

Customer Perception Towards Fee-Based Banking Services: A Comparative Study of Public and Private Bank Users in Lucknow District

Naziya Arif

Department of Commerce

University of Lucknow

Dr. Mohd Hanif

Department of Commerce

Vidyant Hindu P.G. College

Abstract

Fee-based banking services, which include non-fund-based offerings like fund transfers, ATM fees, locker facilities, insurance distribution, demat services, and wealth-advisory support, have grown in importance as a source of revenue for Indian banks. However, little is known about how consumers feel about paying for these services, or whether this is different for bank users in the public and private sectors. In order to close that gap, this study compares how 200 respondents—100 bank customers from the public sector and 100 from the private sector—in Lucknow District of Uttar Pradesh, who were chosen by convenience sampling, perceive fee-based services. Cronbach's alpha (0.838) and exploratory factor analysis were used to validate a seven-item Likert scale measuring awareness, communication, pricing fairness, value for money, convenience, trust, satisfaction, and switching intention. The results confirmed a single underlying construct explaining 52.37% of the total variance. Descriptive statistics, the Shapiro-Wilk test, an independent-samples t-test, effect-size estimations, and one-way ANOVAs across demographic factors were all used in the analysis of the data in SPSS. The findings indicate that, with a small-to-moderate effect size, public sector bank customers reported a much higher overall perception than private sector bank customers. They also scored higher on four out of seven items, including communication, convenience, contentment, and price sensitivity. Age, education, employment, income, and gender did not substantially affect perception, indicating that this difference is driven by bank type rather than demographic makeup. The results cast doubt on the notion that technologically sophisticated private banks inevitably provide more positive client perceptions, instead highlighting communication and service delivery as the primary differentiators. The report makes suggestions to improve consumer trust and fee-based service communication for both banking divisions.

Keywords: Customer Perception, Fee-based Services, Non-Interest Income, Public Sector Banks, Private Sector Banks, Banking Services, India

1. Introduction

Over the past 20 years, the Indian banking industry has seen a significant structural change, shifting from a mostly interest-income-driven paradigm to a more diversified, service-oriented structure. The increasing reliance on fee-based, or non-fund-based, banking services like fund transfers, ATM transactions, locker facilities, insurance and mutual fund distribution, demat services, wealth management, and advisory support through which banks generate revenue from customer fees and commissions rather than interest margins, is a key aspect of this change. Research in emerging nations has verified the connection between fee-based activity, loan performance, and bank profitability (Dang, 2020). Early cross-country data demonstrated that such charge revenue might improve cost efficiency in commercial banking (DeYoung, 1994). Particularly in India, banks and regulators now consider non-interest revenue to be crucial to maintaining profitability in a thinning-margin, competitive market. The increasing contribution of fee-based activity to

income stability in Indian banks was documented by Uppal (2010, 2011). However, more recent research indicates that ownership structure has a significant impact on how aggressively a bank pursues this income stream: public sector banks have historically earned significantly less fee income than private domestic banks due to government ownership constraints, despite the fact that this income also significantly lowers profitability risk for public sector banks specifically (Pennathur, Subrahmanyam, & Vishwasrao, 2012; Trivedi, 2015). In comparison to their international counterparts, Deshmukh (2023) further demonstrates that Indian banks are still in an early and unequal stage of leveraging fee-based income, and digitally enabled channels like internet and mobile banking are now crucial to this expansion (Haryanto & Septiawan, 2024; Saputra & Mahyuni, 2024).

Although the effects of fee-based income on financial performance are becoming more widely known, relatively little is known about how consumers view and react to being charged for these services, and whether this perception varies systematically between bank customers in the public and private sectors. This disparity is significant because consumer perception, which is influenced by factors like convenience, trust, price justice, transparency, and service quality, ultimately decides whether fee-based solutions are accepted, tolerated, or rejected (Banerjee & Sah, 2012; Kaura, Durga Prasad, & Sharma, 2013). While public sector banks like the State Bank of India (SBI), despite introducing comparable services, are frequently perceived as being constrained by bureaucratic procedure and uneven digitization across branches, private sector banks like HDFC Bank and ICICI Bank are widely associated with technological sophistication, faster turnaround, and aggressive cross-selling of fee-based products (ICICI Bank's wealth-management offerings for high-net-worth clients being a prominent example) (Kumbhar, 2011). However, previous research on related banking services has produced conflicting results. While some studies find that private banks perform better in terms of convenience and service quality (Bilamge, 2011; Banerjee & Sah, 2012), others discover that public sector banks continue to have a clear advantage in terms of trust among specific customer segments even though they lag behind in terms of technology (Agarwal, 2012).

Understanding these sector-specific variations in consumer perception is essential for banks looking to plan product offers, improve price communication, and boost customer loyalty in a nation as economically and demographically varied as India. By analysing and statistically contrasting public and private sector bank customers' perceptions of fee-based banking services in Lucknow District, Uttar Pradesh, this study directly meets that requirement. In order to pinpoint the precise areas where the two customer segments differ, the study breaks down this comparison at the level of individual perception items, such as awareness, pricing fairness, value for money, convenience, trust, satisfaction, and switching intention, in addition to testing for an overall difference in perception. In doing so, the study contributes both to the applied literature on fee-based banking in India and to banks' practical understanding of how to align fee-based service strategy with customer expectations.

2. Literature Review

3.1 Fee-Based (Non-Interest) Income in Banking: Origins and Performance Implications

The academic interest in fee-based banking activity originates in the cost-efficiency literature. DeYoung (1994) was among the first to empirically link fee-based services to cost efficiency in commercial banks, arguing that non-fund-based activity allows banks to spread fixed costs over a broader service base. This theme was extended to Indian banks by Uppal (2010, 2011), who documented that fee-based activity contributes meaningfully to income stability, though its adoption varies widely by bank type and region. Pennathur, Subrahmanyam, and Vishwasrao (2012), in an influential study of Indian banks over 2001–2009, demonstrated that ownership structure is a key determinant of non-interest income generation: private domestic banks earn significantly more fee income than public sector banks, while fee income simultaneously reduces default and profitability risk for public sector banks specifically. Trivedi (2015) corroborated this ownership-based divergence, showing that foreign and new private banks derive a considerably larger share of income from fee-based activity than public sector banks, and that this diversification positively affects return on assets. More recent studies confirm that the drivers of fee income are increasingly digital. Haryanto and Septiawan (2024) found that mobile banking, internet banking, and ATM transaction volumes significantly influence fee-based income generation, while Saputra and Mahyuni (2024) showed that optimising mobile banking features directly increases fee-based income for commercial banks. Deshmukh (2023) provides a recent overview of the state of fee-based income across Indian banks, concluding that despite growth, Indian banks continue to lag international peers in the share of income derived from fee-based sources. Beyond India, Dang (2020) examined the relationship between lending and fee-based activity in an emerging-market setting and found the two revenue streams to be complementary rather than

substitutive, while Hardianto and Wulandari (2016) compared Islamic and conventional banks on intermediation efficiency and fee-based activity, finding structural differences in how each banking model monetises non-fund services. Agustuty (2020) and Malhotra (2019) both report that fee-based and trading income significantly influence market performance and financial results, reinforcing fee income as a strategically important, if imperfectly understood, revenue lever.

3.2 Customer Perception and Service Quality: Public versus Private Sector Banks

A separate but complementary stream of research examines customer perception directly, generally through the lens of service quality. The SERVQUAL framework (Parasuraman, Zeithaml, & Berry, 1988), which conceptualises perceived service quality as the gap between customer expectations and experienced performance across tangibility, reliability, responsiveness, assurance, and empathy, remains the dominant lens applied to Indian banking. Using this framework, Banerjee and Sah (2012) found that customer expectations and satisfaction levels are both higher for private banks than for public banks in India, with public banks needing to improve most on responsiveness and empathy. Bilamge (2011), comparing SBI and ICICI Bank directly, similarly concluded that ICICI outperformed SBI on core service parameters such as staff behaviour and transaction turnaround time. Kaura, Durga Prasad, and Sharma (2013) extended this comparison to service convenience specifically, again finding new private banks rated more favourably than public banks.

However, this pattern is not universal. Agarwal (2012), studying customer satisfaction in Aligarh district using the SERVQUAL model, found a wider perceptual gap in service quality for public sector banks but noted that trust-related dimensions remained comparatively strong for the public bank studied. Regional Indian studies extend this ambivalence further: investigations of service quality among public sector bank customers in Andhra Pradesh report particularly strong ratings for security and empathy; comparative work on online banking adoption in Visakhapatnam finds that performance expectancy, effort expectancy, and perceived security jointly shape attitudes and differ significantly by bank type; and district-level studies in Tamil Nadu and Madhya Pradesh similarly report that demographic factors, digital infrastructure, and regional development levels condition how favourably customers view both public and private bank services. Taken together, this literature suggests that while private banks generally lead on technology-enabled convenience, public sector banks retain an edge on dimensions rooted in trust, security, and perceived fairness — a distinction directly relevant to how fee-based charges, which implicate fairness and trust more than convenience, might be perceived.

3.3 Synthesis

Thus, the problem of the current study unites two different literatures. Fee-based services are a growing and ownership-sensitive revenue stream for Indian banks, according to the fee-based income literature (DeYoung, 1994; Uppal, 2010, 2011; Pennathur et al., 2012; Trivedi, 2015; Deshmukh, 2023). However, it is almost entirely bank-side and financial-performance oriented, with little information about how the paying customer perceives or assesses these fees. In contrast, the literature on customer perception and service quality (Parasuraman et al., 1988; Bilamge, 2011; Banerjee & Sah, 2012; Kaura et al., 2013; Agarwal, 2012; Kumbhar, 2011) is customer-facing and comparative across ownership types, but it focuses primarily on e-banking/online banking adoption or general service quality rather than the fee-based aspect of banking. No study identified in this review directly and quantitatively compares public and private sector bank customers' perception of being charged for non-fund-based services using a dedicated, psychometrically validated perception scale. This is the gap the present study addresses.

3. Research Gap

There are two gaps in the literature. The majority of research on fee-based income in Indian banking (Uppal, 2010, 2011; Pennathur et al., 2012; Trivedi, 2015; Deshmukh, 2023) is conducted from the bank's perspective, utilizing financial data to evaluate risk and profitability without taking into account the customer's assessment of these fees. On the other hand, the literature on customer perception that compares public and private banks (Bilamge, 2011; Banerjee & Sah, 2012; Kaura et al., 2013; Kumbhar, 2011; Agarwal, 2012) focuses on e-banking adoption or general service quality; fee-based services in particular which include pricing fairness, value, trust, and switching intention remain empirically understudied. The present study addresses this by treating fee-based service perception as a distinct, measurable construct, validating a seven-item scale (Cronbach's alpha = 0.838), and applying rigorous statistical testing to 200 bank customers in Lucknow District.

4. Objectives

- To examine the level of awareness of fee-based banking services among public and private sector bank users in Lucknow District.
- To identify the most frequently used fee-based banking services among public and private bank users.
- To assess the overall customer perception towards fee-based banking services among public and private sector bank users using the validated seven-item perception scale.
- To compare the overall customer perception towards fee-based banking services between public and private sector bank users.
- To compare public and private sector bank users on each individual perception statement, in order to identify the specific dimensions on which the two customer segments diverge.

5. Hypotheses

H₀₁: There is no significant difference in overall customer perception towards fee-based banking services between public and private sector bank users.

H₁₁: There is a significant difference in overall customer perception towards fee-based banking services between public and private sector bank users.

H₀₂: There is no significant difference between public and private bank users in the extent to which they feel informed about fee-based services by their bank.

H₁₂: There is a significant difference between public and private bank users in the extent to which they feel informed about fee-based services by their bank.

H₀₃: There is no significant difference between public and private bank users in their perception that fee-based charges are reasonable.

H₁₃: There is a significant difference between public and private bank users in their perception that fee-based charges are reasonable.

H₀₄: There is no significant difference between public and private bank users in the value they feel they receive for the fees they pay.

H₁₄: There is a significant difference between public and private bank users in the value they feel they receive for the fees they pay.

H₀₅: There is no significant difference between public and private bank users in their preference for fee-based services that save time and effort.

H₁₅: There is a significant difference between public and private bank users in their preference for fee-based services that save time and effort.

H₀₆: There is no significant difference between public and private bank users in their trust that their bank offers fair fee-based services.

H₁₆: There is a significant difference between public and private bank users in their trust that their bank offers fair fee-based services.

H₀₇: There is no significant difference between public and private bank users in their overall satisfaction with fee-based services.

H₁₇: There is a significant difference between public and private bank users in their overall satisfaction with fee-based services.

H₀₈: There is no significant difference between public and private bank users in their likelihood of switching banks if charges become too high.

H₁₈: There is a significant difference between public and private bank users in their likelihood of switching banks if charges become too high.

6. Research Methodology

6.1 Research Design

The study adopts a descriptive, comparative, and cross-sectional research design. It is descriptive in that it describes the level of awareness, usage, and perception of fee-based banking services among bank customers, and comparative in that it statistically contrasts these variables between public and private sector bank users.

6.2 Population and Sampling

The population comprises individual retail customers holding accounts in public and private sector banks in Lucknow District, Uttar Pradesh. A non-probability convenience sampling method was adopted: the questionnaire was circulated online, and responses were collected from bank customers who were readily accessible and willing to participate. A representative sample of 200 respondents evenly split between 100 exclusive public sector bank users and 100 exclusive private sector bank users was selected, ensuring balanced group sizes for comparative statistical testing.

6.3 Data Collection

Data were collected through a structured questionnaire administered via Google Forms, comprising: (a) a demographic profile (age, gender, education, occupation, monthly income); (b) type of bank primarily used and the bank used most frequently; (c) a binary awareness item on fee-based charges; (d) a multiple-response item on the fee-based services used (ATM/cash withdrawal, card charges, fund transfer, passbook/statement, locker, loan processing, wealth management, or other); and (e) a seven-item, five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) measuring communication, pricing fairness, value for money, convenience, trust, satisfaction, and switching intention.

6.4 Tools and Techniques of Analysis

Data were analysed in IBM SPSS through: frequency/percentage analysis of demographics and services used; reliability analysis (Cronbach's alpha); exploratory factor analysis (KMO, Bartlett's Test) to assess construct validity; descriptive statistics and a Shapiro-Wilk normality test on the composite perception score; an independent-samples t-test (with Levene's test and effect sizes - Cohen's d, Hedges' g, Glass's delta) comparing overall and item-wise perception between public and private sector bank users; and supplementary robustness checks - a gender-composition t-test and one-way ANOVAs across age, education, occupation, and income to rule out demographic confounding.

7. Data Analysis and Interpretation

7.1 Demographic Profile of Respondents

Table 1 presents the demographic profile of the 200 respondents. The sample was predominantly female (69.0%) and young, with 88.0% of respondents aged below 35 years, reflecting the composition of the sampling frame. Just over half the respondents held a postgraduate qualification (51.0%), and half were students (50.0%) by occupation. Monthly income was concentrated in the lower brackets, with 44.0% earning below Rs 20,000 and a further 30.0% between Rs 20,000 and Rs 50,000. The sample was equally split between public sector bank users (n = 100) and private sector bank users (n = 100) by design.

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	62	31.0
	Female	138	69.0
	Total	200	100.0
Age (Years)	Below 25	70	35.0
	25–35	106	53.0
	36–45	10	5.0
	46–60	12	6.0
	Above 60	2	1.0
	Total	200	100.0
Educational Qualification	Below 12 th	2	1.0
	Graduate	61	30.5

	Postgraduate	102	51.0
	Professional Degree	21	10.5
	Other	14	7.0
	Total	200	100.0
Occupation	Student	100	50.0
	Salaried Employee	69	34.5
	Self-employed/Business	8	4.0
	Retired	3	1.5
	Other	20	10.0
	Total	200	100.0
Monthly Income (₹)	Below 20,000	88	44.0
	20,000–50,000	60	30.0
	50,000–1,00,000	36	18.0
	Above 1,00,000	16	8.0
	Total	200	100.0
Type of Bank Used	Public Sector Bank	100	50.0
	Private Sector Bank	100	50.0
	Total	200	100.0

Table 1. Demographic Profile of Respondents (N = 200)

7.2 Awareness of Fee-Based Banking Services

An overwhelming majority of respondents, 90.0% (n = 180), reported being aware that banks charge separate fees for certain services beyond interest on loans, while only 10.0% (n = 20) were unaware. This high baseline awareness suggests that fee-based charges are a familiar, visible feature of the banking relationship for most customers today, making perception rather than mere awareness the more analytically important construct for this study, and justifying the study's focus on the seven-item perception scale.

Response	Frequency	Percent (%)
Yes	180	90.0
No	20	10.0
Total	200	100.0

Table 2. Awareness of Fee-Based Banking Services

**Awareness of Fee-Based Banking Services
(N = 200)**

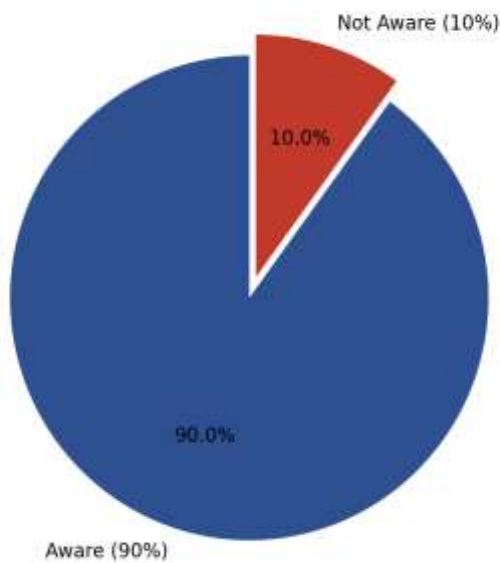


Figure 1. Awareness of Fee-Based Banking Services (N = 200)

7.3 Fee-Based Services Used by Respondents

Respondents were asked to indicate all the fee-based services they had used (a "tick all that apply" item), so percentages are calculated independently for each service against the full sample (N = 200) and do not sum to 100%, since most respondents use more than one service. ATM/cash withdrawal service was the most widely used fee-based service, used by 86.5% of respondents (n = 173), followed closely by debit/credit card charges at 79.5% (n = 159). Fund transfer (NEFT/RTGS/IMPS) service was used by 58.5% (n = 117), and account statement/duplicate passbook services by 38.5% (n = 77). Less frequently used, more specialised services included locker facilities (20.0%, n = 40), loan processing (16.0%, n = 32), and wealth management/investment advisory services (7.5%, n = 15), reflecting the smaller segment of customers who engage with premium or credit-linked banking products. A single respondent (0.5%) reported an "other" service not listed among the standard options. This usage pattern confirms that customer experience with fee-based services in this sample is overwhelmingly anchored in high-frequency transactional charges (ATM and card usage) rather than in advisory or credit-linked services, which is an important interpretive context for the perception findings that follow.

Fee-Based Service	Respondents Using (n)	Percentage of Sample (%)
ATM / Cash Withdrawal Charges	173	86.5
Debit/Credit Card Charges	159	79.5
Fund Transfer Charges (NEFT/RTGS/IMPS)	117	58.5
Account Statement / Duplicate Passbook	77	38.5
Locker Facility	40	20.0
Loan Processing Fees	32	16.0

Fee-Based Service	Respondents Using (n)	Percentage of Sample (%)
Wealth Management / Investment Advisory	15	7.5
Other	1	0.5

Table 3. Fee-Based Services Used by Respondents (Multiple Responses Permitted, N = 200)

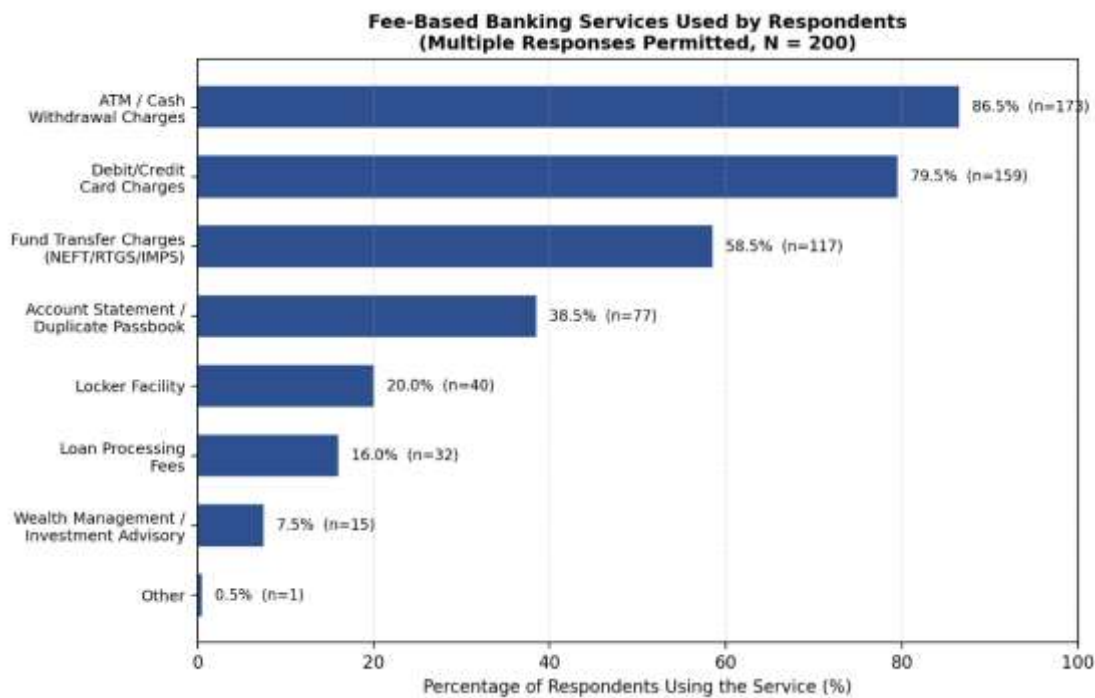


Figure 3. Percentage of Respondents Using Each Fee-Based Service

7.4 Reliability of the Customer Perception Scale

Before substantive analysis, the internal consistency of the seven-item Customer Perception scale was assessed using Cronbach's alpha. The scale returned an alpha coefficient of 0.838, which exceeds the conventional threshold of 0.70 (Nunnally, 1978) and indicates good internal consistency. Item-total statistics (Table 4) show that all seven items correlate acceptably with the total scale (corrected item-total correlation range: 0.354 to 0.723), and no item's removal would meaningfully improve the alpha coefficient. The seventh item ("I would switch banks if the charges were too high") shows the weakest item-total correlation (0.354), which is expected given that it captures behavioural intention rather than an attitudinal evaluation, but its removal would reduce rather than improve reliability, and it was therefore retained as it is objective 5's most price-sensitive indicator.

Cronbach's Alpha	Number of Items
0.838	7

Table 3. Reliability Statistics

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
I am clearly informed about fee-based services by my bank.	20.33	19.378	0.608	0.813
The charges for fee-based services are reasonable.	20.87	19.766	0.666	0.804
I receive good value for the fees I pay.	20.74	20.012	0.600	0.814
I prefer fee-based services if they save me time and effort.	20.25	20.198	0.558	0.821
I trust my bank to provide fair fee-based services.	20.41	20.143	0.666	0.805
I would switch banks if the charges were too high.	20.17	21.830	0.354	0.853
I am satisfied with the overall experience of fee-based services.	20.52	19.638	0.723	0.796

Table 4. Item-Total Statistics

7.5 Exploratory Factor Analysis: Construct Validity of the Perception Scale

To complement the reliability evidence above with evidence of construct validity, an exploratory factor analysis (Principal Component Analysis) was conducted on the seven perception items. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.865, well above the recommended threshold of 0.60, and Bartlett's Test of Sphericity was highly significant ($\chi^2(21) = 510.928, p < .001$), confirming that the item correlation matrix was suitable for factor analysis and that the items share sufficient common variance to justify data reduction.

KMO and Bartlett's Test	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.865
Bartlett's Test of Sphericity — Approx. Chi-Square	510.928
Df	21
Sig.	< 0.001

Table 5. KMO and Bartlett's Test

Using the Kaiser criterion (eigenvalue > 1), only a single component was extracted, with an eigenvalue of 3.666, accounting for 52.37% of the total variance comfortably above the 50% benchmark typically expected for a well-defined unidimensional scale in social-science research. Because only one component was extracted, no rotation was performed or required. This confirms that the seven items load onto a single underlying construct, which can be labelled "Customer

Perception towards Fee-Based Banking Services," providing strong evidence of the scale's unidimensionality and construct validity, and justifying its use as a single composite score in the comparative analysis that follows.

Component	Eigenvalue (Total)	% of Variance	Cumulative %
1	3.666	52.370	52.370
2	0.897	12.817	65.188
3	0.667	9.534	74.721
4	0.626	8.946	83.667
5	0.456	6.507	90.174
6	0.370	5.291	95.465
7	0.317	4.535	100.000

Table 6. Total Variance Explained (Initial Eigenvalues)

Communalities and component loadings (Table 7) further support this structure: five of the seven items load strongly on the single extracted component (loadings between 0.68 and 0.83), reflecting communication clarity, pricing fairness, value for money, convenience, trust, and satisfaction as closely related facets of the same underlying perception construct. The item "I would switch banks if the charges were too high" showed a comparatively weaker loading (approximately 0.46, corresponding to its extraction communality of 0.213), consistent with its status as a behavioural-intention item rather than a purely attitudinal one, and with its weaker item-total correlation in the reliability analysis (Table 4). It was nonetheless retained given its direct relevance to the study's price-sensitivity objective.

Perception Item	Communality (Extraction)	Component Loading
I am clearly informed about fee-based services by my bank.	0.544	0.737
The charges for fee-based services are reasonable.	0.621	0.788
I receive good value for the fees I pay.	0.536	0.732
I prefer fee-based services if they save me time and effort.	0.467	0.683
I trust my bank to provide fair fee-based services.	0.595	0.771
I would switch banks if the charges were too high.	0.213	0.462
I am satisfied with the overall experience of fee-based services.	0.689	0.830

Table 7. Communalities and Component Matrix (Principal Component Analysis, Single Component Extracted)

7.6 Descriptive Statistics of Composite Customer Perception

The composite Customer Perception score (mean of the seven items) ranged from 1.43 to 5.00 across the full sample ($N = 200$), with an overall mean of 3.41 ($SD = 0.74$), indicating a moderately favourable perception of fee-based banking services on average, with room for improvement.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Customer Perception	200	1.43	5.00	3.4114	0.73802

Table 8. Descriptive Statistics of Composite Customer Perception Score

7.7 Test of Normality

Prior to conducting the comparative t-test, the normality of the composite Customer Perception scores was assessed using the Shapiro-Wilk test, appropriate given the sample size. The test statistic was non-significant ($p = 0.108 > 0.05$), indicating that the data did not deviate significantly from a normal distribution. Parametric techniques (the independent-samples t-test) were therefore considered appropriate for the comparative analysis that follows.

Variable	Shapiro-Wilk Statistic	p-value	Interpretation
Customer Perception	0.989	0.108	Normally Distributed

Table 9. Test of Normality (Shapiro-Wilk)

7.8 Comparison of Overall Customer Perception: Public vs. Private Sector Bank Users

As a robustness check prior to the substantive comparison, an independent-samples t-test on Gender by bank type confirmed no significant difference in gender composition between the two groups ($t(198) = -1.222$, $p = 0.223$), indicating that the public and private sector bank user samples were demographically comparable on gender before proceeding.

Group statistics (Table 10) show that public sector bank users reported a higher mean Customer Perception score ($M = 3.5443$, $SD = 0.69147$) than private sector bank users ($M = 3.2786$, $SD = 0.76228$), a mean difference of 0.266 points on the five-point scale, indicating a more favourable overall perception among public bank customers.

Group	N	Mean	Std. Deviation	Std. Error Mean
Public Sector Bank	100	3.5443	0.69147	0.06915
Private Sector Bank	100	3.2786	0.76228	0.07623

Table 10. Group Statistics

Levene's test for equality of variances was non-significant ($Sig. = 0.380 > 0.05$), confirming that the assumption of equal variances between the two groups was satisfied, and that the standard ("equal variances assumed") form of the t-test was therefore appropriate.

An independent-samples t-test was then conducted to formally test H_0 against H_1 . The results revealed a statistically significant difference in customer perception scores between the two groups, $t(198) = 2.582$, $p = 0.011$ (two-tailed), mean difference = 0.266. Since $p < 0.05$, the null hypothesis (H_0) of no significant difference is rejected. Bank type therefore significantly influences customers' overall perception of fee-based banking services in this sample.

Variable	t	df	p-value (2-tailed)	Mean Difference	Decision
Customer Perception	2.582	198	0.011	0.266	Significant

Table 11. Independent Samples t-test Comparing Overall Customer Perception

Effect-size estimates confirm that, while statistically significant, the practical magnitude of the difference is modest. Cohen's d of 0.365 and Hedges' g of 0.364 both fall in the small-to-moderate range, while Glass's delta (0.349) indicates a small effect. This indicates that although bank type reliably predicts perception direction in this sample, the two customer groups' perceptions overlap substantially, and the difference should be interpreted as a meaningful but not large practical gap.

Effect Size	Value	Interpretation
Cohen's d	0.365	Small to moderate effect
Hedges' g	0.364	Small to moderate effect
Glass's delta	0.349	Small effect

Table 12. Effect Size Estimates

7.8.1 Hypothesis Testing Summary

H0: There is no significant difference in overall customer perception towards fee-based banking services between public and private sector bank users. Decision: Since $p = 0.011 < 0.05$, H0 is rejected, and H1 is accepted. There is a statistically significant difference in overall customer perception between public and private sector bank users in Lucknow District, with public sector bank users exhibiting the more favourable perception of the two groups.

7.9 Item-wise Comparison of Customer Perception Statements

To identify precisely where the two customer segments diverge, each of the seven perception statements was compared separately between groups (Table 13 and Table 14). Public sector bank users reported numerically higher mean agreement on every one of the seven statements. Their highest-rated statement was price-sensitivity ("I would switch banks if the charges were too high," $M = 3.90$, $SD = 1.07$), followed by convenience ("...save me time and effort," $M = 3.79$) and communication ("My bank clearly informs me...", $M = 3.74$). Private sector bank users' highest-rated statement was also price-sensitivity ($M = 3.52$), followed by convenience ($M = 3.47$); however, their scores trailed the public-bank group on every item.

Statement	Public Bank Users (Mean $\pm$ SD)	Private Bank Users (Mean $\pm$ SD)
S1: My bank clearly informs me about fee-based services	3.74 $\pm$ 1.11	3.36 $\pm$ 1.12
S2: The charges for fee-based services are reasonable	3.13 $\pm$ 0.92	2.90 $\pm$ 1.07
S3: I receive good value for the fees I pay	3.22 $\pm$ 1.05	3.06 $\pm$ 1.03

Statement	Public Bank Users (Mean $\pm$ SD)	Private Bank Users (Mean $\pm$ SD)
S4: I prefer fee-based services if they save me time and effort	3.79 $\pm$ 1.02	3.47 $\pm$ 1.10
S5: I trust my bank to provide fair fee-based services	3.51 $\pm$ 0.97	3.43 $\pm$ 0.92
S6: I am satisfied with the overall experience of fee-based services	3.52 $\pm$ 0.95	3.21 $\pm$ 0.95
S7: I would switch banks if the charges were too high	3.90 $\pm$ 1.07	3.52 $\pm$ 1.11

Table 13. Descriptive Statistics of Customer Perception Statements by Type of Bank

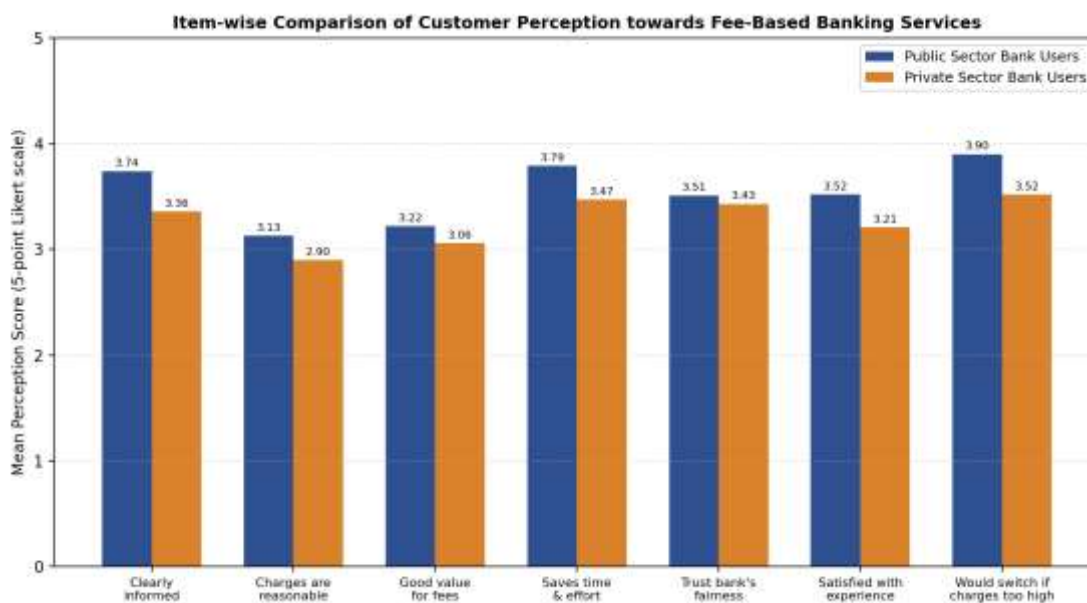


Figure 3. Item-wise Comparison of Customer Perception, Public vs. Private Sector Bank Users

Item-wise independent-samples t-tests (Table 14) show that this gap reaches statistical significance ($p < 0.05$) for four of the seven statements: communication (S1, $p = 0.017$), convenience (S4, $p = 0.034$), overall satisfaction (S6, $p = 0.022$), and price-driven switching intention (S7, $p = 0.014$). The remaining three statements - pricing fairness (S2, $p = 0.104$), value for money (S3, $p = 0.279$), and trust in fair treatment (S5, $p = 0.551$) do not differ significantly between the two groups, indicating that public and private bank customers hold broadly similar views on whether charges are reasonable, whether they receive fair value, and whether they trust their bank's fairness, even though they diverge significantly on communication, convenience, satisfaction, and price sensitivity.

Statement	Public Mean	Private Mean	t-value	p-value	Result (p < 0.05)
S1: Clearly informed about fee-based services	3.74	3.36	2.409	0.017	Significant
S2: Charges are reasonable	3.13	2.90	1.633	0.104	Not Significant
S3: Receive good value for fees paid	3.22	3.06	1.086	0.279	Not Significant
S4: Save time and effort	3.79	3.47	2.139	0.034	Significant
S5: Trust bank's fairness	3.51	3.43	0.597	0.551	Not Significant
S6: Satisfied with overall experience	3.52	3.21	2.315	0.022	Significant
S7: Would switch if charges too high	3.90	3.52	2.472	0.014	Significant

Table 14. Independent Samples t-test for Individual Perception Statements

7.9.1 Hypothesis Testing Summary (Item-wise Statements)

Based on the item-wise t-test results reported in Table 15, each of the seven statement-level hypotheses formulated in Section 5 is evaluated below:

- H02 (Communication): Since $p = 0.017 < 0.05$, H02 is rejected and H12 is accepted - public and private bank users differ significantly in how clearly they feel informed about fee-based services.
- H03 (Reasonableness of Charges): Since $p = 0.104 > 0.05$, H03 is retained - no significant difference between the two groups in their perception that charges are reasonable.
- H04 (Value for Money): Since $p = 0.279 > 0.05$, H04 is retained - no significant difference between the two groups in the value they feel they receive for the fees they pay.
- H05 (Convenience): Since $p = 0.034 < 0.05$, H05 is rejected and H15 is accepted - public and private bank users differ significantly in their preference for fee-based services that save time and effort.
- H06 (Trust in Fairness): Since $p = 0.551 > 0.05$, H06 is retained - no significant difference between the two groups in their trust that their bank offers fair fee-based services.
- H07 (Overall Satisfaction): Since $p = 0.022 < 0.05$, H07 is rejected and H17 is accepted - public and private bank users differ significantly in their overall satisfaction with fee-based services.
- H08 (Price-Driven Switching Intention): Since $p = 0.014 < 0.05$, H08 is rejected and H18 is accepted - public and private bank users differ significantly in their likelihood of switching banks if charges become too high.

In summary, of the seven item-wise hypotheses, four (Communication, Convenience, Overall Satisfaction, and Switching Intention) show a statistically significant difference between public and private sector bank users, while three (Reasonableness of Charges, Value for Money, and Trust in Fairness) do not, indicating that the two customer segments diverge specifically on service-delivery and behavioural dimensions rather than on their evaluation of pricing itself.

7.10 One-Way ANOVA: Customer Perception Across Demographic Groups

To rule out demographic confounding of the bank-type comparison reported above, one-way ANOVAs were conducted to test whether the composite Customer Perception score varies significantly across categories of age, educational qualification, occupation, and monthly income. For all four variables, Levene's test was non-significant ($p > 0.05$ in

every case), confirming that the homogeneity-of-variance assumption was satisfied and that the ANOVA F-tests below are valid without correction.

Demographic Variable	F	df (between, within)	Sig. (p)	Result
Age	1.921	4, 195	0.108	Not Significant
Educational Qualification	1.799	4, 195	0.131	Not Significant
Occupation	0.988	4, 195	0.415	Not Significant
Monthly Income	1.010	3, 196	0.390	Not Significant

Table 15. One-Way ANOVA Summary: Customer Perception by Demographic Variables

None of the four demographic variables significantly affects customer perception of fee-based banking services. This is a methodologically valuable result: it indicates that age, educational qualification, occupation, and monthly income do not confound the central comparative finding of this study, and that the significant perception gap identified in Section 7.7 is attributable specifically to bank type rather than to differing demographic composition between the public and private sector bank user samples. Together with the gender-balance check reported in Section 7.7, this provides converging evidence that the two comparison groups were adequately comparable on observable demographic characteristics, strengthening the internal validity of the study's central conclusion.

8. Findings

- Awareness of fee-based charges is very high (90.0%); usage is dominated by routine transactional services such as ATM/cash withdrawal (86.5%) and card charges (79.5%) while advisory services such as wealth management (7.5%) are used by far fewer respondents.
- The seven-item perception scale shows good reliability (Cronbach's $\alpha = 0.838$) and a unidimensional structure confirmed by factor analysis (KMO = 0.865; Bartlett's $p < .001$; 52.37% variance explained).
- The composite perception score was moderately favourable overall ($M = 3.41$, $SD = 0.74$) and normally distributed (Shapiro-Wilk $p = 0.108$).
- Public sector bank users reported significantly higher overall perception ($M = 3.54$) than private sector users ($M = 3.28$), $t(198) = 2.582$, $p = 0.011$, $d = 0.365$, scoring higher on all seven individual statements.
- The gap is significant on four items i.e. communication ($p = 0.017$), convenience ($p = 0.034$), satisfaction ($p = 0.022$), and switching intention ($p = 0.014$) but not on pricing fairness, value for money, or trust (all $p > 0.05$).
- Price-driven switching intention was the highest-rated statement in both groups, indicating strong price sensitivity across the entire sample regardless of bank type.
- Gender composition and demographic variables (age, education, occupation, income) showed no significant association with perception (all $p > 0.05$), confirming bank type as the specific driver of the observed difference.

9. Discussion

The finding that public sector bank customers report a more favourable perception of fee-based services runs counter to the technology-and-convenience narrative common in comparative banking literature, where private banks are typically rated ahead on service quality (Bilange, 2011; Banerjee & Sah, 2012; Kaura et al., 2013), but is consistent with evidence that public banks retain an advantage on trust and fairness (Agarwal, 2012; Kumbhar, 2011). The present results refine this picture: public bank customers rate their bank more favourably specifically on communication, convenience, and satisfaction, while showing no significant difference from private bank customers on whether charges themselves are reasonable or fair suggesting the gap is driven less by pricing itself and more by how effectively each bank type communicates and delivers around that pricing.

This aligns with bank-side evidence that private banks pursue fee-based income more aggressively than public banks (Pennathur et al., 2012; Trivedi, 2015); if this monetisation is not matched by proportionately clearer communication, it

could translate into lower customer satisfaction despite a technological edge. The consistently high rating for price-driven switching intention across both groups further indicates that fee sensitivity, not sector loyalty, is the dominant behavioural driver for customers of both bank types implying that private banks would benefit from more transparent fee communication, while public banks should convert their trust advantage into stronger value-for-money perceptions, an area where neither sector currently holds a significant edge.

10. Conclusion and Recommendations

This study set out to compare customer perception of fee-based banking services between public and private sector bank users in Lucknow District. Using a validated seven-item perception scale administered to 200 respondents, the study found a statistically significant, though modest, overall difference favouring public sector bank customers, driven specifically by differences in communication clarity, convenience, satisfaction, and price sensitivity rather than by differing views on pricing fairness or value for money. The findings challenge the assumption that private banks' technological edge automatically translates into superior customer perception of fee-based services, and instead point to communication and service delivery, rather than pricing structure per se, as the key differentiator between the two sectors.

Based on these findings, the study recommends that: (i) private sector banks invest in clearer, more proactive disclosure of fee-based charges at the point of transaction, potentially narrowing the communication gap identified in this study; (ii) public sector banks build on their existing trust and communication advantage by improving perceived value for money, an area with room for improvement across both sectors; (iii) both sectors monitor price-driven switching intention closely, given that this was the single highest-rated perception item across the entire sample, indicating that fee escalation carries real retention risk irrespective of bank ownership type; and (iv) banking regulators and industry bodies consider standardising fee-disclosure formats across public and private banks, to ensure that communication quality, rather than institutional ownership, becomes the primary driver of customer perception.

11. Ethical Considerations

- i. Respondents were informed of the purpose of the study prior to data collection.
- ii. Informed consent was obtained from all respondents before administering the questionnaire.
- iii. Responses were collected and stored anonymously, and confidentiality of individual responses was maintained throughout.
- iv. Participation in the study was entirely voluntary, and respondents were free to withdraw at any stage.

12. Limitations of the Study

- i. The sample of 200 respondents was drawn exclusively from Lucknow District; findings may not generalise to other regions of India with different demographic, economic, or digital-infrastructure profiles.
- ii. The sample skews towards younger, more educated, and lower-income respondents (with students constituting 50% of the sample), which may not proportionately represent the broader customer base of either banking sector.
- iii. The study uses a non-probability convenience sampling method rather than a fully randomised sampling frame across all public and private bank branches in the district; consequently, the sample may not be strictly representative of the wider customer population, and findings should be interpreted with this in mind.
- iv. The study measures perception at a single point in time (cross-sectional design) and cannot capture how perception evolves as customers gain more experience with fee-based services.

13. Future Scope of Research

Future research could extend this study geographically, comparing customer perception of fee-based services across multiple districts or states to test the generalisability of the present findings. Longitudinal designs could track how perception changes as digital fee-based services expand. Future studies could also incorporate multivariate techniques such as multiple regression or structural equation modelling to identify which demographic or usage-related variables (age, income, digital literacy, tenure with the bank) most strongly predict fee-based service perception, and could extend the comparison to foreign banks, small finance banks, and payment banks operating in India.

14. References

- Agarwal, J. (2012). Customer satisfaction in Indian banking services (A Study in Aligarh district). *International journal of computing and business research*, 3(1), 1-14.
- Agustuty, L. (2020). The effect of fee based income and trading income on market performance and risk in the banking industry in Indonesia. *International Journal of Innovative Science and Research Technology*, 5(11), 972-977.
- Banerjee, N., & Sah, S. (2012). A Comparative Study of Customers' Perceptions of Service Quality Dimensions between Public and Private Banks in India. *International Journal of Business Administration*, 3(5), 33-44.
- Bilange, P. C. (2011). A comparative study of customer perception towards services rendered by public sector and private sector banks. *Indian Journal of Commerce and Management Studies*, 2(2), 110-115.
- Dang, V. D. (2020). Bank performance and the relationship between lending and fee-based activities in an emerging market. *Malaysian Journal of Economic Studies*, 57(2), 213-231.
- Deshmukh, R. S. (2023). An overview of fee-based income in Indian banks. *Indian Streams Research Journal*, 12(12).
- DeYoung, R. (1994). *Fee-based services and cost efficiency in commercial banks* (Vol. 94, No. 3). Office of the Comptroller of the Currency.
- Hardianto, D. S., & Wulandari, P. (2016). Islamic bank vs conventional bank: intermediation, fee based service activity and efficiency. *International Journal of Islamic and Middle Eastern Finance and Management*, 9(2), 296-311.
- Haryanto, L., & Septiawan, I. (2024). The influence of mobile banking, internet banking, and automated teller machine (ATM) transactions on fee based income. *Majalah Ilmiah Bijak*, 21(1), 116-124.
- Kaura, V., Prasad, C. S. D., & Sharma, S. (2013). Customer perception of service convenience: A comparison between public and new private sector banks. *Global Business Review*, 14(3), 529-547.
- Kumbhar, V. M. (2011). Service quality perception and customers' satisfaction in internet banking service: a case study of public and private sector banks.
- Malhotra, S. K., Sarabhai, S., & Malhotra, P. (2019). Impact of fee-based services on the financial performance of the banks: an empirical study. *Journal of Entrepreneurship and Management*, 8(3), 45.
- Markjackson, D. A., & Tanen-John, L. P. (2026). Fee-Based Income and Bank Profitability: A Study of Deposit Money Banks in Nigeria. *Studies in Economics and Business Relations*, 7(1), 1-7.
- Nunnally, J. C. (1978). *Psychometric Theory* 2nd ed: McGraw hill book company.
- Parasuraman, A. B. L. L., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *1988*, 64(1), 12-40.
- Pennathur, A. K., Subrahmanyam, V., & Vishwasrao, S. (2012). Income diversification and risk: Does ownership matter? An empirical examination of Indian banks. *Journal of Banking & Finance*, 36(8), 2203-2215.
- Saputra, N. W., & Mahyuni, L. P. (2024). Increasing fee based income (FBI) through optimizing BNI Mobile Banking features to support banking performance. *Quantitative Economics and Management Studies*, 5(2), 394-404.
- Malhotra, S. K., Sarabhai, S., & Malhotra, P. (2019). Impact of fee-based services on the financial performance of the banks: an empirical study. *Journal of Entrepreneurship and Management*, 8(3), 45.
- Trivedi, S. R. (2015). Banking innovations and new income streams: impact on banks' performance. *Vikalpa*, 40(1), 28-41.
- Uppal, R. K. (2010). Stability in bank income through fee-based activities. *Information Management and Business Review*, 1(1), 40-47.
- Uppal, R. K. (2011). Fee-based activities in Indian Banks. *International Journal of Research in IT & Management*.