Insights from the Correlation Matrix

1. **Credit Score and Loan Amount**: A positive correlation (0.1106) suggests that higher fico scores with higher loan amounts are associated but not strongly. This may indicate varying loan sizes corresponding to creditworthiness levels.

2. **Income Level and Total Collateral Money Behind the Loan (Tot_coll_amt)**: A weak negative correlation (-0.000225) implies that a slight inverse relationship exists between income and total collateral money, though this variable is likely influenced by other factors rather than direct income effects.

3. **Debt-to-Interest Ratio (Dti)**: A positive correlation (0.1245) indicates that higher debt levels are linked to lower dti ratios, meaning individuals with more debt might have fewer monthly payments relative to their outstanding balances.

4. **Interest Rate and Total Collateral Money Behind the Loan**: A positive correlation (-0.003561) suggests that as interest rates increase, the total collateral money behind the loan decreases, possibly due to lower net worth or higher debt repayment pressures.

5. **Fico Score and Interest Rate**: A strong negative correlation (-0.416) indicates that poorer credit scores (higher fico range) are associated with higher interest rates, aligning with common financial relationships where poor credit is linked to more expensive loans.

Conclusion

The matrix highlights various financial interdependencies: loan sizes, income levels, and debt levels affecting each other. Understanding these relationships can aid in predicting financial outcomes based on variables like credit scores, loan amounts, and income.