

A Statistical Analysis of Financial Disclosure Practices in Jaipur Municipal Corporation



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Abstract

In Rajasthan Jaipur Municipal Corporation is working good as compared to other Municipal Corporation because all Municipal Corporation are lacking in disclosure requirement and reporting at portal, so Jaipur Municipal Corporation is considered in this study. Jaipur Municipal Corporation has two parts Jaipur Greater Municipal Corporation and Jaipur Heritage Municipal Corporation. Financial disclosure is a fundamental pillar of transparency, accountability, and good governance in any organization, so this study examines the trend and relationship between financial years and the level of disclosure practices in Jaipur Municipal Corporations. The study is based on secondary data and a descriptive and analytical research design was used to measure the relationship between financial year and level of disclosure by using Pearson correlation. The primary objective of the research was to evaluate whether financial transparency and disclosure practices have improved over a five-year period. The finding results a strong positive correlation ($R = 0.844$), indicating a linear association between years and disclosure practices and the p -value (0.073) suggests that the relationship is statistically significant at the 10% level of significance. Overall, the research concludes that disclosure practices have shown improvement over time, contributing positively toward financial accountability in municipal governance. However, the study also acknowledges certain limitations such as a small sample size and reliance on secondary data.

Keywords: Financial Transparency, Financial Disclosure, Public Accountability, & Correlation Analysis

Introduction

Historical Background of Municipal Corporations in Rajasthan: The development of Municipal Corporations in Rajasthan shows the transition from municipalities of the princely state period to a unified structure following independence, resulting in the introduction of the Rajasthan Municipalities Act, 2009. The first municipality in the region was established at Mount Abu in 1864. Following independence, the Rajasthan Municipalities Act of 1951 aimed to standardize urban municipal government, which was later replaced by the Rajasthan Municipalities Act of 1959. The 1959 Act and its subsequent amendments, notably the 74th Constitutional

Amendment Act, delineated the framework and authority of municipal entities in Rajasthan.



Fig. 1

Rajasthan Municipalities Act, 2009

This key act replaced prior statutes, including the 1951 Act, and provided a comprehensive framework for all urban municipal organizations in Rajasthan.

It specified the authorities, responsibilities, structure, elections, funds, and obligations for:

- Municipal Corporations (Nagar Nigam)
- Municipal Councils (Nagar Parishad)
- Municipal Boards (Nagar Palika)

Jaipur Municipal Corporation

The Jaipur Municipal Corporation (JMC) is the principal urban local authority tasked with municipal administration and infrastructure management in Jaipur, the capital of Rajasthan, India. It supervises critical municipal operations like sanitation, waste management, public health, road maintenance, water supply coordination, street lighting, property tax collection, birth and death registries, and more citizen services that enhance urban government and quality of life.

The origins of urban self-governance in Jaipur trace back to the late 19th century, with the establishment of the Jaipur Municipal Council in 1869, rendering it one of the first municipal entities in Rajasthan. It was then transformed to a complete Municipal Corporation in 1994.

In recent years, the structure of municipal governance in Jaipur has evolved:

- Until 2019, the city was administered under a single municipal corporation.
- In 2019, it was bifurcated into Jaipur Greater Municipal Corporation and Jaipur Heritage Municipal Corporation, together comprising 250 wards, to improve administrative coverage.
- In 2025, the Government of Rajasthan resolved to amalgamate the two corporations into a single organization, the consolidated Jaipur Municipal Corporation, to minimize administrative redundancy and improve governance efficiency.

Financial disclosure is an essential component of transparency, accountability, and effective gov-

ernance inside any business. In current economic frameworks, disclosure techniques guarantee that stakeholders such as investors, regulators, creditors, and the public receive pertinent, dependable, and prompt information for informed decision-making. Regulatory frameworks and governance changes have progressively prioritized enhanced disclosure standards to bolster financial discipline and public trust.

Disclosure procedures fluctuate with regulatory, stakeholder, and governance constraints. Thus, it is crucial to quantify disclosure levels at a given period and assess whether disclosure practices improve over time.

This study analyses the correlation between financial years and disclosure levels, investigating if disclosure practices have considerably improved over time and if the overall degree of disclosure is deemed appropriate.

Financial disclosure indicates the systematic presentation of financial and non-financial facts in yearly reports and other official documents to guarantee openness and accountability. It encompasses obligatory disclosures mandated by regulatory bodies, together with optional disclosures that improve business transparency. Disclosure quality is frequently assessed by disclosure indices, scoring methodologies. These quantitative metrics facilitate the evaluation of compliance and transparency across reporting intervals.

Nevertheless, assessing disclosure just by percentages fails to offer comprehensive understanding. Statistical methods, including correlation analysis and hypothesis testing, are necessary to ascertain the statistical significance of observed improvements.

Review of Literature

Patel et al. (2024) evaluated local revenue streams and capital expenditures for sustainable urban growth facilities and infrastructure. The Reserve Bank of India's Report on Municipal Finances provides secondary data from 26 Indian states and Union Territories' municipal corporations. A cross-sectional study design without a temporal component is used. The tax income

municipal corporations collect does not seem to affect their capital project spending. Non-tax revenue streams are important and affect capital expenditures. They provide more money for urban municipal governments than taxes. National government grants and transfers tend to predict capital spending more than state government payments. The diagnostic tests used to confirm these findings also showed that the model estimate was accurate.

Rathod (2024) studied the procedures of the Thane Municipal Corporation (TMC), the extent of its service, and the consensus among corporators on various subjects to evaluate their perceptions on the management of TMC's financial resources and operations. From each electoral ward, 35 corporators, including the mayor and vice mayor, were elected. The entire population is systematically covered ward-by-ward, with 26% selected based on the number of corporators and interviewed in-person using a structured questionnaire regarding their perspectives on TMC's financial planning and management, as well as the challenges faced and potential solutions.

Maheshwari and Tak (2023) analysed the fiscal condition of two municipal corporations in Rajasthan. The samples from the municipal corporations of Jaipur and Jodhpur have been chosen for the stated objective. Revenue, costs, and surplus deficit have been recognized as essential elements, and theories have been utilized to analyze them both within and across corporations. ANOVA and the t-test were utilized to examine the relevant hypotheses that were developed. An analysis of the revenue, expenses, and surplus deficit of municipal corporations over time reveals no significant disparity. It is prudent to manage expenses and utilize resources effectively to create revenue, so maintaining a surplus for each fiscal year.

Sharma (2022) aimed to deliver a thorough review of Rajasthan municipal corporations, encompassing their accounting practices, reforms, transition from cash to accrual accounting, and budget preparation. Secondary data from six municipal corporations in Rajasthan (Jodhpur, Jaipur, Kota, Ajmer, Udaipur, and Bikaner) was collected

from the official website and yearly budgets for the seven fiscal years (FY 2013–14 to 2019–20). The data was subsequently evaluated through tabular, diagrammatic, and graphical representations. ANOVA was employed to assess the hypotheses.

Reardon et al. (2022) provided a theoretically informed empirical study of the implementation of Narendra Modi's slogan, "more governance, less government," in India. This is achieved through the application of multilevel governance theory in a qualitative case study of the Smart Cities Mission and its implementation in four cities. By circumventing local institutions and employing "special purpose vehicles," it uncovers centralizing dynamics in operation. The analysis highlights a hitherto overlooked aspect in the literature: the impact of institutional design on multilevel governance dynamics.

Ansari and Singh (2022) assessed Uttar Pradesh municipal corporation stagnation. Principal component analysis is used to create a composite index for 1,063 wards in 13 Municipal Corporations using 2011 census data. House Quality, Basic Amenities, and Physical Assets are the three areas of this rating, which uses 22 carefully selected criteria. The study examined Municipal Corporation development using descriptive statistics and ANOVA. The House Quality Index, Basic Amenities Index, and Physical Assets Index vary widely between Municipal Corporations, according to ANOVA. Development variance is highest in Saharanpur Municipal Corporation (Mean -0.40; SD = 2.09) and lowest in Agra Municipal Corporation wards (Mean = 0.14; SD = 1.03).

Maheshwari and Tak (2022) - examined the many revenue sources of urban local bodies in Rajasthan, specifically focusing on the Jaipur municipal corporation. Trend analysis was used to examine 2012-13 to 2019-20 data. Two-way ANOVA was used to test hypotheses on revenue absolute value, percentage share, and growth rates over time. Each revenue source of the Jaipur municipal corporation has shown volatility in revenue, percentage share, and growth rates throughout time. The political resolve to follow

Planning Commission recommendations would help urban local government grow.

Research Gap

A substantial corpus of literature pertains to municipal finance, urban government, and fiscal decentralization in India. Numerous studies have identified problems including insufficient income generation, reliance on government subsidies, limited financial independence, and a deficiency in openness within Urban Local Bodies (ULBs). However, the majority of these studies primarily concentrate on financial performance, budgeting methodologies, or revenue spending trends, rather than assessing the precision of accounting records and audited balance sheets. Limited research evaluates the gradual improvement of accounting processes, disclosure quality, and audit compliance throughout multiple financial years. Jaipur's significance as a growing urban area underscores that the efficacy of its municipal corporations' accounting and auditing methods directly influences governance, infrastructure finance, and public confidence. The absence of focused research on financial record administration, account categorization, and enhancements in audited balance sheets indicates a distinct research gap. Consequently, it is essential to objectively assess if disclosure practices have markedly enhanced over time and whether the overall level of disclosure is sufficient. This study seeks to fill this gap by carefully analyzing the financial records of Jaipur Municipal Corporations from 2019 to 2024, therefore offering new perspective on the quality of transparency.

Research Problem

In the case of Jaipur Municipal Corporations, ambiguities remain regarding the appropriate upkeep of all necessary registers, ledgers, and financial records, compliance of financial statements with statutory requirements, and the evident improvements in accounting practices across successive financial years. Shortcomings in these areas weaken budgetary discipline and hinder public trust, transparency, and evidence-based decisions.

This study's core research problem is to examine if the Jaipur Municipal Corporation maintains comprehensive and accurate financial records, produces timely audited balance statements, and demonstrates gradual improvement in financial disclosure standards from 2019 to 2024.

Objectives of the Study

- To examine whether financial disclosure practices have improved over the observed financial years.
- To compare disclosure practices of both Municipal Corporation over time.
- To suggest recommendation for improving disclosure practices of Municipal Corporation

Hypothesis

H₀: There is no significant relationship between financial year and level of disclosure practices.

H₁: There is a significant positive relationship between financial year and level of disclosure practices.

Research Methodology

Research Design: The study adopts a Descriptive and Analytical Research Design.

- Descriptive, because it describes disclosure levels across financial years.
- Analytical, because it statistically examines the relationship between financial year and disclosure level using correlation analysis.

It also has elements of a Longitudinal Time-Series Study (5 consecutive financial years).

Nature of Study

- Quantitative Research
- Based on numerical disclosure scores
- Uses statistical tools for hypothesis testing

Scope of the Study

(1) Geographical Scope: Jaipur Heritage Municipal Corporation and Jaipur Greater Municipal Corporation.

(2) Timeframe: Financial years 2019–2020 to 2023–2024.

(3) Focus Areas:

- i. Maintenance of statutory books and records.

- ii. Preparation and classification of accounts.
- iii. Timeliness and accuracy of audited balance sheets.
- iv. Trends and improvements in financial disclosure quality.

Sources of Data

Secondary Data: Collected from:

- Annual reports
- Financial statements
- Official disclosure documents
- Government/municipal publications

Sample Size: Number of observations (n) = 5 financial years

Sampling Technique: PURPOSIVE SAMPLING

Variables of the Study

Independent Variable	Dependent Variable
Financial Year	Level of Disclosure

Financial Year → Proxy for time

Level of Disclosure → Measured through disclosure index/scoring method

Measurement Technique: The score is given to Municipal Corporation on the following basis:

- 0- Not disclosed/ not maintained
- 1- Partially disclosed/ incomplete
- 2- Fully disclosed/ properly maintained

Total disclosure score computed annually

Statistical Tools Used: Karl Pearson's Correlation Coefficient

Significance Testing:

- Hypothesis tested at 10% level of significance ($\alpha = 0.10$)
- p-value method used for decision making

Additional Tools:

- Scatter Plot (to visually assess trend)
- Line of Best Fit

Limitations

- The analysis is constrained to five financial years (n = 5), which diminishes the statistical power and impacts the generalizability of the results.
- The analysis encompasses a brief duration. An extended time-series may yield more dependable evidence of trends in disclosure procedures.
- The research is exclusively based on secondary data sourced from annual reports and public financial statements. Any flaws or omissions in these materials may affect the outcomes.
- The scoring method may involve researcher judgment.
- The findings may not be applicable to: other institutions, other municipalities, other sectors due to contextual differences.

Data Analysis and Interpretation

The scores are given to Municipal Corporation on the following basis:

Not disclosed/ not maintained -0

Partially disclosed/ incomplete -1

Fully disclosed/ properly maintained -2

Table No. 1: Jaipur Heritage Municipal Corporation and Jaipur Greater Municipal Corporation Year wise Accounts Maintained and Disclosure Practices

Sr. No.	Disclosure practices	F.Y. 2019-2020		F.Y. 2020-2021		F.Y. 2021-2022		F.Y. 2022-2023		F.Y. 2023-2024	
		Heritage	Greater	Heritage	Greater	Heritage	Greater	Heritage	Greater	Heritage	Greater
1	Accounting method followed by municipal corporation										
	Accrual	2	2	2	2	2	2	2	2	2	2
	Double entry method	2	2	2	2	2	2	2	2	2	2

Sr. No.	Disclosure practices	F.Y. 2019-2020		F.Y. 2020-2021		F.Y. 2021-2022		F.Y. 2022-2023		F.Y. 2023-2024	
2	Compliance with relevant statutory acts (e.g., Rajasthan Municipalities Act, 2009)	1	1	1	1	1	1	1	1	1	1
3	Record/ Register										
	1.Cash Book	2	2	2	2	2	2	2	2	2	2
	2.Journal Book	0	0	2	2	2	2	2	2	2	2
	3.Ledgers	0	0	2	2	2	2	2	2	2	2
	4.Cash/Bank Voucher Receipt	2	2	2	2	2	2	2	2	2	2
	5.Cash/Bank Payment Voucher	2	2	2	2	2	2	2	2	2	2
	6.Collection Register	0	0	0	0	0	0	0	0	0	0
	7.Cheque Issue Register	2	2	2	2	2	2	2	2	2	2
	8.Register of Advance	2	2	2	2	2	0	2	2	2	2
	9.Register of Notice Fee, Warrant Fee, Other Fees	0	0	0	0	0	0	0	0	0	0
	10.Register of Refunds, Remissions and Write-offs	0	0	0	0	0	0	0	0	0	0
	11.Register of Immovable Property	0	0	2	2	2	2	2	2	2	2
	12.Register of Movable Property	0	0	2	2	2	2	2	2	2	2
13.Register of Land	0	0	2	2	2	2	2	2	2	2	
4	Records and documents related to public works										
	1.summary statement of status of capital work-in-progress /deposit works	0	0	0	0	0	0	0	0	0	0
	2.work sheet	0	0	0	0	0	0	0	0	0	0
	3.deposit register works	0	0	0	0	0	0	0	0	0	0
5	Records and document related to stores										
	1.material receipt note	2	2	2	2	2	2	2	2	2	2
	2.stores ledger	2	2	2	2	2	2	2	2	2	2
	3.statement of closing Stocks	0	0	0	0	0	0	0	0	0	0

Sr. No.	Disclosure practices	F.Y. 2019-2020		F.Y. 2020-2021		F.Y. 2021-2022		F.Y. 2022-2023		F.Y. 2023-2024	
6	Records and document related to employees related transaction										
	1.consolidated pay bill summary roll of the permanent / temporary	2	2	2	2	2	2	2	2	2	2
	2.register of employee loans/advances	0	0	0	0	0	0	0	0	0	0
	3.register interest of on loans to employees for the year	0	0	0	0	0	0	0	0	0	0
7	Records and document related to grants										
	grant register	0	0	0	0	0	0	0	0	0	0
8	Records and document related to borrowings										
	1.register of loans	0	0	0	0	0	0	0	0	0	0
	2.register of debentures	0	0	0	0	0	0	0	0	0	0
9	Records and document related to special fund										
	special register funds	0	0	0	0	0	0	0	0	0	0
10	Records and document related to investment										
	1.investment ledger / register	0	0	0	0	0	0	0	0	0	0
11	Proper records of lease rentals	0	0	0	0	0	0	0	0	0	0
12	Physical verification reports available Fixed asset and stores	0	0	0	0	0	0	0	0	0	0
13	Figures verified with vouchers and supporting records	2	2	2	2	2	2	2	2	2	2
14	Depreciation Policy	0	0	0	0	0	0	0	0	0	0
15	Various income and expenditure classification to proper head	0	0	0	0	0	0	0	0	0	0
16	BRS provided by accounts department	0	0	0	0	0	2	0	0	2	0

Sr. No.	Disclosure practices	F.Y. 2019-2020		F.Y. 2020-2021		F.Y. 2021-2022		F.Y. 2022-2023		F.Y. 2023-2024	
17	Internal control system	1	1	1	1	1	1	1	1	1	1
18	Quality of management responses and corrective action is satisfactory	2	2	2	2	2	2	2	2	2	2
19	Financial statements and audit reports prepared and submitted timely	2	2	0	0	0	0	0	0	2	2
20	Public disclosure and accessibility ensured	1	1	1	1	1	1	1	1	1	1

Source: Author's calculation

From the above data the following concise table is created by totalling the score, overall score assigned to single Municipal Corporation is 80. 80

consist 40 points and every point has 2 score. The overall total of both municipal corporation is 160.

Table No. 2: Summary of the Above Data

Financial year	Jaipur Heritage Municipal Corporation	Jaipur Greater Municipal Corporation	Total (160)	Percentage (level of Disclosure)
2019-2020	28	29	57	35.625
2020-2021	36	37	73	45.625
2021-2022	36	37	73	45.625
2022-2023	36	37	73	45.625
2023-2024	40	39	79	49.375

Source: Author's calculation

Table No. 4: Calculation of Correlation

Variables	Financial Year	Level of Disclosure
Number of Samples	5	5
Significant Level	0.10	
R-Value	.844	
P- Value	.073	

Source: Author's calculation

Sources: Author's own work

The scatter plot shows an upward trend, and the line of best fit slopes positively. This visually confirms by data, which indicates a strong linear association where A correlation coefficient of .844 suggests a strong positive relationship. Although the correlation is strong, the significance p-value is 0.073. Thus, since $p > .10$, the

correlation is statistically significant at the 10% level. So, the graphical trend suggests progressive enhancement in disclosure practices across the observed financial years. Since the calculated p-value (0.073) is less than the chosen significance level of 0.10, the null hypothesis is rejected. This indicates a statistically significant positive relationship between financial years and the level

of disclosure, suggesting improvement in disclosure practices over time. The correlation study reveals a statistically significant positive association between the financial year and the level of transparency; nonetheless, the total percentage score out of 100 suggests a relatively low level of disclosure. Consequently, despite notable advancements, the disclosure processes cannot be deemed entirely sufficient or suitable.

Recommendation

- Financial Statement should be available on portal within specific timeframe.
- There should be strict penalties for delayed reporting.
- There must be minimum disclosure practices for every municipal corporation.
- Technical training should be provided to municipal corporation staff.

Conclusion

The study shows that a robust and positive correlation exists between the financial year and the degree of disclosure in Jaipur Municipal Corporations. The statistical findings and graphical depiction clearly show a gradual improvement in transparency standards over the five-year span. Despite the moderate significance level of 10%, the results indicate improvement in financial disclosure procedures.

Consequently, it can be inferred that municipal financial transparency has exhibited consistent improvement, favourably influencing accountability and effective governance procedures. The correlation study reveals a statistically significant positive association between the financial year and the level of transparency; nonetheless, the total percentage score out of 100 suggests a comparatively low level of disclosure. Consequently, despite significant advancements, the disclosure processes cannot be deemed entirely sufficient or suitable.

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