

Loan pricing calculation Reports

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Customer Details

Loan ID:	H8GXPAOS71
Age:	38
Income:	\$111,188/month
Loan Amount:	\$177,025 (159% of income)
Credit Score:	429 (Very Poor)
Employment:	80 months (6.7 years) at current job
DTI Ratio:	16%
Existing Mortgage:	Yes
Co-Signer:	Yes
Loan Purpose:	Home

Approved Interest Rate

19.11%

Rate Justification

The interest rate was determined based on the following risk factors:

Primary Risk Components

- **Credit History (429 Score):**
 - Deep subprime credit tier indicates significant repayment risks
 - Added **+6.50%** to base rate
- **Loan-to-Income Ratio (159%):**
 - Loan amount exceeds annual income by 59%
 - Added **+3.00%** for repayment capacity concerns
- **Existing Mortgage:**
 - Current housing liability increases overall debt exposure
 - Added **+1.50%** for additional obligation risk

Mitigating Factors

- **Co-Signer Presence:**
 - Qualified co-signer reduces some lender risk
 - Provided **-2.00%** adjustment
- **Employment Stability:**
 - 6.7 years at current job demonstrates income reliability
 - Prevented additional rate increases

Rate Calculation Breakdown

Component	Rate Adjustment
Base Rate (RBI Repo + Bank Profit)	7.00%
Credit Score Risk Premium	+6.50%
Loan-to-Income Risk Premium	+3.00%
Existing Mortgage Premium	+1.50%
Loan Purpose Risk Premium	+2.11%
Co-Signer Discount	-2.00%
Final Approved Rate	19.11%

Recommendations for Rate Improvement

- **Credit Repair:** Bringing score above 600 could reduce rate by 4-6%
- **Loan Reduction:** Decreasing amount to $\leq 100\%$ of income may lower rate by 2-3%
- **Collateral Addition:** Secured loan structure could qualify for better pricing

Customer Details

Loan ID:	0HGZQKJ36W
Age:	56
Income:	\$126,802/month
Loan Amount:	\$155,511 (123% of income)
Credit Score:	531 (Poor)
Employment:	67 months (5.6 years) at current job
DTI Ratio:	43%
Education:	PhD
Marital Status:	Married
Existing Mortgage:	No
Dependents:	No
Co-Signer:	Yes
Loan Purpose:	Home

Approved Interest Rate

8.15%

Rate Justification

The interest rate was determined based on the following risk factors:

Primary Risk Components

- **Credit History (531 Score):**
 - Poor credit tier indicates some repayment risks
 - Added **+1.25%** to base rate
- **Loan-to-Income Ratio (123%):**
 - Loan amount exceeds annual income by 23%
 - Added **+0.75%** for repayment capacity concerns
- **Debt-to-Income Ratio (43%):**
 - Nearing the maximum recommended DTI threshold
 - Added **+0.50%** for elevated debt burden

Mitigating Factors

- **Co-Signer Presence:**
 - Qualified co-signer reduces lender risk
 - Provided **-2.00%** adjustment
- **Employment Stability:**
 - 5.6 years at current job demonstrates income reliability
 - Prevented additional rate increases
- **Education Level (PhD):**
 - Advanced degree suggests strong earning potential
 - Provided **-0.25%** adjustment

Rate Calculation Breakdown

Component	Rate Adjustment
Base Rate (RBI Repo + Bank Profit)	7.00%
Credit Score Risk Premium	+1.25%
Loan-to-Income Risk Premium	+0.75%
DTI Ratio Premium	+0.50%
Co-Signer Discount	-2.00%
Education Level Discount	-0.25%
Loan Term Premium (60 months)	+0.90%
Final Approved Rate	8.15%

Key Positive Factors

- Long-term employment (5.6 years) with stable income
- No existing mortgage reduces debt obligations
- Married status suggests financial stability
- Co-signer provides additional security

Recommendations for Rate Improvement

- **Credit Repair:** Bringing score above 650 could reduce rate by 0.5-1.0%
- **Shorter Loan Term:** 36-month term could lower rate by 0.25-0.5%
- **Down Payment Increase:** Reducing loan amount to 100% of income may improve terms

Customer Details

Loan ID:	1R0N3LGNRJ
Age:	36
Income:	504,636/year (42,053/month)
Loan Amount:	92,357 (18.3% of income)
Credit Score:	827 (Excellent)
Employment:	83 months (6.9 years) at current job
Number of Credit Lines:	1
Loan Term:	48 months
Interest Rate (Current):	23.94%
DTI Ratio:	20%
Education:	Bachelor's
Employment Type:	Self-employed
Marital Status:	Divorced
Existing Mortgage:	Yes
Dependents:	No
Loan Purpose:	Education
Co-Signer:	No

Suggested Interest Rate

7.70%

Rate Justification

The currently assigned rate of 23.94% is significantly high and not justified by the borrower's profile. After considering all key financial and risk factors, the recommended fair interest rate is given below.

Primary Risk Components

- **Self-Employment:**
 - Income uncertainty and verification risks
 - Added **+0.75%**
- **No Co-Signer:**
 - Increases lender's exposure in case of default
 - Added **+0.50%**
- **Only 1 Credit Line:**
 - Limited credit history creates underwriting difficulty
 - Added **+0.25%**

Mitigating Factors

- **Excellent Credit Score (827):**
 - Indicates high repayment discipline
 - Reduced **-1.50%**
- **Low Loan-to-Income Ratio (18.3%):**
 - Very safe ratio ensures repayment capacity
 - Reduced **-0.50%**
- **Stable Long-Term Employment (6.9 years):**

- Strong signal of financial consistency
- Prevented additional rate additions
- **Low DTI (20%):**
 - Financial obligations are manageable
 - Reduced **-0.25%**

Rate Calculation Breakdown

Component	Rate Adjustment
Base Rate (Benchmark)	7.00%
Self-Employment Premium	+0.75%
No Co-Signer Premium	+0.50%
Limited Credit History Premium	+0.25%
Excellent Credit Score Discount	-1.50%
Low LTI Ratio Discount	-0.50%
Low DTI Ratio Discount	-0.25%
Loan Term Premium (48 months)	+0.45%
Final Suggested Rate	7.70%

Key Positive Factors

- Excellent credit score (827)
- Low loan-to-income ratio (18.3%)
- Stable employment (6.9 years)
- Education loan with long-term earning potential

Recommendations

- **Build additional credit lines** to diversify credit portfolio
- **Add a co-signer** to potentially reduce rate by 0.5–1.0%
- **Consider a shorter loan term** for further interest savings