

# Bias Detection Report

The Chi-square statistic is 18.922441415256635 and the p-value is 0.015279979756143208. This indicates that there is a significant correlation between the two categorical features 'Housing' and 'Credit history'.

The causal Bayesian network analysis shows that there is a causal path from 'Housing' to 'Credit amount', indicating potential bias.

However, the pgmpy library is not installed, so the causal effect calculation cannot be performed.

Therefore, the overall bias level is unknown.

The relevant features are 'Housing' and 'Credit history' for the correlation analysis, and 'Housing' and 'Credit amount' for the causal analysis.

The bias type is correlation bias for the Chi-square test and potential causal bias for the Bayesian network analysis.

Additional explanation: The correlation between 'Housing' and 'Credit history' is significant, indicating that the distribution of 'Credit history' varies across different 'Housing' categories. The causal analysis suggests that 'Housing' may have a direct impact on 'Credit amount', but the exact causal effect cannot be determined due to the lack of the pgmpy library.