Standard Bank Report

Customer Summary

The customer demonstrates several positive financial traits... (This could come from another analysis step or be generated here)

Surplus Position

Below is our detailed analysis and recommendations based solely on the provided tables and explanations.

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1. Analysis of Consistency to Pay an EMI (Q1)

- We assume that the EMI amount (emi_amount) should be compared with the monthly surplus in the "Monthly Credit, Debit, and Surplus" table. For example, if we take emi_amount = 855.60 (roughly the average monthly surplus), then we must verify that every month's surplus is at least that high.
- Reviewing the data:
  – 2023-05: Surplus = 7,170.56 7,170.56 ≥ 855.60 (OK)
  – 2023-06: Surplus = –131.66 –131.66 < 855.60 (Risk)
  – 2023-07: Surplus = –1,427.84 –1,427.84 < 855.60 (Risk)
  – 2023-08: Surplus = –2,221.87 –2,221.87 < 855.60 (Risk)
  – 2023-09: Surplus = –946.17 –946.17 < 855.60 (Risk)
  – 2023-10: Surplus = 1,466.27 1,466.27 ≥ 855.60 (OK)
  – 2023-11: Surplus = –2,238.29 –2,238.29 < 855.60 (Risk)
  – 2023-12: Surplus = 5,173.79 5,173.79 ≥ 855.60 (OK)
- Several months (June, July, August, September, and November) fall short of even the assumed EMI of 855.60.

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2. Ability to Pay the EMI Every Month Without Struggle (Q2)

- The average monthly surplus is 855.60; however, note the fluctuation in surplus – from very high positive amounts (7,170.56 in May, 5,173.79 in December) to steep deficits (as low as –2,238.29 in November).
- Given that nearly 5 out of the 8 recorded months do not meet the assumed emi_amount of

855.60, the customer is at risk of struggling to pay a fixed EMI each month consistently.

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3. Stability of Income vs. Expenses (Q3)

- Income (Credits):

– Credit transactions are labeled “Monthly Salary” and occur on predictable dates in May, October, and December. Although the salary is recurring, there are large gaps – several months show no salary inflow (for instance, June, July, August, September, and November have zero credit).

- Expenses (Debits):

– Many debit items are for routine bills (water, electricity, mobile, gym membership, insurance) which are recurring.

– However, there are several irregular and discretionary expenses (movies, travel bookings, electronics) that add variability.

- In summary, while the salary receipts are predictable during months when they are credited, there is an overall lack of regular monthly income. Also, expenses include both recurring obligations and erratic disbursements, indicating instability when measured on a monthly basis.

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4. Risk of Default if EMI = emi_amount (Q4)

- The risk of default is evaluated by checking whether the customer’s surplus ever drops below the required EMI repayment.

- With an assumed EMI matching the average surplus (855.60), the surplus falls far below that in several months (June: –131.66, July: –1,427.84, August: –2,221.87, September: –946.17, November: –2,238.29).

- In addition, the “Credit & Debit Transactions” show that salary (the sole predictable income) is not received every month, which magnifies the risk.

- Therefore, the customer faces a high default risk should the EMI requirement be set near or above the average surplus level.

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5. Maximum Safe EMI Amount (Q5)

- To determine a safe EMI, we must use the most conservative monthly surplus value. If we consider all months, the minimum surplus is –2,238.29. However, negative surpluses clearly are not representative of months with positive income inflow.

- Focusing on the months with incoming salary (assumed months with predictable income):
  – 2023-05 positive surplus: 7,170.56
  – 2023-10 positive surplus: 1,466.27
  – 2023-12 positive surplus: 5,173.79
  – Minimum positive surplus among these is 1,466.27 (October).
- To allow for fluctuations and to maintain a safety buffer, it is prudent to apply a conservative factor. For example, a 50% buffer applied to the minimum positive surplus suggests a safe EMI of roughly 1,466.27 × 0.50 ≈ 733.
- Hence, the maximum safe EMI amount recommended based on the data is approximately 730–750.

Final Recommendation
- Suggested Safe EMI: Approximately 730 per month
  – This EMI is based on the lowest positive surplus recorded (1,466.27 in October) with a 50% safety buffer to accommodate months when income is absent and expenses vary.
- Risk Rating: High
  – The customer experiences significant monthly fluctuations. Five out of eight months record a surplus far below the assumed EMI level, and several months even show deficits.
- Key Financial Observations:
  – Regular salary credits occur only in select months, resulting in an uneven income distribution.
  – There is a mix of recurring and discretionary expenses. Some recurring expenses (utilities and insurance) are somewhat predictable, yet the months without income cause overall instability.
  – The high variability and multiple months with negative surplus are a red flag regarding consistent loan repayment capacity.
  – It is recommended that the customer either build a larger reserve during months of high surplus or restructure scheduled repayments to align with months when income is received.

Summary
Based on the provided data, the customer does not consistently maintain a surplus that can cover an EMI near or above the average surplus. A safe EMI ceiling of about 730 per month is advised; however, even this conservative approach indicates high risk because of wide

fluctuations and several deficit months. It would be advisable for the customer to reassess their cash flow management before taking on a new loan obligation.

Debt-to-Income (DTI) Ratio

Below is a detailed professional analysis based solely on the provided tables.

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1. Overall Burden

- The Overall DTI Ratio is 0.0537 (approximately 5.37%), as stated in the data.
- A DTI of around 5% indicates a very light debt burden relative to income.
- Recommendation: Continue current practices while monitoring any increase in outstanding debt.

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2. Monthly Trends

- The monthly breakdown shows that only December 2023 provides both Debt and Income values with a computed DTI of 0.0434 (4.34%).
- In May 2023 income is recorded (8176.37) but no debt value is provided; in July 2023, debt is provided (438.1) with missing income; in September 2023, debt is provided (262.66) with missing income; and in October 2023 income is provided (3554.25) without an accompanying debt value.
- The available December data is consistent with a low-risk DTI, yet the gaps in other months indicate incomplete data tracking rather than evidence of high risk.
- Recommendation: For a clearer monthly trend, ensure debt and income are consistently reported; missing values may mask potential spikes.

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3. Income & Expense Dynamics

- Credit (Income) Flows:
  – Regular monthly salary deposits are observed on multiple dates (May, October, December)

with amounts ranging from about 2189.93 to 4850.28.

- Debit (Spending/Payment) Flows:
  – Recurring utility payments (e.g., Water, Electricity, Mobile Recharge, Gym Membership) and regular Loan EMI transactions are evident.
  – Loan EMI amounts vary significantly: as low as 17.61 (July) and as high as 420.49 (July), with an additional EMI in December (294.39).
  – Discretionary spending (Movies, Clothing, Electronics) is present, though these do not directly affect debt servicing.
- The overall low debt relative to income suggests spending is manageable, but the variation in EMI payments warrants clarification.
- Recommendation: Maintain consistent income inflows and consider smoothing out irregular EMI amounts to better forecast debt service obligations.

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4. Risk Tiering

- Under conventional thresholds (e.g., 0.2, 0.36, 0.43, 0.5), the borrower's DTI of 0.0537 is well below even the lowest risk threshold of 0.2.
- This places the borrower in a very low-risk tier as their debt obligations constitute only about 5% of their income.
- Recommendation: Although current classification is low risk, continued diligence is advised, especially if monthly data gaps could later reveal unaccounted liabilities.

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5. Stability & Volatility

- Evidence from December 2023 shows a DTI of 0.0434, which is in line with the overall DTI indicator of 0.0537.
- While data for the other months is incomplete (only income or debt is recorded), the available value in December suggests stability in debt servicing relative to income.
- Recommendation: Enhance data collection consistency to verify the stability trend over subsequent periods.

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6. Potential Red Flags

- Inconsistencies noted include:
  – Months with recorded debt but missing income (e.g., July 2023 with Debt 438.1 and September 2023 with Debt 262.66) and vice versa (e.g., May and October 2023).
  – A highly variable Loan EMI amount is observed: a very low EMI of 17.61 contrasted with other higher EMI values (420.49, 262.66, 294.39). Such discrepancies could indicate irregular debt repayment schedules or data entry inconsistencies.
- Recommendation: Confirm whether these anomalies are due to genuine timing differences in reporting or if further action is needed to harmonize reporting practices.

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7. Stress Testing: 10% Income Drop

- Using December 2023 as a reference:
  – Current December Income = 6785.48; Debt = 294.39; thus DTI = 294.39 / 6785.48 ≈ 0.0434.
  – A 10% income reduction would yield a revised income = 6785.48 × 0.9 = 6106.93.
  – The new DTI ratio = 294.39 / 6106.93 ≈ 0.0482.
- While the DTI increases by nearly 5 percentage points in relative terms (from 0.0434 to 0.0482), it remains very low overall.
- Recommendation: Even under stress, the borrower remains within a low-risk DTI tier; however, continuous monitoring is recommended if such income reductions persist.

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8. Recommendations for Financial Health

- Ensure complete and consistent monthly data reports for both debt and income to better track trends and potential volatility.
- Investigate and, if necessary, standardize the repayment amounts for loan EMIs to avoid scheduling inconsistencies.
- Reduce discretionary spending where possible (e.g., movie, clothing, and certain one-off purchases) to further strengthen cash flows.
- Maintain a healthy buffer by potentially increasing savings or emergency funds, safeguarding against even mild income disruptions.
- Regularly review utility and recurring service expenses for opportunities to optimize

spending.

Conclusion

Based solely on the information provided, the borrower’s debt burden is minimal and stable relative to their income, classifying them in a low-risk tier. The primary areas for improvement are ensuring complete reporting and clarifying varying EMI amounts. With these actions, the borrower can further secure their financial stability and mitigate potential risks under income stress scenarios.

Behavioral Insights

Below is the behavior risk indicator analysis based on the provided credit and debit transaction data:

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1. Bounced Cheques

- Analysis: There are no transactions indicating failed or returned cheque payments.
- Risk Flag: Low
- Key Observation: No record in either table shows any indication of cheque bounce or related issues.

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2. Speculative Transactions

- Analysis: The dataset consists predominantly of salary credits, utility payments, EMI, and other everyday purchases. There are no transactions related to stocks, forex, or other high-risk investment instruments.
- Risk Flag: Low
- Key Observation: All transactions fall into regular predictable categories and lack any speculative nature.

Standard Bank Report

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3. Gambling

- Analysis: None of the narrations or classifications indicate gambling-related activity (e.g., no casinos, betting apps, or lottery payments).
- Risk Flag: Low
- Key Observation: All spending is directed toward utility payments, personal expenses, or recurring bills.

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4. Frequent Overdrafts

- Analysis: There is no indication in the available data of overdraft usage or negative balance occurrences. All transactions appear to be covered by the recurring salary deposits.
- Risk Flag: Low
- Key Observation: The regular incoming salary credits and routine expenses suggest disciplined account management without evidence of overdraft reliance.

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5. Heavy Use of BNPL (Buy Now Pay Later)

- Analysis: There are no transactions identified as BNPL. The expenses—ranging from electronics to clothing—do not explicitly indicate deferred payment plans or BNPL schemes.
- Risk Flag: Low
- Key Observation: All transactions listed are categorized as either utility payments or one-time discretionary purchases, with no signs of heavy BNPL usage.

Overall Behavior Risk Indicator

- Overall Score: 1/10
- Summary:
  – The customer exhibits a highly stable and predictable financial behavior profile.
  – Predictable salary income and routine utility/EMI transactions dominate the account activity.

– No evidence of bounced cheques, speculative investments, gambling, frequent overdrafts, or heavy BNPL usage was found.

Based on the provided data, the borrower's financial behavior is assessed as extremely low risk.

Risk Assessment

Credit Risk: While the overall DTI and behavioral indicators are strong... (and so on)

Conclusion & Recommendation

Final Remarks:

The customer’s financial profile is marked by low overall debt...

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