 2022-23, the IRDAI launched the State Insurance Plan (SIP) with the objective of achieving "Insurance for All by 2047." This initiative aims to implement various strategies to increase insurance penetration across different regions of the country, working closely with State Governments. The primary goal is to enhance awareness and accessibility to insurance coverage nationwide. In line with these efforts, the IRDAI (Expenses of Management of Insurers transacting Life Insurance Business) Regulations of 2023, which replaced the 2016 Regulations, were introduced. These regulations aim to ease the compliance burden on Life Insurers, with a focus on boosting insurance awareness through additional allowances. The fundamental framework for protecting policyholders' interests is detailed in the IRDA (Protection of Policyholder's Interests) Regulations of 2017.

3. GRIEVANCE REDRESSAL FRAMEWORK AT THE HEART OF INVESTOR PROTECTION

Financial regulators in India have established grievance redressal mechanisms to address concerns and complaints from stakeholders in the financial sector. A brief review of the key financial regulators and their respective grievance redressal mechanisms is provided below:

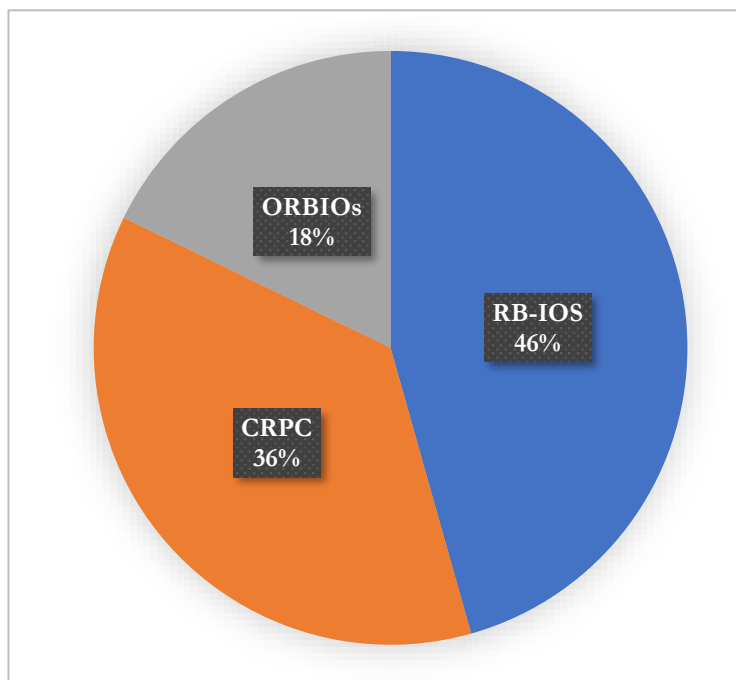
3.1 Ombudsman Scheme of RBI:

The RBI has a dedicated Banking Ombudsman Scheme to address grievances related to banking services. Individuals can file complaints with the Banking Ombudsman if they are not satisfied with the resolution provided by their bank.

In the fiscal year 2021-22, the RBI achieved a significant milestone in its Ombudsman mechanism by integrating three Ombudsman Schemes into the Reserve Bank- Integrated Ombudsman Scheme (RB-IOS), launched on November 12, 2021. This integration included the Banking Ombudsman Scheme (BOS) 2006, Ombudsman Scheme for Non-Banking Financial Companies (OSNBFC) 2018, and Ombudsman Scheme for Digital Transactions (OSDT) 2019. A Centralised Receipt and Processing Centre (CRPC) was established at RBI, Chandigarh, to handle complaints nationwide. The RB-IOS, based on the 'One Nation, One Ombudsman' principle, replaced territorial jurisdictions, expanding the grounds of complaint to cover all deficiencies in service. Between November 12, 2021, and March 31, 2022, the RB-IOS received

1,86,268 complaints. The CRPC processed 1,49,419 complaints, and 72,580 were assigned to the Offices of RBI Ombudsman (ORBIOs) for redressal.

Figure 1: Number of Complaints received by RBI Ombudsman schemes in 2021- 2022 under three different ombudsman schemes



Source- Authors' compilation from available data in RBI Ombudsman Report.

Note- Offices of RBI Ombudsman (ORBIOs); Centralised Receipt and Processing Centre (CRPC); Reserve Bank- Integrated Ombudsman Scheme (RB-IOs)

Additionally, several initiatives were undertaken by the RBI to strengthen the grievance redressal system, including a Customer Satisfaction Survey, Root Cause Analysis, completion of strategic milestones, extension of RB-IOs to Credit Information Companies, and awareness campaigns conducted by the RBI Ombudsman Offices.

Table 3: Total receipt and disposal of complaints under the Ombudsman Schemes from 2019-20 to 2021-22

Number of Complaints	2019-20	2020-21	2021-22
	(Jul - Jun)	(Jul - Mar)	(Apr - Mar)
Received during the year (All OS + RBIOs)	3,30,543	3,03,107	3,04,496
Brought forward from previous year	12,158	25,636	11,429
Complaints received by email before the start of the year but registered at or after start of the year, including complaints transferred from Consumer Education and Protection Cells at or after start of the year	-	6,302	1,589
Handled during the year	3,42,701	3,35,045	3,17,514

Disposed of during the year	3,17,065	3,23,616	3,11,067
Rate of Disposal (%)	92.52%	96.59%	97.97%
Carried forward to the next year	25,636	11,429	6,447

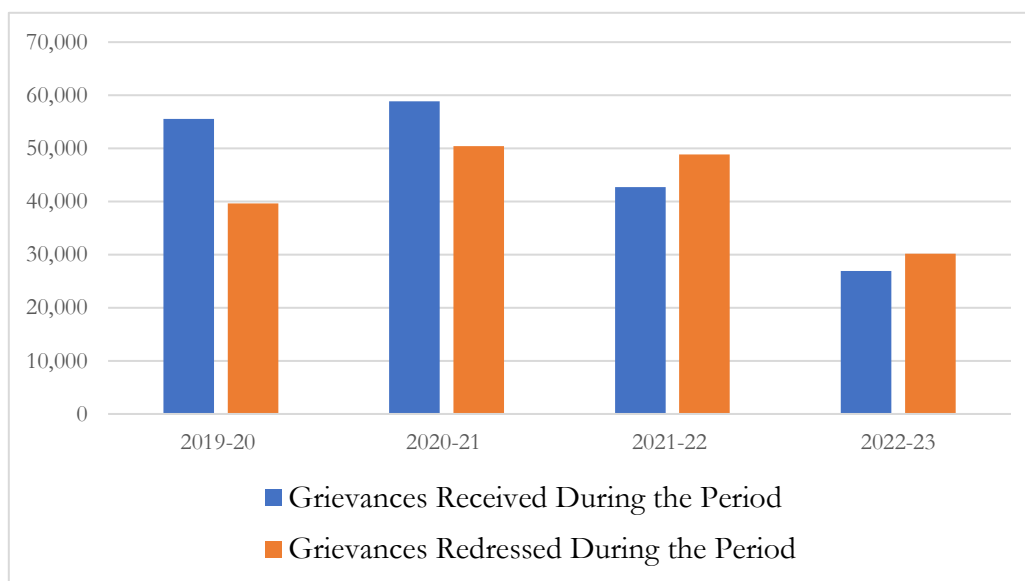
Source- Ombudsman Annual Report 2021-22, RBI

It can be observed from Table-3 that while the number of complaints received have increased, the number of complaints disposed of declined in 2021-22. However, the disposal rate has improved year-on-year from 92.52% to 97.97% over the past three years. According to an article by BSFI, the total number of complaints received as of 2022-23 reduced drastically to 234,690. The article also states that as of December 2023-24, it reduced further to 144,400, of which only 8,604 complaints remained to be addressed.

3.2 SEBI Complaints Redress System (SCORES) of SEBI:

SEBI operates SCORES (SEBI Complaints Redress System), an online platform for investors to lodge and track their complaints related to securities market activities. It provides a transparent and efficient system for grievance redressal.

Figure 2: Number of Grievances received and redressed from 2019-20 to 2022-2023



Source- SEBI Annual Report 2022-23

As per SEBI's Annual Report, from 2010 to December 2022 SCORES received 32,72,790 grievances and redressed 31,31,375 cases.

SEBI's Online Dispute Resolution Portal (ODR Portal) for Market Infrastructure Institutions (MIIs)

SEBI has introduced a new Online Dispute Resolution Portal (ODR Portal), aimed at improving the dispute resolution mechanism for investors and other market participants and helping settle disagreements in the Indian Securities Market by using online discussions and arbitrations. This Portal is a first-of-its-kind initiative and will resolve online disputes arising

from the activities of specified intermediaries and regulated entities, covering a wide range of securities market activities, disputes with entities like stock brokers, mutual funds, and portfolio managers, thereby significantly broadening the scope of the dispute resolution process in the securities market. By integrating online technologies, the ODR Portal aims to facilitate a timely, efficient, and transparent resolution process, enhancing the overall investor protection framework in India's securities market.

3.3 Bima Bharosa Portal (BBP) of IRDAI:

The IRDAI has introduced the Bima Bharosa Portal (formerly Integrated Grievance Management System - IGMS) to streamline the online lodging and tracking of insurance-related complaints. In the fiscal year 2022-23, the portal recorded 2,02,640 grievances, of which 61.5% were related to Life Insurance. The industry's resolution rate stood at an impressive 98.21%, with life insurers resolving 99.77% of grievances -- private sector life insurers achieved a resolution rate of 99.33%, while their public sector counterparts achieved nearly 100%. General insurers addressed 95.8% of handled grievances, with the figure for public sector companies at 90.62% and for private companies at 97.87%. Most of the life insurance grievances (over 62%) pertained to Survival claims, Policy servicing, and unfair business practices, while general insurance grievances (66%) were predominantly related to claims.

Table 5: Status of Grievances from 2019-2020 to 2021-2022 (number in thousand)

	2019-20		2020-21		2021-22		2022-23	
Insurer	Reported During the year	Attended During the year	Reported During the year	Attended during the year	Reported During the year	Attended During the year	Reported during the year	Attended during the year
Life Insurers Total	1,65,217	1,62,425	1,51,046	1,53,740	1,54,826	1,54,890	1,24,293	1,24,417
General Insurers Total	49,988	49,917	48,017	47,877	65,515	64,625	78,347	76,959
Grand Total	2,15,205	2,12,342	1,99,063	2,01,617	2,20,341	2,19,515	2,02,640	2,01,373

Source- Authors' compilation from the Annual Reports of IRDAI

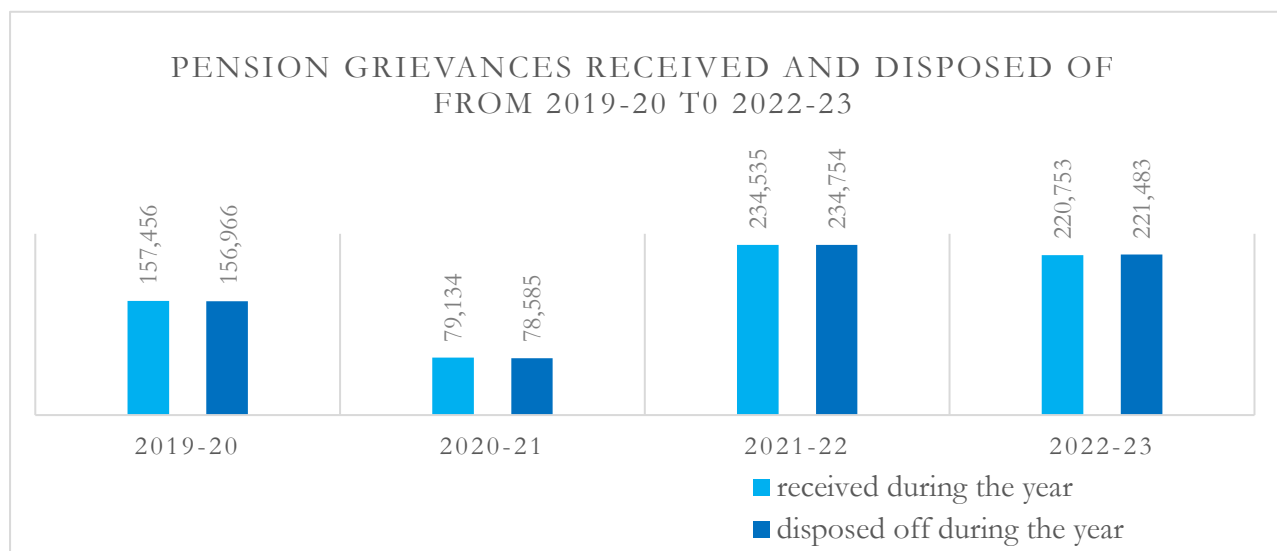
In addition, IRDAI disposes of grievances registered on the DARPG Portal. In 2022-23, it disposed of 12,808 out of the total 13,028 grievances on the DARPG Portal. If the complainant remains unsatisfied, the insurer can appeal to the Insurance Ombudsman.

3.4 CRA GRM (Central Recordkeeping Agency Grievance Redressal Mechanism) of the PFRDA:

The PFRDA oversees the National Pension System (NPS), and individuals can get their grievances related to the NPS redressed through the CRA (Central Recordkeeping Agency) Grievance Redressal Mechanism. As per the PFRDA Regulations 2015, subscribers can raise their grievances for resolution through the Central Grievance Management System (CGMS). The grievances are directed to the intermediary/office concerned for necessary action.

If the complaint remains unaddressed, it is escalated to the NPS Trust and a further appeal can be filed before the ombudsman. For any pension related grievance that remains unresolved or is not addressed satisfactorily, an appeal can be made to PFRDA member, and thereafter the complainant has the right to approach the Securities Appellate Tribunal (SAT).

Figure 3: Status of Total Grievances from 2019-2020 to 2022-23



Source- Authors' compilation from available data in the Annual Reports of PFRDA

Figure-3 represents the grievances received and redressed over a four-year period. In the fiscal year 2019-20, a total of 1,57,456 grievances were received, with 1,56,966 being successfully redressed. The subsequent fiscal year, 2020-2021, saw a decrease in the number of grievances, with 79,134 received and 78,585 redressed. However, there was a substantial increase in both received and redressed grievances (including pending ones) in 2021-2022, which reached 2,34,535 and 2,34,754, respectively.

The total grievances received and redressed over the four-year period stand at 6,91,878 and 6,91,788, respectively. This indicates a nearly equal number of grievances received and redressed, demonstrating a proactive and efficient grievance redressal mechanism. However, the substantial increase in grievances during the fiscal year 2021-2022 might warrant investigation to understand the factors contributing to the surge and ensure continued effectiveness in redressing grievances in the future. Overall, the data suggests a system responsive to grievances, with efforts made to maintain a balance between the number of grievances received and those redressed.

While the regulatory bodies generally demonstrated effective grievance redressal mechanisms, the fluctuations in reported grievances and disposals, as well as the period for which they were pending, necessitate a detailed analysis to understand the underlying factors for the same and assess the effectiveness of the grievance redressal system.

4. IEPFA INVESTOR PROTECTION: CLAIMING THE UNCLAIMED

The IEPFA has put in place a rigorous claim settlement process for investors or their kin to claim their unclaimed shares and dividends which have been lying idle for more than seven years, apart from having a dedicated cell for grievance redressal. The IEPFA Claim Settlement Process, as outlined in the Companies Act, allows individuals entitled to amounts specified in

Section 125(2) to apply for payment to the authority. Section 124(6) ensures that claimants of shares transferred to the fund can reclaim them from the IEPF. Claimants submit online applications (Form IEPF-5) for refunds, sending the form and necessary documents to the company concerned for verification. The company submits within 30 days an online verification report to the authority through the MCA 21 system. The authority processes complete applications within 60 days of receipt of the verification report and relevant documents from the company, as per the IEPF Authority Rules, 2016. If we look at the available data, the number of applications to the authority increased from 19,188 in 2018-19 to 28,647 in 2021-22.

Table 6: Claim Applications to the authority for claiming unpaid amounts and shares out of IEPF

PERIODS	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY 2021-2022
Claim Applications	19,188	16,166	14,032	28,647

Source- Annual Report of IEPFA, 2021-22

The IEPFA was able to successfully settle 26,044 claims and distribute 61,21,291 shares and dividends worth over Rs.10.85 crore to the rightful claimants during the financial year 2021-22.

Table 7: Details of applications for refund filed with IEPF authority

Sl. No.	Items	2018-19	2019-20	2020-21	2021-22
I	Number of applications received (including carry forward) during the period	9,011	23,998	12,332	29,926
II	Number of applications for which sanction for refunds was made	712	6,989	7,262	10,472
III	Number of applications pending at the end of the year.*	7,974	16,309	12,792	16,418

Source- IEPFA

Note- *These applications are pending for want of clarification/rectified documents/report from Company/Claimant.

Table-7 provides insights into the operational dynamics of the Investor Education and Protection Fund Authority (IEPFA) from fiscal year 2018-19 to 2021-22. The number of pending applications along with the received applications at the beginning of each fiscal year exhibited variability, notably surging from 9,011 in 2018-19 to a peak of 29,926 in 2021-22. The data on applications for which sanctions for refunds were made showed an upward trend, reaching 10,472 in 2021-22. The number of pending applications at the end of each fiscal year showed a dip from 2019-20 to 2020-21 but increased in 2021-22. As the IEPFA handles a substantial volume of applications, there is need for speedy implementation of the budget announcement of 2022-23 regarding an online portal for unclaimed shares and dividends, which will reinforce investor protection and education initiatives.

5. SCAM/ FRAUD PREVENTION: AN EFFECTIVE MECHANISM FOR INVESTOR PROTECTION

The terms “scam” and “fraud” are often used interchangeably, but they have different meanings. Fraud is a broader term that refers to any intentional deception or misrepresentation made for personal gain or to cause harm to others. A scam, on the other hand, is a type of fraud that involves tricking people into giving away their money or personal information. Fraud usually involves suspicious activity on our account that we didn't know about and didn't authorise. Examples of fraud include unauthorised use of our credit or debit card, bank account takeover, and identity theft. A scam, on the other hand, involves our making or authorising the payment ourselves. We are persuaded to buy a fake item, hand over our security code, or transfer a sum of money, not realising that we are being conned by a criminal.

It's important to note that while scams are a type of fraud, not every instance of fraud is a scam. Fraud can take many forms, including Ponzi schemes, pyramid schemes, real estate scams, market manipulation fraud, etc.

India has had a long and complex history of scams and financial fraud that have captured national attention and, in some cases, had significant political and economic repercussions. Some notable financial scams and fraud cases in India's history are: Harshad Mehta Scam (1992), Ketan Parekh Scam (2001), 2008 Satyam Scandal, 2010 2G Spectrum Scam, Speak Asia Online Scam (2011), 2011 Commonwealth Games Scam, PNB-Nirav Modi Scam (2018), IL&FS Scam (2018), Sahara Scam, Coalgate Scam: The coal allocation scam or ‘Coalgate’, Pearls Agrotech Corporation Limited Scam (2016), I Monetary Advisory (IMA) Scam (2019), QNet Scam (Various Years), and Agrigold Scam (2016).

Fraud significantly undermines investor confidence, especially in investor funds, thereby impairing the mobilisation of resources for financial markets. With the advent of digitalisation and complex/composite financial products including cryptocurrencies, the risks of fraud and scams have increased. To keep pace with the digitalised world, not only do regulators need to provide a fraud prevention and early detection framework, but investors themselves need to cross-verify the genuineness of investment offerings and not fall prey to greed. Many a time, it is ignorance and negligence on part of the investor that wrecks their financial well-being.

6. CYBERSECURITY AND HARNESSING AI

Cybersecurity protects computer systems and sensitive data from unauthorised access and digital crimes. In today's digital era, it's crucial to protect investors and their sensitive financial and personal information. While they are essential for financial investors, cybersecurity measures must simultaneously respect fundamental human rights such as privacy (Fisher D., 2021). Implementing robust data security measures is crucial for protecting personal data and upholding privacy rights (Choo K.-K., Tan H., 2021).

In today's interconnected digital landscape, cybersecurity is a cornerstone for safeguarding individuals, businesses, and national interests. The increasing reliance on digital technologies has elevated the significance of cybersecurity to unprecedented levels. As personal and financial information traverses digital networks, robust cybersecurity measures become essential to thwart unauthorised access, protecting against identity theft, fraud, and privacy breaches. Beyond individual well-being, the uninterrupted functioning of businesses and critical infrastructure depends heavily on the resilience of cybersecurity defences. Cyberattacks such as ransomware and Distributed Denial of Service (DDoS) incidents can disrupt operations, making cybersecurity crucial for ensuring business continuity. Moreover, the interconnectedness of

digital networks raises concerns about national security, making cybersecurity instrumental in safeguarding critical assets and neutralising potential threats.

Compared to 2022, the Indian Computer Emergency Response Team (CERT-In) reported a 62% increase in API (application program interface) attacks on the Indian financial sector as of June 30, 2023, according to a joint white paper published with Mastercard and CSIRT-Fin (Computer Security Incident Response Team - Financial Sector). The rise is attributed to the growing use of APIs in the financial sector, a critical component in the development of fintech and open banking systems in India. Security misconfiguration accounted for a majority of API attacks (57%), followed by distributed denial of service attacks (34%). The white paper recommends deploying artificial intelligence and machine learning for real-time monitoring and emphasises the need for improved logging standards and automation to address security gaps.

The National Critical Information Infrastructure Protection Centre (NCIIPC) is a governmental organisation that serves as the National Nodal Agency for Critical Information Infrastructure Protection, focusing on the safety, security, and resilience of information infrastructure crucial to the nation's critical sectors. The NCIIPC Training & Awareness Programme aims to strengthen the capabilities of personnel in Critical Sector Organisations, including CISOs, CTOs, CXOs, and front-end employees. The programme covers various aspects like Information Security, Policy Guidelines, Best Practices, VAPT, Audit, Incident handling, and employs interactive sessions, cyber drills, demonstrations, and assignments for effective learning.

On the other hand, CERT-In, a governmental organisation under the Ministry of Electronics and Information Technology, serves as the national agency for incident response. In 2022, CERT-In handled a total of 13,91,457 incidents, including Website Intrusion, Malware Propagation, Phishing, and DDoS (Distributed Denial-of-Service) attacks. The organisation issued 653 security alerts, 38 advisories, and 488 Vulnerability Notes during that period. CERT-In actively participated in various cybersecurity initiatives, conducting training programmes, domestic crisis exercises, international cyber drills, and collaborating with organisations like Cyber Security Agency, Singapore, for international cybersecurity exercises, as part of its efforts to enhance cybersecurity.

Recognising the evolving cyber threat landscape, the Government and financial regulators have undertaken comprehensive measures to bolster cybersecurity. Regulatory frameworks established by financial sector regulators like the RBI and SEBI articulate cybersecurity standards and guidelines for the entities under their purview. At the national level, the formulation of the National Cyber Security Policy reflects the government's commitment to create a secure and resilient cyberspace environment. This policy focuses on protecting information, preventing cyber threats, and fostering a robust cybersecurity ecosystem. Incident response mechanisms have been instituted by financial regulators to address and mitigate the impact of cyber incidents swiftly. These mechanisms involve coordinated efforts with stakeholders and the sharing of threat intelligence.

To fortify cybersecurity capabilities, the government has undertaken initiatives for capacity building, including training programmes, workshops, and collaborations with educational institutions. The goal is to nurture a skilled workforce equipped to address the evolving challenges in the cybersecurity landscape. Collaboration with the private sector and international organisations is emphasised, fostering public-private partnerships that play a pivotal role in enhancing overall cybersecurity resilience. Regular cybersecurity audits and assessments conducted by regulators ensure that entities adhere to prescribed security standards, as continuous monitoring is essential to identify and address vulnerabilities proactively.

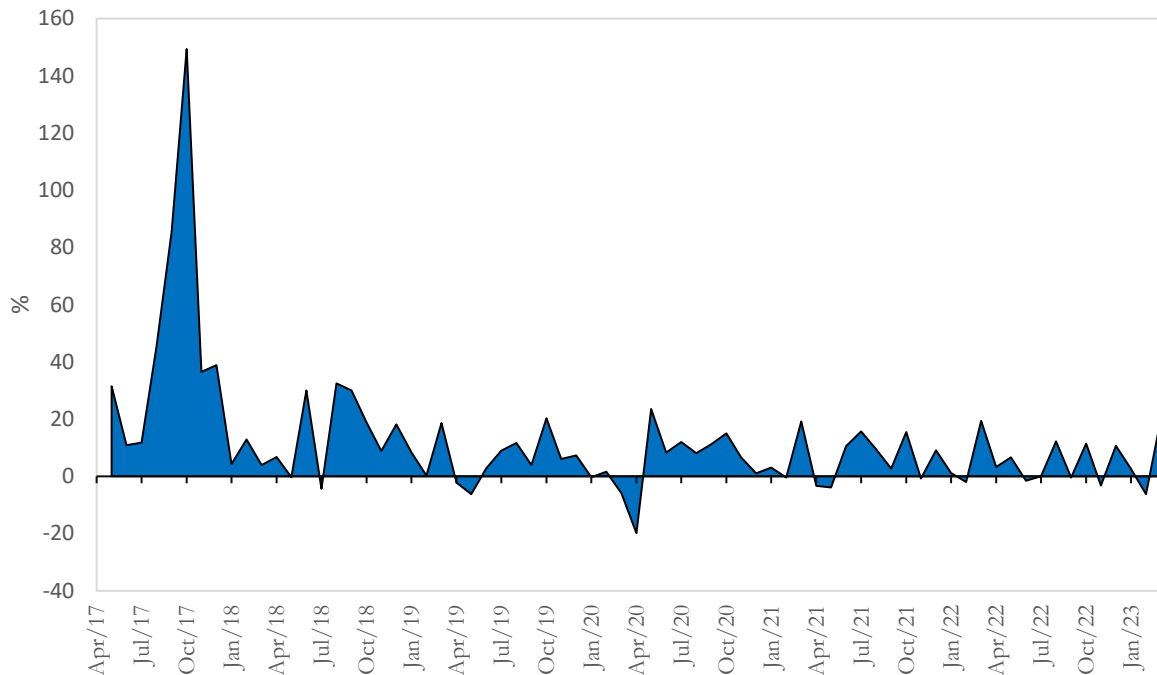
The Reserve Bank of India (RBI) has spearheaded various initiatives to prevent and mitigate financial fraud, enhance cybersecurity, and promote financial inclusion. Notable among these initiatives is the implementation of regulatory sandbox cohorts, with a focus on preventing financial fraud. The fourth cohort, launched in February 2023, involves testing products like risk-based authentication solutions and AI/ML-based models for fraud prevention. The Interoperable Regulatory Sandbox (IoRS) facilitates collaborative testing of hybrid products across multiple financial regulators. Additionally, RBI's hackathon, 'HARBINGER,' has garnered global interest, attracting teams from 23 countries to create solutions for smarter digital payments. The central bank is actively involved in promoting financial inclusion through measures such as the Account Aggregator (AA) ecosystem, aimed at streamlining the delivery of Kisan Credit Card (KCC) loans. Technological innovations, including the use of Artificial Intelligence (AI) in the Complaint Management System, demonstrate the RBI's commitment to customer protection and grievance redressal. The RBI's goals for 2023-24 include conducting scenario analysis for market risk and enhancing early warning signals and the Fraud Risk Management System (FRMS). Fraud analysis indicates that private sector banks report the highest number of fraud, while public sector banks contributed significantly in terms of financial loss during 2022-23. The Digital Payments Index (DPI) set up in 2021 has shown substantial growth in digital payments adoption. The RBI's initiatives extended globally with 'HARBINGER 2023,' focusing on inclusive digital services, RegTech solutions, and Central Bank Digital Currency (CBDC) transactions. In summary, the RBI's multifaceted approach using technological innovation and regulatory advancements underscores its commitment to shape a secure, efficient, and inclusive financial landscape in India.

The Unified Payments Interface (UPI), introduced in 2016, has revolutionised digital payments by enabling instant transfers between bank accounts through smartphones. Leveraging the Aadhaar identification system, the government has promoted Aadhaar-enabled payment systems (AEPS), allowing individuals to conduct financial transactions securely.

Findex data reveals a substantial surge in the adoption of digital financial services in India between 2017 and 2021. Mobile money account usage among individuals aged 15 and above witnessed remarkable growth, rising from 2% in 2017 to 10% in 2021. Additionally, the percentage of individuals aged 15 and above who made or received digital payments increased from 29% in 2017 to 35% in 2021. Notably, the use of mobile phones or the internet to pay bills experienced a significant jump, rising from 3% in 2017 to 10% in 2021. The trend extends to receiving wages through a mobile phone, which was non-existent in 2017 but reached 3% in 2021. Furthermore, the growth in digital payment transactions was evident across income groups, with both the poorest 40% and the richest 60% witnessing notable increases. In rural areas, 30% of the population made or received digital payments, compared to 40% in urban areas in 2021. This data underscores the growing prevalence and acceptance of digital financial transactions across various demographic groups in India.

The surge in Unified Payments Interface (UPI) transactions in India reflects the convenience of digital payments (Figure 4). Yet, the transition to digital payments among lower-income adults brings forth certain consumer risks. These risks encompass fraudulent activities and phishing scams that target accounts, the potential for over-indebtedness through digital credit, as well as instances of customers receiving inadequate or inaccurate information regarding the fees and expenses associated with financial products (Demirgüç-Kunt, A., Klapper et al., 2022).

Figure 5 - Month-to-Month Growth Rate in the volume of BHIM-UPI Transactions (in La khs)



Source- Computed from National Payments Corporation of India (NPCI) and RBI Data

In the context of India, a nation boasting the world's largest population and the fifth-largest economy with a GDP of \$3.74 trillion (Forbes India), the impact of social media is particularly noteworthy. According to the Internet and Mobile Association of India (IAMAI), India currently hosts over 830 million internet users, a figure that is set to reach 900 million by 2025, supported by approximately 400 million smartphones. The enormity of India's digital footprint is underscored by the generation of a staggering 150 exabytes of data annually, positioning the country among the fastest-growing data-generating nations globally (Report of the Joint Committee on the Personal Data Protection Bill, 2019).

Smart cards, suggested as an alternative to biometric collection, require citizen cooperation and offer security with optional use and pin requirements. Unlike biometrics, once disposed of, smart cards cannot be used for identification, reducing the risk of misuse by criminals or foreign entities accessing Indian biometric databases (Boruah, J., & Das, B. 2020).

SEBI implemented a series of cybersecurity measures during the 2022-23 period to enhance the security architecture of the securities market. These initiatives included conducting quarterly cybersecurity tabletop exercises in collaboration with CERT-In, initiating a Chief Information Security Officer (CISO) forum, and issuing a revised framework for cloud services adoption. Vulnerability Assessment and Penetration Testing (VAPT) was conducted for key entities, and a special-purpose cyber audit will evaluate cyber resilience. Cybersecurity frameworks for market intermediaries were modified, emphasising identification of critical assets and comprehensive cyber audits. SEBI issued advisories on cybersecurity best practices and established the Cyber Incidents Reporting Portal (CIRP) to enhance incident reporting. The Security Operations Centre (SOC) integrated new technologies, and threat hunting exercises were conducted. SOPs were enhanced, IR playbooks improved, and IT Policy documents updated. SEBI participated in the G20 Cyber Security exercise and actively addressed potential threats. For the insurance sector, steps were taken to enhance information and cybersecurity, including the formation of a committee to review and provide recommendations on IRDAI Information and Security guidelines. Updated guidelines were issued, and efforts were made to

strengthen IT security through monitoring and advisories. Internal information and cybersecurity were further reinforced through VAPT for the entire ICT infrastructure, and events like Cyber Jaagrookta Diwas were conducted to improve employee awareness. Along the same lines, PFRDA has implemented robust measures to boost cybersecurity, of which the introduction of 'Cyber Jaagrookta Diwas,' a monthly awareness campaign led by the Ministry of Home Affairs, is most noteworthy. This initiative, occurring every first Wednesday, seeks to consistently educate the public, especially vulnerable groups, on various aspects of cyber hygiene.

The collaborative efforts underline the regulatory system's commitment to enhance cybersecurity awareness and education regularly. Overall, these measures aim to enhance cybersecurity readiness among all the financial regulators and guard against evolving threats.

Governments and financial regulators can enhance investor protection through various strategies that leverage AI and digital advancements. Sentiment analysis enables the identification of early warning signs by analysing online content, news, and social media for public sentiment. Surveillance and monitoring tools powered by AI swiftly detect potential market manipulation and insider trading, facilitating faster investigations. Sophisticated AI algorithms conduct granular risk evaluations across investment portfolios, offering regulators improved visibility on systemic risks. Fraud detection relies on AI, analysing large datasets to identify patterns indicative of financial fraud and money laundering and aiding in the prompt identification of fraudulent activities. Automation of compliance processes, regulatory filing reviews, and identification of inconsistencies using AI strengthens oversight and accountability. AI-driven forecasting analyses economic and market data, allowing regulators to anticipate compliance and governance issues. AI chatbots enhance regulator accessibility by addressing investor queries, complaints, and feedback. Additionally, AI tools bolster cybersecurity efforts, enhancing detection and response to cyber risks and, ultimately, safeguarding market integrity. But thoughtful deployment of AI is key, as it complements human insight and oversight to ensure quicker, more effective, and proactive investor protection measures.

7. DATA PROTECTION IS KEY TO INVESTOR PROTECTION: THE DPDP ACT, 2023

The lack of robust privacy protection can exact substantial costs on consumers, ranging from tangible issues like identity theft to intangible ones like stigma or psychological discomfort, as highlighted by Acquisti et al. (2016). The significance of privacy protection becomes evident in the real-world impact of security breaches, exemplified by the 2021 identity theft incidents in the United States that impacted around 15 million consumers and caused losses of approximately 24 billion USD (Javelin, 2022).

7.1 Digital Personal Data Protection (DPDP) Act, 2023

On August 11, 2023, the Digital Personal Data Protection (DPDP) Act came into effect, aiming to regulate, inter alia, crucial aspects of privacy and personal data. In an acknowledgment of the growing need to safeguard personal information in the digital age, this legislation seeks to curb illegal activities concerning data by imposing penalties. Important to recognise here is the fact that government initiatives aimed at development can lead to a potential challenge, with integration of various sensitive data sometimes inadvertently creating opportunities for fraudsters.

In the realm of fraud, personal details play a significant role. An article in Business Line (2023) has highlighted a noteworthy statistic — nearly half of the cybercrime cases reported

since 2020 are associated with UPI. This underscores the system's increasing vulnerability as we integrate various sectors with technology: from 77,000 cases in 2020-21, the number went up to 84,000 in 2021-22 and further to 95,000 in 2022-23. Despite governmental and regulatory efforts, such as implementation of OTP (One-Time Password) and two-factor authentication to enhance investor protection, cases of fraud persist. This trend emphasises the challenges in ensuring the security of personal information in our increasingly technology-dependent landscape.

In the context of investor privacy framework, therefore, it is crucial to address the growing demand for anonymous payment methods which safeguard user data and uphold the right to be forgotten. Systems need to avoid the potential risk of invading privacy beyond consumer tolerance (Choi et al. 2022). It is for this reason that ongoing discussions, such as those highlighted by Kahn (2018), delve into the balance between user anonymity and policies aimed at securing the larger ecosystem. While traditional cash transactions inherently protect anonymity and privacy, the level of anonymity in the digitalised world is subject to the careful crafting of policy, which need to align with anti-money laundering (AML) and combating the financing of terrorism (CFT) regulations.

7.2 Data Breach

Data breach occurs when unauthorised individuals gain access to sensitive or confidential data, typically stored by an organisation. Such unauthorised access can result in the exposure, theft, or compromise of personal, financial, or proprietary information. Data breaches can happen through various means, such as cyberattacks, hacking, phishing, or even physical theft of devices containing sensitive data. The consequences of a data breach can include identity theft, financial losses, reputational damage, and legal repercussions. Organisations implement security measures and protocols to prevent, detect, and respond to data breaches, aiming to safeguard the privacy and integrity of the data they hold.

A data breach can lead to significant expenses, as highlighted in IBM's annual "Cost of a Data Breach" report, which indicates an average cost of approximately \$4.24 million per incident. Furthermore, the report outlines a consistent upward trend in such costs every year. This underscores the growing financial burden associated with safeguarding data.

Thus, prioritising data security is not only a prudent choice but also a preventive measure against substantial financial liabilities. This also makes it evident that investor protection efforts must be aligned with sensitive data protection and privacy.

7.3 Steps taken by financial regulators

Indian financial regulators are taking steps to enhance transparency, either through guidelines or through the new DPDPA'23. SEBI guidelines state that listed companies must disclose data breaches or cybersecurity compromises to stock exchanges as "Material Events or Information." Similarly, the RBI requires prompt reporting of significant data breaches or cybersecurity incidents by banks, which should also be included in their Annual Reports, along with details of risk mitigation measures. The DPDP Act, particularly Section 16, empowers the Indian government to regulate cross-border personal data transfers, aligning with global trends seen in the EU's GDPR (General Data Protection Regulation).

The Insurance Regulatory and Development Authority of India (IRDAI) is taking proactive measures to assess the potential impact of the Digital Personal Data Protection (DPDP) Act 2023 on the insurance sector. It has proposed the formation of an 11-member

taskforce to delve into its implications. A Gazette Notification from the Ministry of Law and Justice's Legislative Department signals a commitment to establish a comprehensive framework for processing digital personal data. This legislative step will significantly influence how the insurance sector navigates and responds to the evolving landscape of data protection regulations (Business Standard, 2023).

8. CRITICALITY OF DIGITALISATION IN MODERN-DAY INVESTOR PROTECTION

In the digital era, the financial landscape has experienced a significant shift, necessitating a focus on investor education and protection. Digital platforms have increased accessibility to financial instruments, enhancing the need for investor education. Digitalisation has addressed challenges such as distance to banks and elevated transaction costs, with demat accounts witnessing a more than three-fold increase from 4 crore in March 2020 to around 14 crore in December 2023. Market Infrastructure Institutions (MIIs) are actively promoting financial education through various initiatives, with a focus on reaching individuals in remote areas. The cybersecurity concerns associated with the rise in digital transactions highlight the importance of robust cybersecurity measures. The banking cybersecurity market, valued at \$38.52 billion in 2021, is expected to grow at a rate of 22.4% by 2029. Responding to data breaches, the RBI has revamped the IT governance and cybersecurity framework, issuing draft guidelines in October 2022 and notifying the master direction on November 7, 2023. Real-time information provided by digital platforms empowers investors but also introduces challenges such as information overload and impulsive decision-making. The number of demat accounts in India surged more than three-fold from around 4 crore in March 2020 to around 14 crore in December 2023, reflecting a persistent trend.

India's stock market has witnessed a surge in investors, with approximately 80 million unique individuals participating through the NSE, despite there being 160-170 million accounts on the NSE. Notably, these investors represent around 50 million unique households, accounting for 17% of all households in India. (Business Today, 2023) This growth in investor participation aligns with the country's rising stock market capitalisation, which recently surpassed Hong Kong's, reaching \$4.33 trillion as compared to Hong Kong's \$4.29 trillion. India now stands as the fourth-largest equity market globally, attracting global capital and positioning itself as a promising investment destination with a stable political environment and a rapidly growing retail investor base. The country's stock market value crossed the \$4-trillion mark on 5th December, 2023, reflecting significant growth over the past four years. (Bloomberg, 2024). The buoyancy in Indian equities is attributed to robust corporate earnings and a burgeoning consumption-driven economy, making it an appealing alternative to China for investors and companies worldwide.

The landscape of market volatility has evolved with algorithmic trading, which has introduced efficiency but also contributed to increased market fluctuations. Yet, despite challenges, digitalisation has enhanced market transparency, provided educational resources, and fostered financial literacy through webinars and platforms for investors. As investors navigate this evolving landscape, education, risk management, and disciplined approaches are crucial for maximising the benefits of real-time information through digitalisation while avoiding potential pitfalls.

In the evolving digitalisation landscape, a transformative approach is imperative to align with the dynamic needs of investor protection. The handholding of investors throughout the investment journey emerges as a critical component, ensuring they are well-guided and informed from initiation to execution. Incorporating comprehensive training programmes on how to claim

unclaimed shares and navigate grievance redressal sites becomes essential in this context, as it empowers investors to assert their rights seamlessly.

A recent survey on global risk indicates that ‘misinformation and disinformation’ is considered as the number one risk in India. (Fleck A., 2024). With the financial sector witnessing a pervasive influence of social media, a concerted effort is required to regulate its impact. The rise of finfluencers and financial advisors calls for a careful scrutiny of the information disseminated and verification of their credentials and adherence to regulatory guidelines. Considering the prevalence of fake news and misinformation in India, as was highlighted by the World Economic Forum in their Global Risk Report of 2024, measures need to be taken to substantially increase the number of financial/ investment advisors and put in place a regulatory framework for finfluencers. The verification of their credentials, coupled with steps to encourage their registration and compliance with SEBI guidelines, becomes paramount in fostering a trustworthy financial environment.

9. CONCLUSION

India is steering towards the monumental goal of being a \$5-trillion economy by 2027-28 and a \$30-trillion economy by 2047, making the financial landscape in the country even more critical. The intersection of economic growth and investor empowerment is the bedrock of a sustainable and resilient financial future. As we envision a \$5-trillion economy, the role of investor education becomes pivotal, since it will ensure that individuals can navigate the evolving financial landscape with confidence and knowledge.

As we navigate the investor protection paradigm in the age of digitalisation, several key considerations demand our attention. The increasing use of Artificial Intelligence (AI) in financial services requires a nuanced understanding of its implications, ensuring its responsible and transparent usage. Regulatory uncertainties surrounding cryptocurrencies and emerging complex and composite financial products call for streamlined guidelines to safeguard investors and maintain market integrity.

The rise of finfluencers, while popular, brings forth potential risks. It is imperative to establish clear regulatory frameworks for finfluencers and financial advisors in the digital era, protecting investors from misinformation and fraudulent practices, as well as have a policy that helps increase the number of registered financial advisors. The large-scale introduction of Central Bank Digital Currency (CBDC) by the RBI can enhance financial transactions, but careful implementation is crucial to mitigate associated risks.

Initiatives such as the National Strategy on Financial Education (NSFE) play a pivotal role in shaping the landscape of investor education in India. The creation of a National Centre for Financial Education underscores a commitment to foster long-term financial literacy among the population. It must be emphasised here that expediting the implementation of the "5C strategy" is crucial for achieving a financially aware and empowered India. The strategy entails developing relevant ‘Content’ in the curricula for schools, colleges, and training establishments, building ‘Capacity’ among intermediaries providing financial services, leveraging the positive impact of a ‘Community-led’ model for financial literacy, devising an appropriate ‘Communication’ strategy, and enhancing Collaboration among various stakeholders. The introduction of a “6th C” in the strategy, a ‘Class or group-oriented’ approach, has been suggested to address the unique financial challenges faced by different groups, including homemakers, senior citizens/retirees, college students/youths, and school children. The importance of stronger coordination among stakeholders and timely curriculum updates cannot be overstated. Emphasis should be placed on implementing a sustainable financial awareness

programme that covers modern cyber issues and delivers comprehensive training and certification. It is argued that combining the right attitude with knowledge and skills is key to optimising financial well-being.

Introduction of refresher training courses and certification for trainers, master trainers, regulators, fresh recruits, and all others associated with the financial literacy ecosystem, along with understanding the importance of attracting prospective investors and nurturing their confidence by strengthening institutional capabilities, simplifying processes, and ensuring sustained follow-up training and hand-holding, is required. Conducting applied research and comprehensive surveys is parallelly crucial for identifying and mitigating last mile issues in optimal investor protection.

The establishment of the Centralised Grievance Redressal and Processing Centre (CGRPC) stands out as a proactive move towards enhancing complaint resolution mechanisms. In this pursuit, the recommendations of the Financial Sector Legislative Reforms Commission (FSLRC) provide a valuable roadmap. The FSLRC emphasises the need for a comprehensive legal framework to address the evolving financial landscape, including setting up of a Financial Redressal Agency that will bring grievances arising in the financial sector within the ambit of one agency, providing a centralised platform for dispute resolution in the financial sector.

Additionally, incorporating Corporate Social Responsibility (CSR) activities alongside effective utilisation of funds with organisations like IEPFA and DEAF can contribute to investor welfare. Continuous follow-up to guide new and prospective investors reflects a commitment to their financial well-being. Ultimately, a comprehensive and collaborative approach is essential to uphold investor trust, foster market stability, and navigate the digitalised future of the financial landscape.

Investor protection is a two-way process: while regulators, government and agencies need to work on policies and their implementation, investors need to be alert and aware enough to be able to make sound financial decisions. The stakeholders need to strive collectively towards a secure and enabled environment, and investors need to be well-informed and wary of fraud and mis-selling. Comprehensive research and surveys to guide policy, apart from intensified efforts to build the trust and confidence of investors, both domestic and foreign, as well as the availability of simplified processes and products, is the need of the hour.

Opting for a proactive approach is always wiser. The longer we wait, the more possibilities open up of investor well-being being compromised. Enacting a law or framing regulations is necessary but doesn't suffice; we must actively address the issues at hand. Prioritising data/investor protection cases and expediting their resolution becomes crucial in this context. The government and financial sector regulators should prioritise addressing the backlog of grievances with the establishment of an integrated fast-track grievance redressal mechanism, ensuring the effective implementation of the DPDP Act. Well-coordinated measures which follow a more proactive and responsive approach to enforce data protection regulations will ensure comprehensive and efficient investor protection.

The investor education and protection paradigm in India is at a crossroads, shaped by a robust regulatory framework and the transformative impact of digitalisation. While the achievements so far have been commendable, the journey ahead necessitates a dynamic approach that keeps pace with the evolving financial landscape. As India embraces the digital future, investor education and protection will remain integral pillars of the financial sector's development, ensuring that every investor is empowered, informed, and protected in the rapidly changing milieu.

REFERENCES

1. Acquisti, A., Taylor, C., and Wagman, L. (2016). The economics of privacy. *Journal of Economic Literature*, 54(2):442–492.
2. Akerlof, G., & Shiller, R. J. (2003). *Phishing for fools: How lucky investors make money and why you don't*. Princeton University Press.
3. Beyond GDPR: Data Protection Around the World (Link:- <https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/magazine/beyond-gdpr-data-protection-around-world>)
4. Boruah, J., & Das, B. (2020). Right to Privacy and Data Protection under Indian Legal Regime. *DME Journal of Law*, 1.
5. Choi, S., Kim, Y. S., Kim, B., & Kwon, O. (2022). Central Bank Digital Currency and Privacy: A Randomized Survey Experiment. *Bank of Korea WP*, 13.
6. Cost of a Data Breach Report 2023 (Link: - <https://www.ibm.com/reports/data-breach>)
7. Data Protection and Privacy Legislation Worldwide (Link: - <https://unctad.org/page/data-protection-and-privacy-legislation-worldwide>)
8. Data Protection Laws of The World
(Link: - https://iapp.org/media/pdf/resource_center/Data-Protection-Full.pdf)
9. Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank Publications.
10. European Central Bank (2021). ECB Digital Euro Consultation Ends with Record Level of Public Feedback, Press Release.
11. Fisher D. (2021) Cyber-security and Privacy Law: The Evolving Inter-section. *Boston College Law Review*, vol. 62, no. 6, pp. 2129–2149. Available at: <https://doi.org/10.2139/ssrn.3832595>
12. IRDAI sets up 11-member taskforce to examine the impact of DPDPA Act by Business Standard (2023). (Link: - https://www.business-standard.com/industry/news/irdai-sets-up-11-member-taskforce-to-examine-the-impact-of-dpdp-act-123112800840_1.html)
13. Javelin (2022). 2022 identity fraud study: The virtual battleground, Press Release.
14. Kahn, C. M. (2018). Payment Systems and Privacy. *Federal Reserve Bank of St. Louis Review*, 100(4):337–344.
15. Regulation Of Cross Border Data Transfers Under The Digital Personal Data Protection Act, 2023 (Link: - <https://amlegals.com/regulation-of-data-transfers-under-the-digital-personal-data-protection-act-2023/#>)
16. Report of the Joint Committee on the Personal Data Protection Bill, 2019 (Link: - https://eparlib.nic.in/bitstream/123456789/835465/1/17_Joint_Committee_on_the_Personal_Data_Protection_Bill_2019_1.pdf)
17. [National Payments Corporation of India \(NPCI\) - Enabling digital payments in India](#)
18. [IRDAI - National Centre for Financial Education \(NCFE\)](#)
19. [Reserve Bank of India \(rbi.org.in\)](#)
20. [Securities and Exchange Board of India \(sebi.gov.in\)](#)

21. [Home - IRDAI](#)
22. [Home-Pension Fund Regulatory and Development Authority \(PFRDA\)](#)
23. [IEPF Authority](#)
24. Annual Reports of RBI, SEBI, PFRDA, IRDAI, IEPFA, NCFE, NSFE, RBI Ombudsman Report.
25. Findex Database, World Bank.
26. <https://nciipc.gov.in/>
27. <https://cert-in.org.in/>
28. Miah M, 2023, The Role of FinTech in Bridging the Divide for Economic Empowerment.
29. Prasad L., Kakarlapudi K K, Global agenda of financial inclusion: Where does India stand?
30. Abbott K., Faur D. and Snidal D., 2017, Introducing Regulatory Intermediaries.
31. India Tops Hong Kong as World's Fourth-Largest Stock Market (2024) (Link- [India Overtakes Hong Kong as World's Fourth Largest Stock Market - Bloomberg](#))
32. 17% of all Indian households invest in the Indian stock markets, says NSE CEO (2023) (Link- <https://www.businesstoday.in/markets/stocks/story/17-of-all-indian-households-invest-in-the-indian-stock-markets-says-nse-ceo-403824-2023-10-30>)
33. Global Risks Report 2024, World Economic Forum (Link- <https://www.weforum.org/publications/global-risks-report-2024/>)
34. Sinha D. and Azad R., 2018. Can Jan Dhan Yojana Achieve Financial Inclusion?, Vol. 53, Issue No. 13, 31 Mar, 2018, Economic and Political Weekly. (Link- [Can Jan Dhan Yojana Achieve Financial Inclusion?, Vol. 53, Issue No. 13, 31 Mar, 2018, Economic and Political Weekly | Request PDF \(researchgate.net\)](#))
35. Fleck A., 2024. Survey Finds False Information Risk Highest in India, The Wire (2024) (Link- <https://thewire.in/media/survey-finds-false-information-risk-highest-in-india#:~:text=Out%20of%20all%20risks%2C%20misinformation,activity%2C%20inequality%20and%20labour%20shortages>)



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