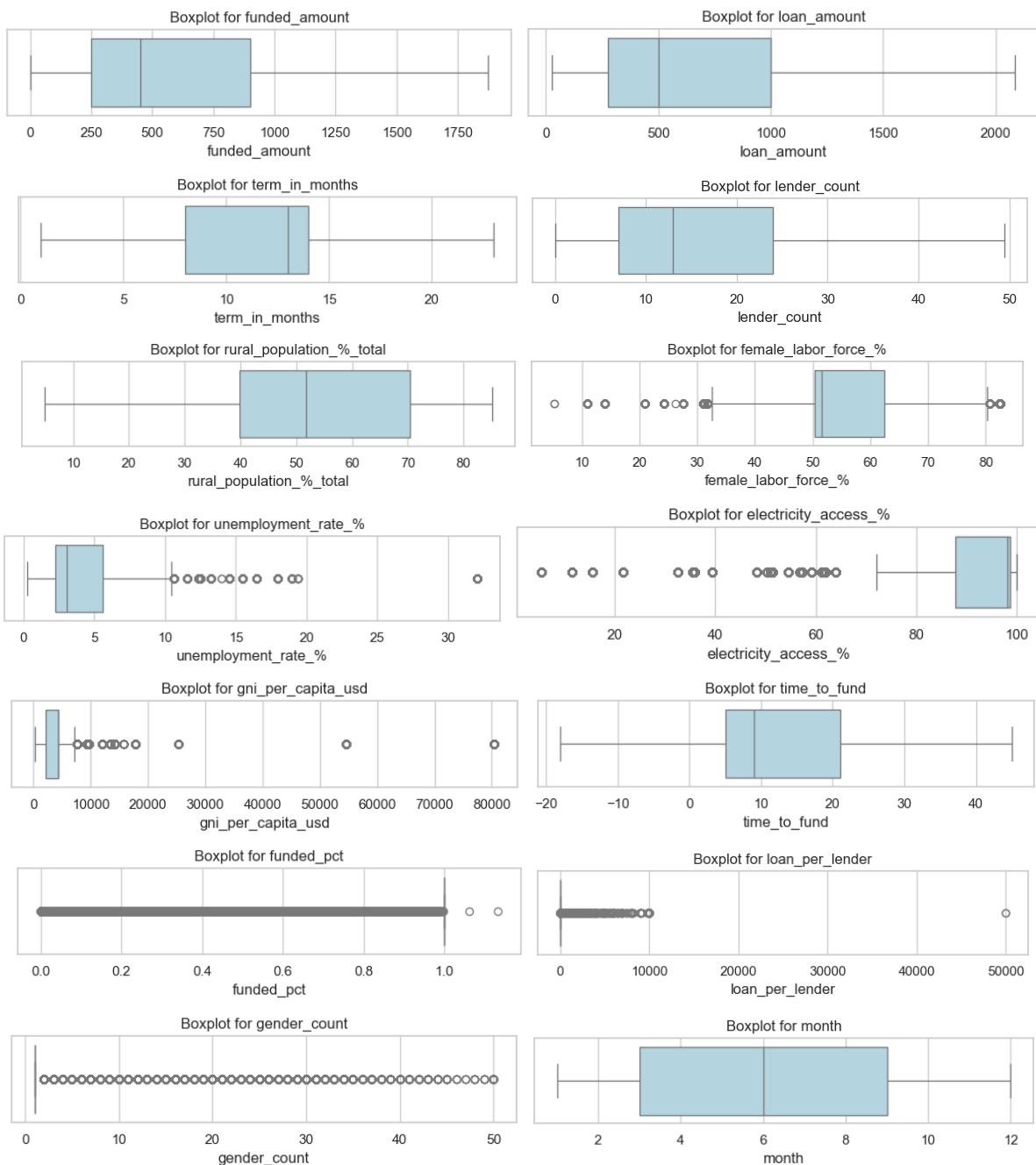
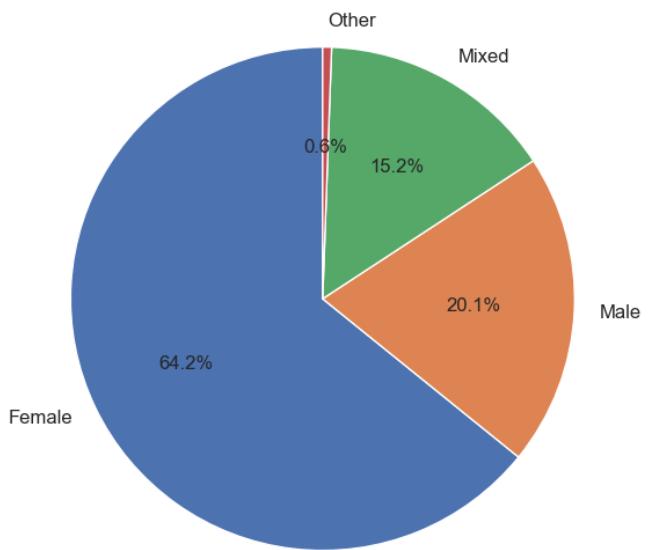


# EDA

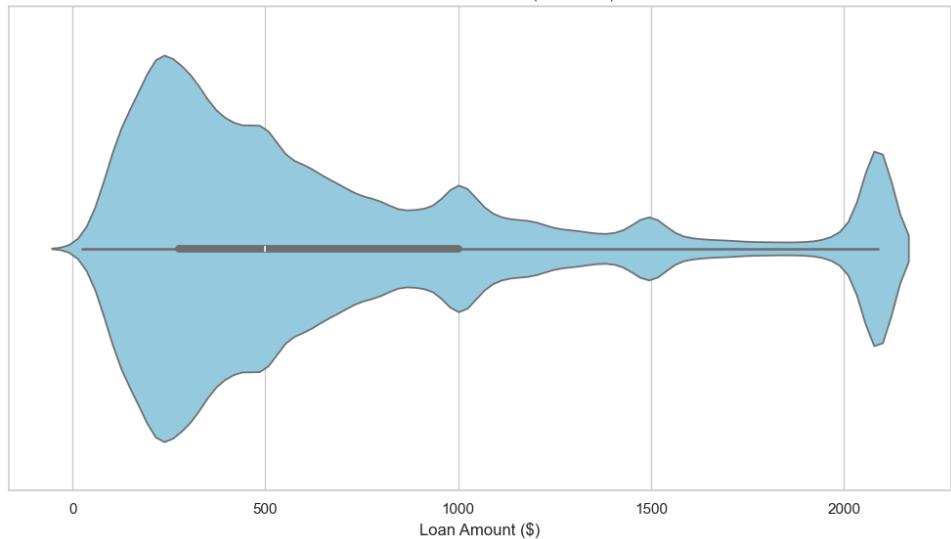
## BOXPLOT VISUALISATION OF SELECTED NUMERICAL FEATURES AFTER IQR BASED OUTLIER TREATMENT

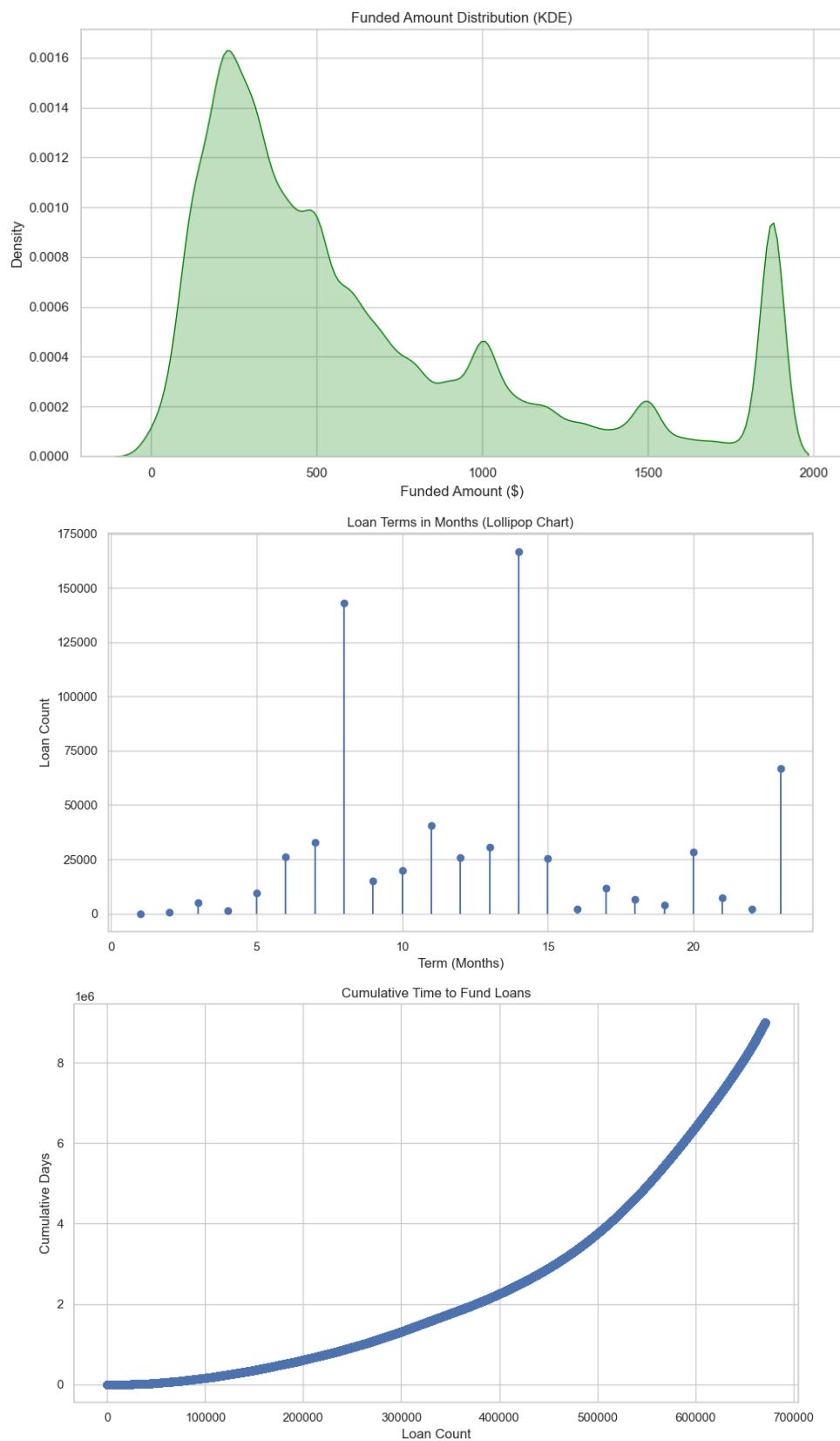


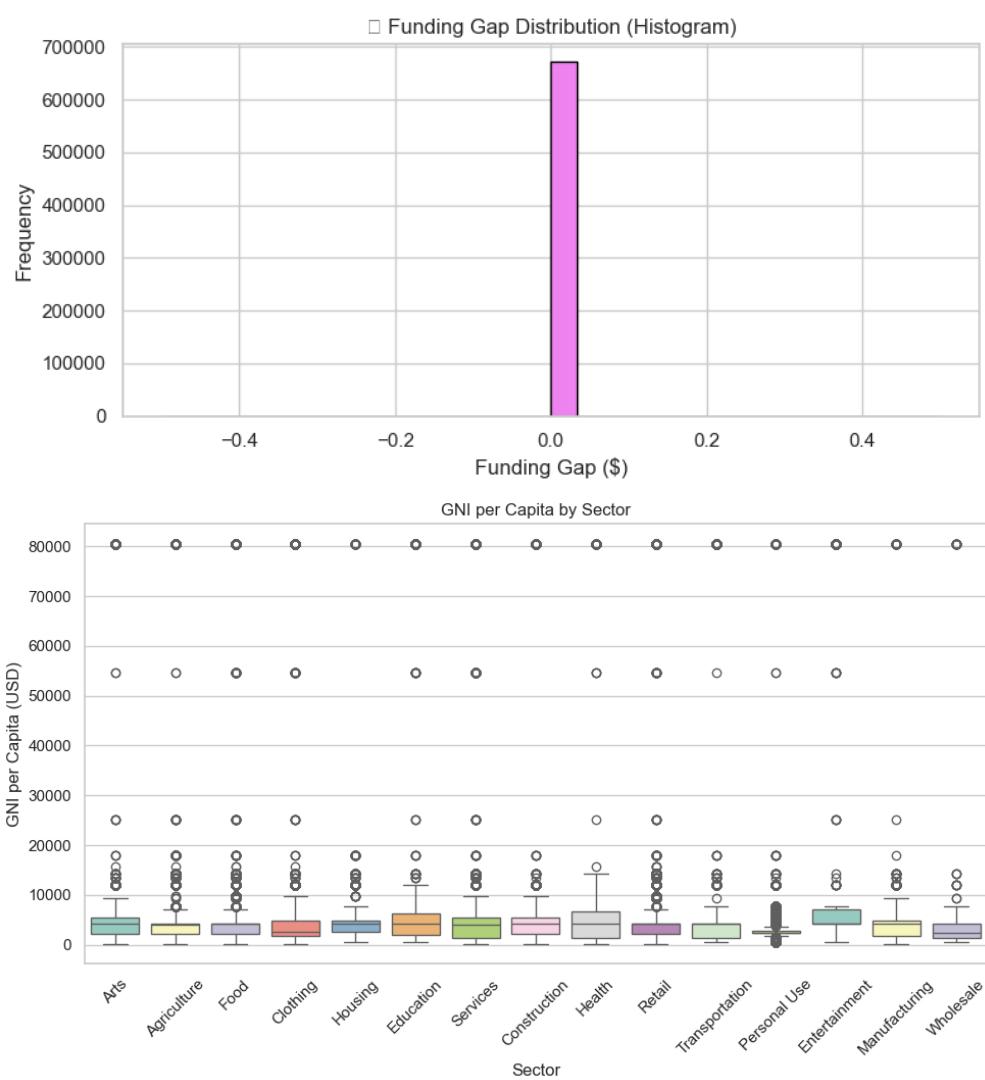
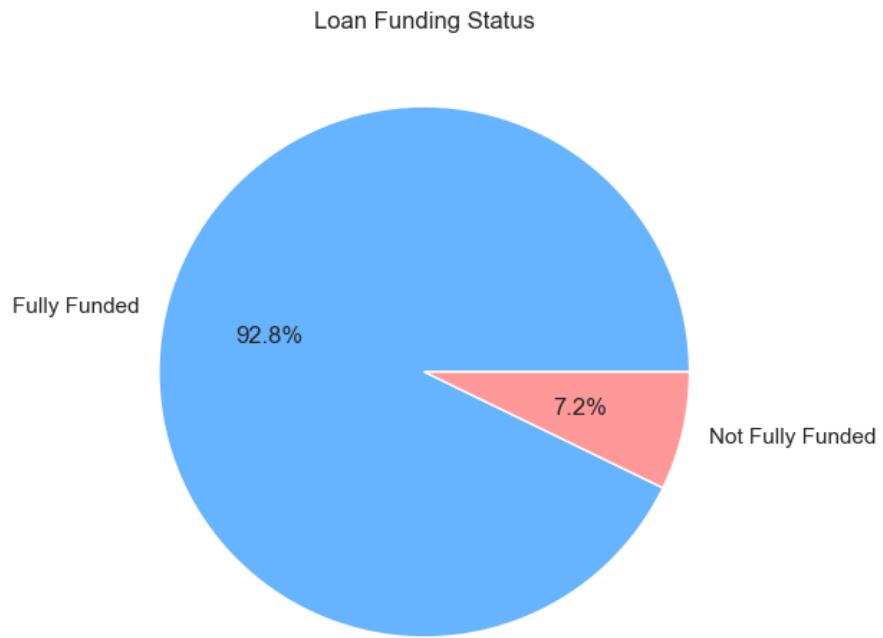
Borrower Gender Distribution

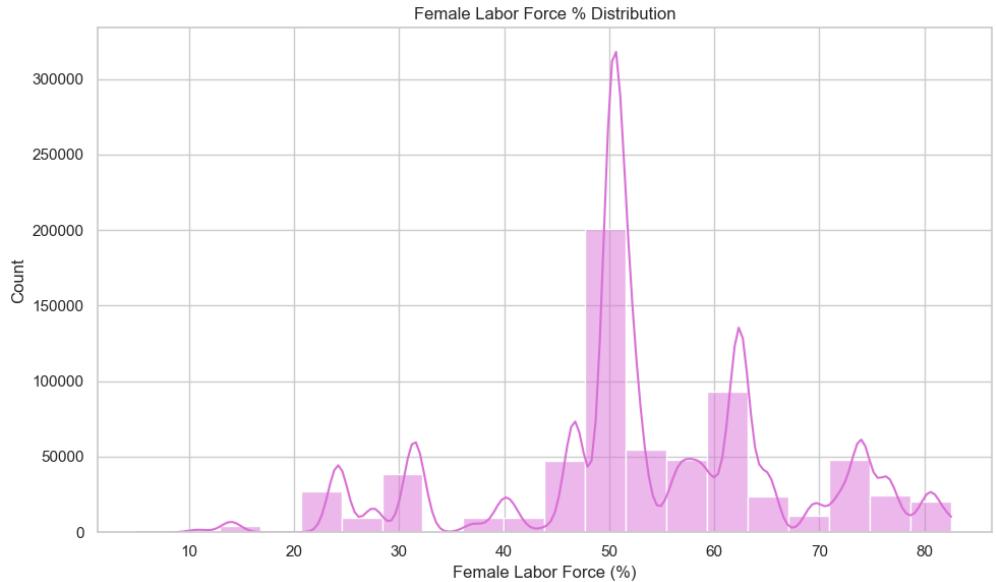


Loan Amount Distribution (Violin Plot)







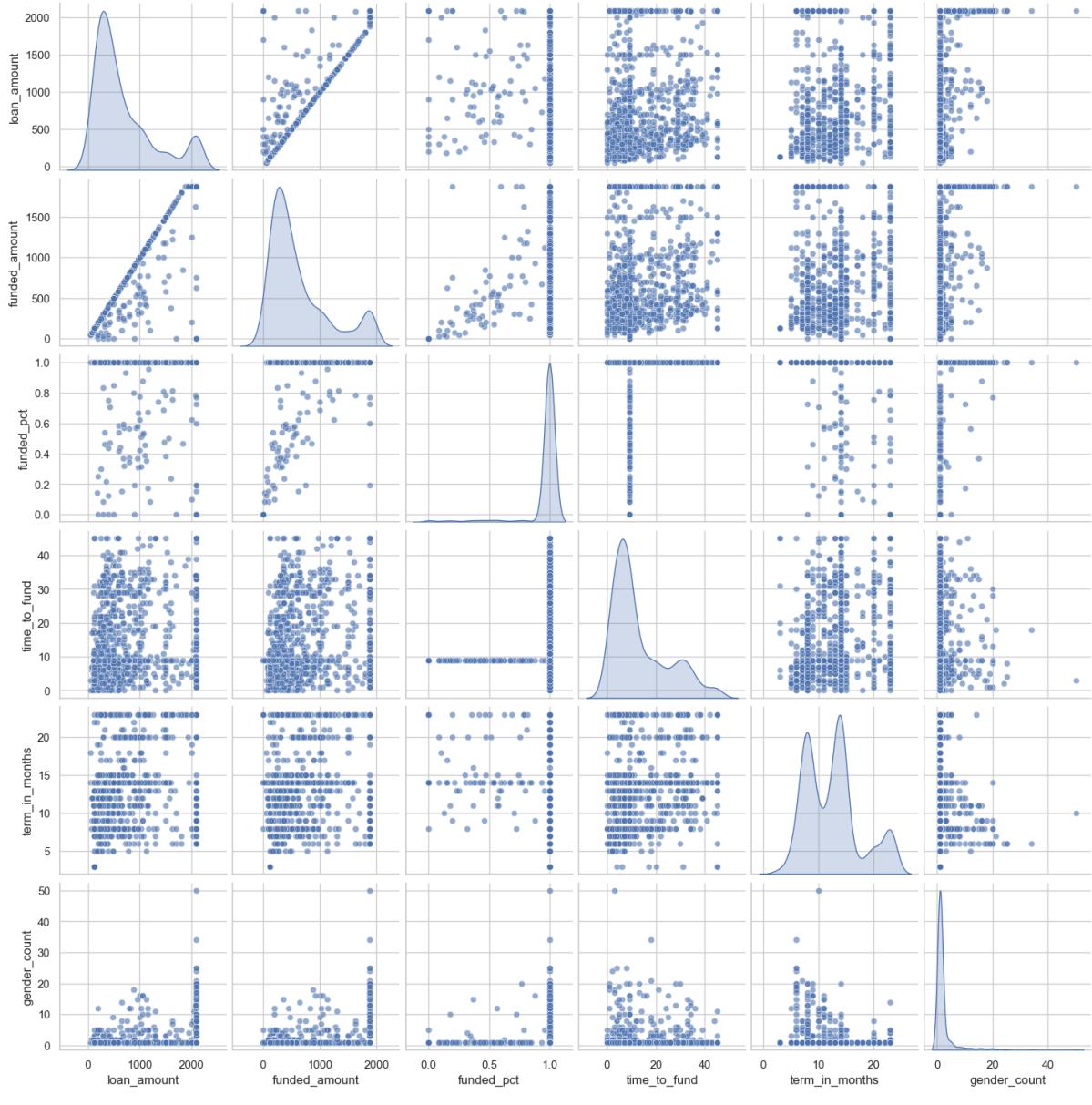


□ Correlation Matrix of Key Numerical Features

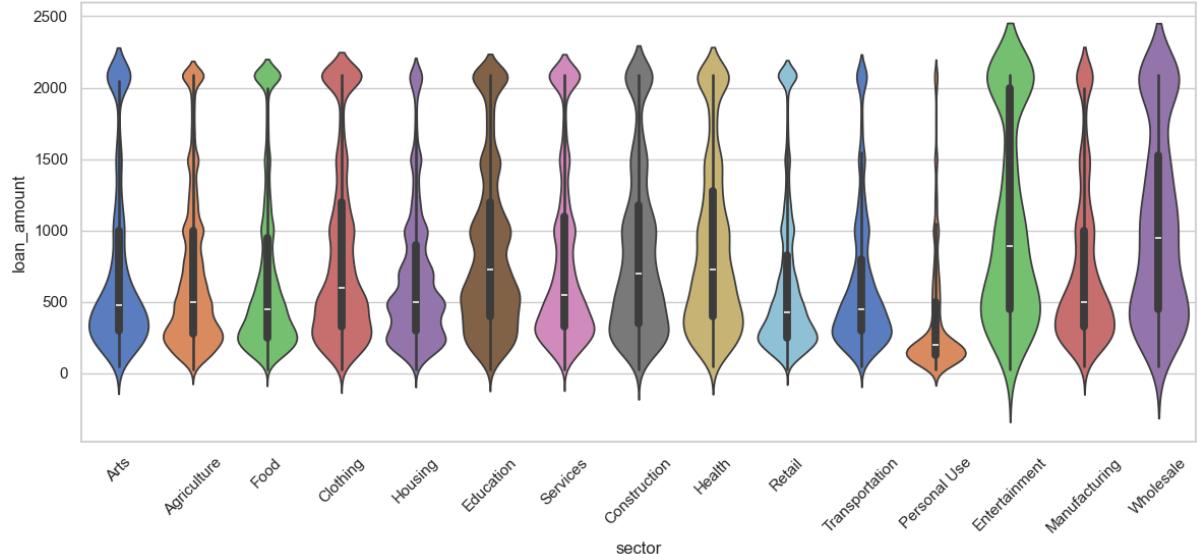
	funded_amount	loan_amount	loan_per_lender	time_to_fund	funded_pct	gender_count	term_in_months	female_labor_force_%	unemployment_rate_%	electricity_access_%	gni_per_capita_usd
funded_amount	1.00	0.95	0.03	0.25	0.12	0.44	0.22	-0.00	0.20	0.05	0.18
loan_amount	0.95	1.00	0.17	0.21	-0.16	0.45	0.27	-0.00	0.21	0.05	0.25
loan_per_lender	0.03	0.17	1.00	-0.05	-0.29	0.12	0.01	0.02	0.00	0.04	0.27
time_to_fund	0.25	0.21	-0.05	1.00	0.10	0.01	0.24	-0.05	0.13	-0.01	0.07
funded_pct	0.12	-0.16	-0.29	0.10	1.00	0.02	-0.20	-0.00	-0.06	-0.01	-0.15
gender_count	0.44	0.45	0.12	0.01	0.02	1.00	-0.22	0.12	0.01	-0.13	-0.04
term_in_months	0.22	0.27	0.01	0.24	-0.20	-0.22	1.00	-0.11	0.24	0.16	0.19
female_labor_force_%	-0.00	-0.00	0.02	-0.05	-0.00	0.12	-0.11	1.00	-0.36	-0.48	-0.02
unemployment_rate_%	0.20	0.21	0.00	0.13	-0.06	0.01	0.24	-0.36	1.00	-0.02	-0.01
electricity_access_%	0.05	0.05	0.04	-0.01	-0.01	-0.13	0.16	-0.48	-0.02	1.00	0.22
gni_per_capita_usd	0.18	0.25	0.27	0.07	-0.15	-0.04	0.19	-0.02	-0.01	0.22	1.00

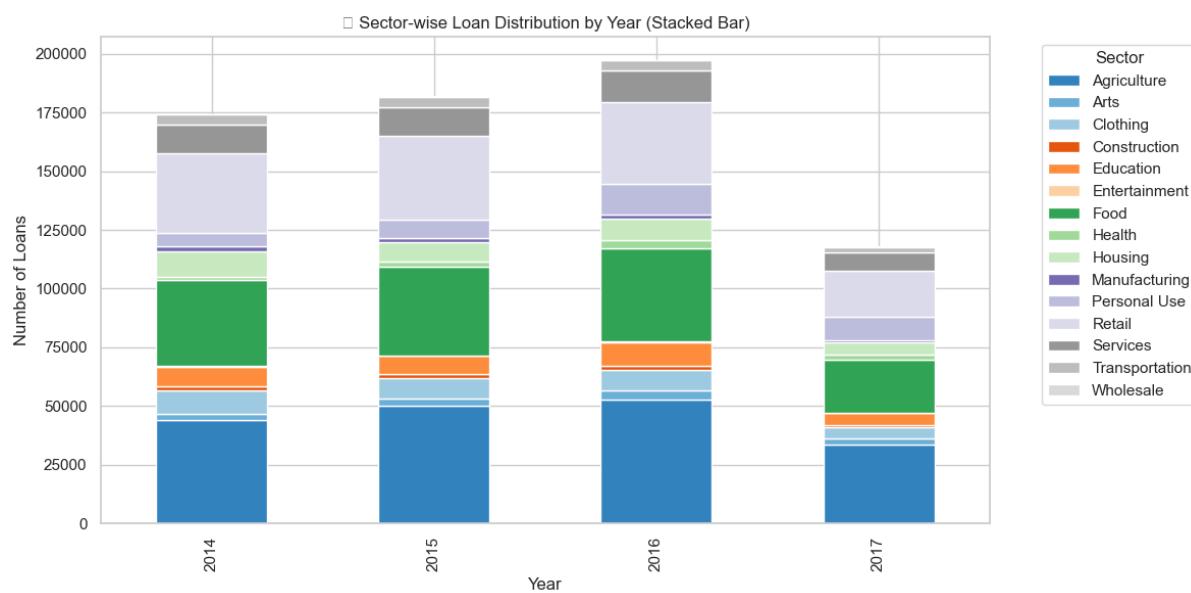
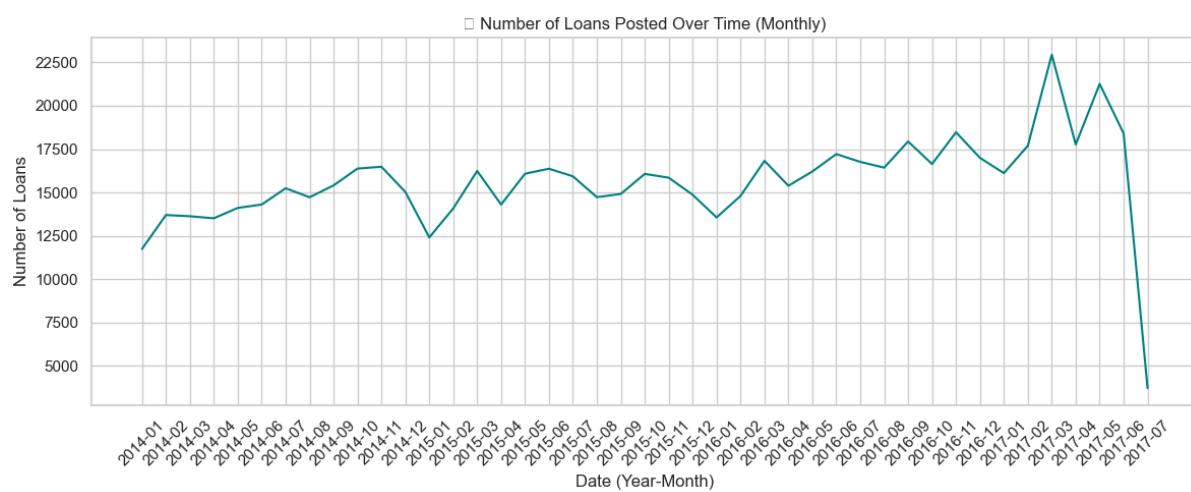
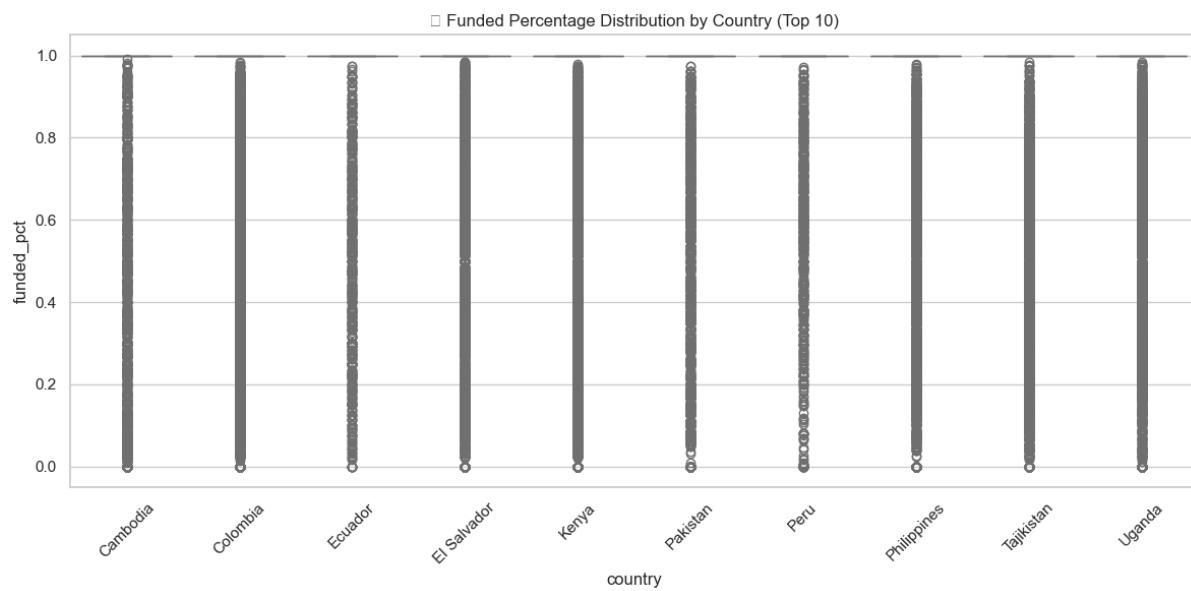
funded_amount	loan_amount	loan_per_lender	time_to_fund	funded_pct	gender_count	term_in_months	female_labor_force_%	unemployment_rate_%	electricity_access_%	gni_per_capita_usd
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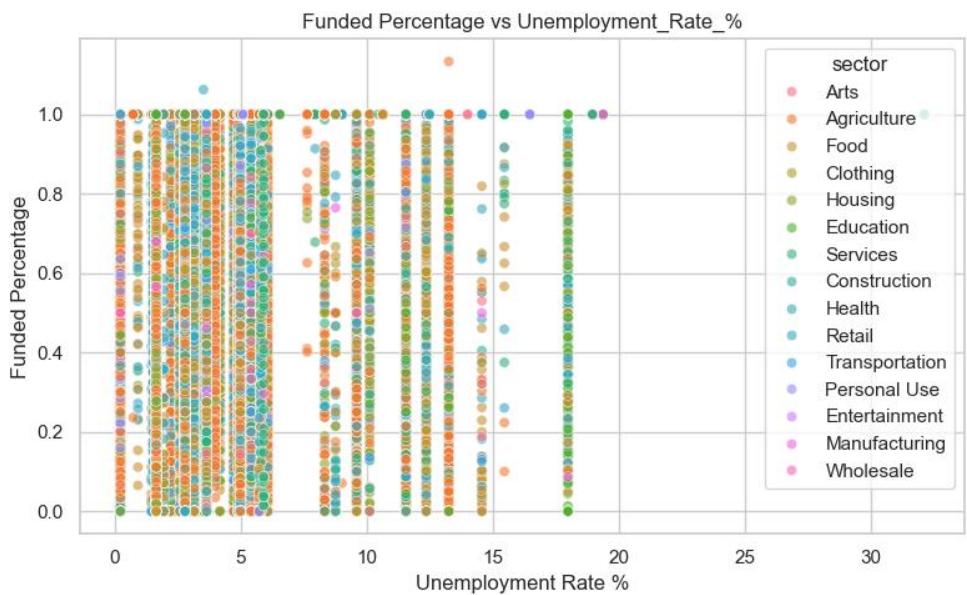
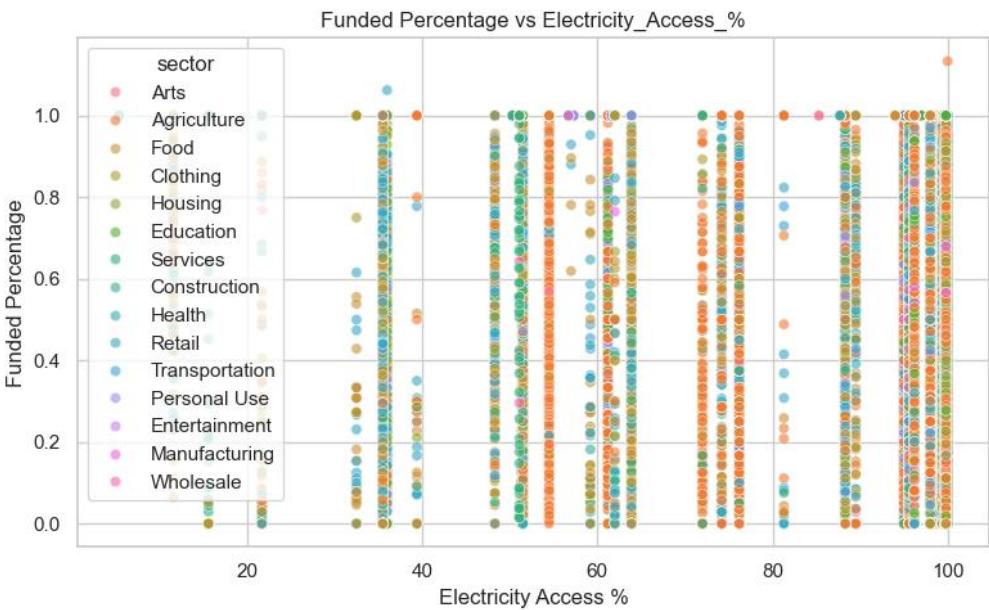
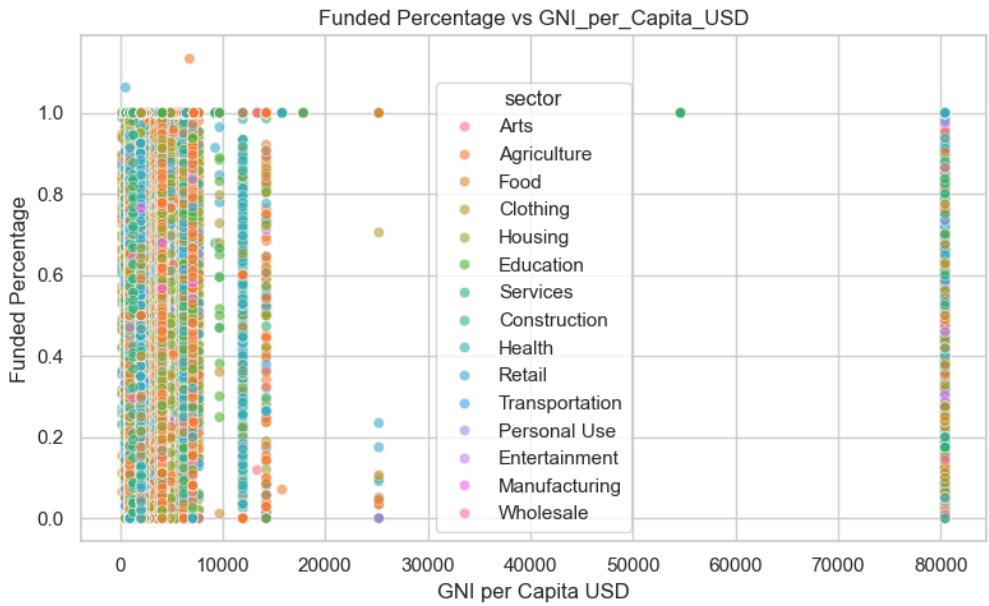
□ Pairwise Relationships Between Key Numerical Features

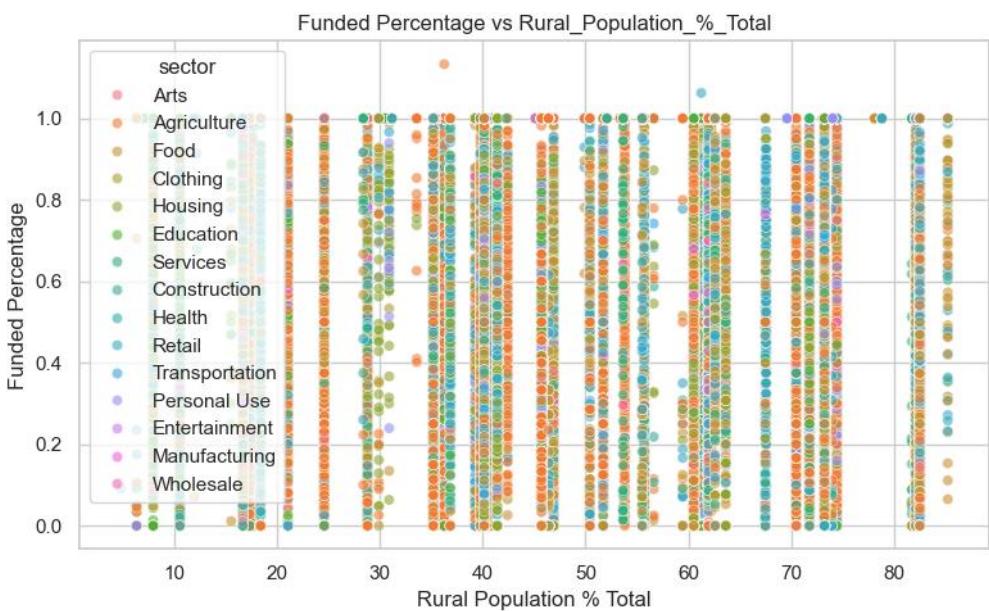
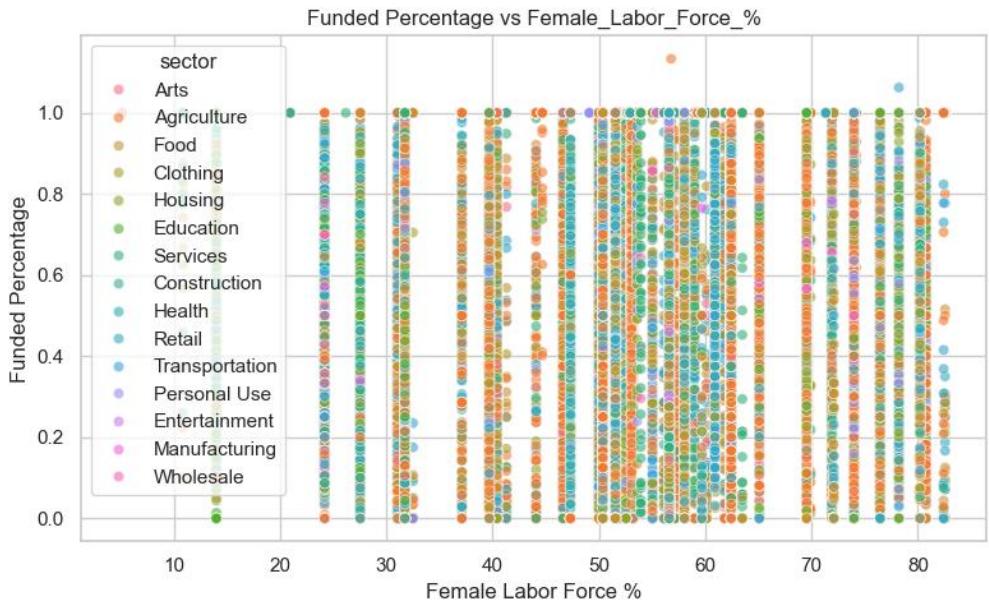


□ Loan Amount Distribution by Sector

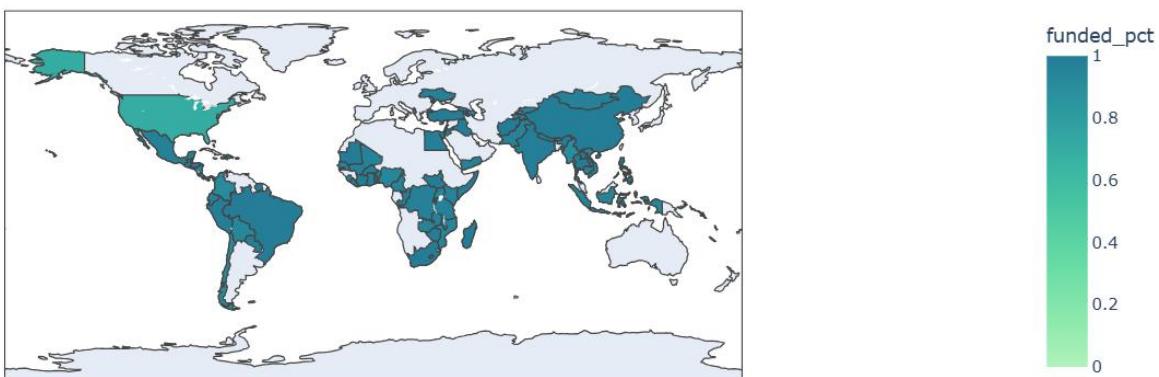


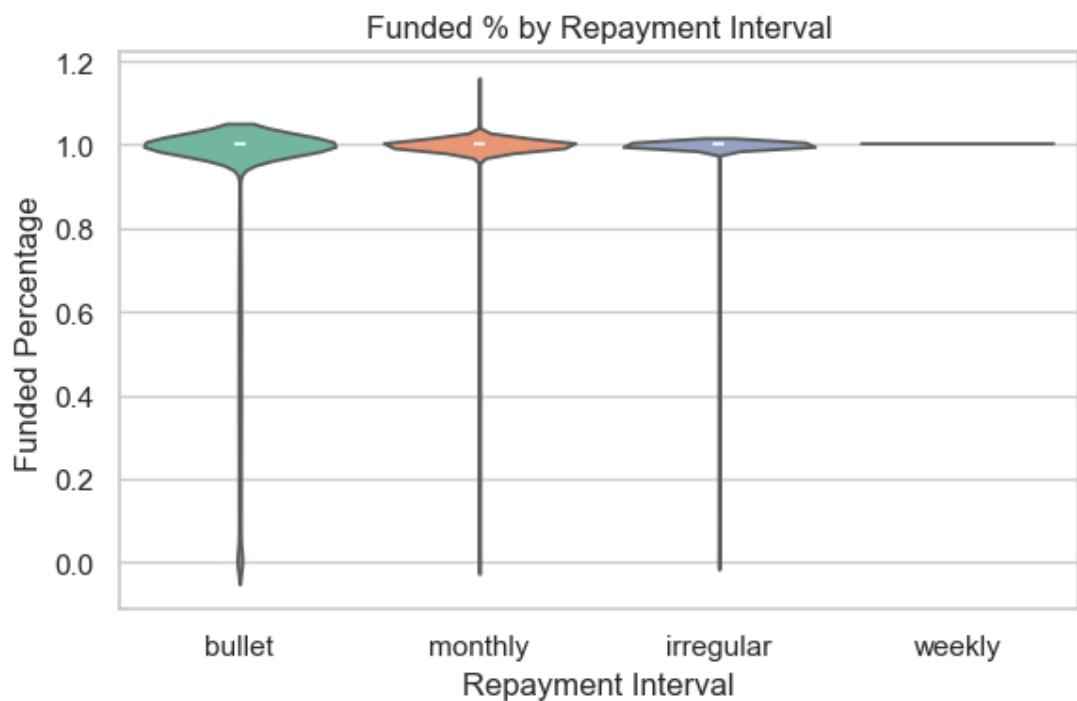






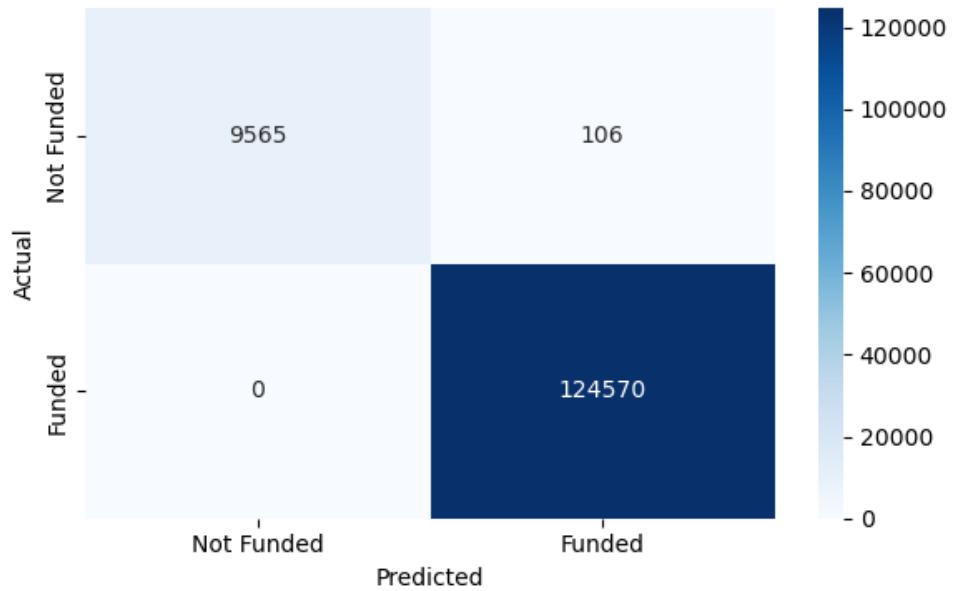
### 🌐 Average Funded Percentage by Country



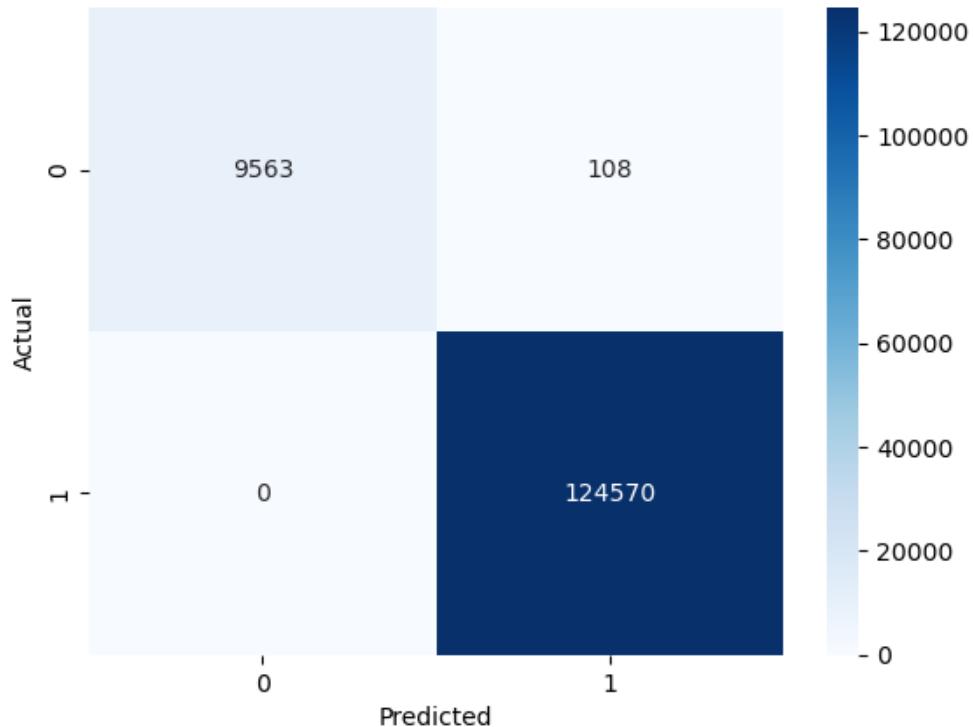


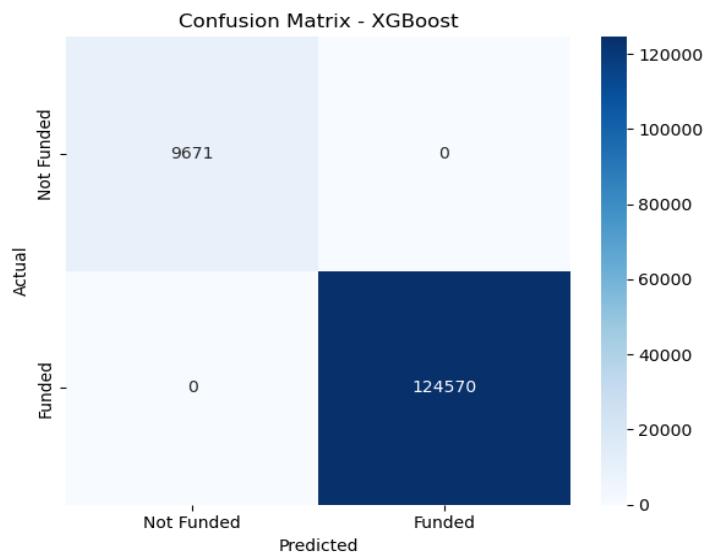
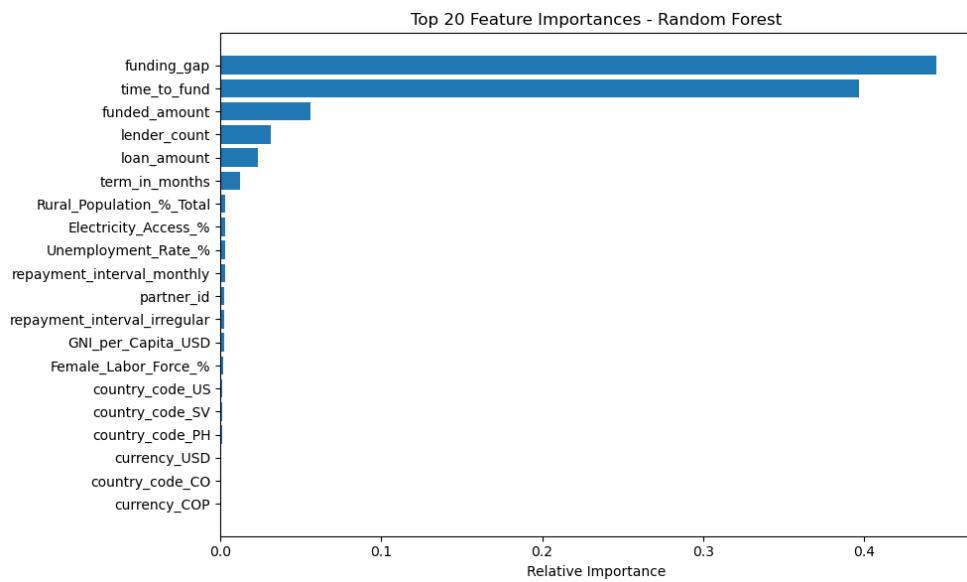
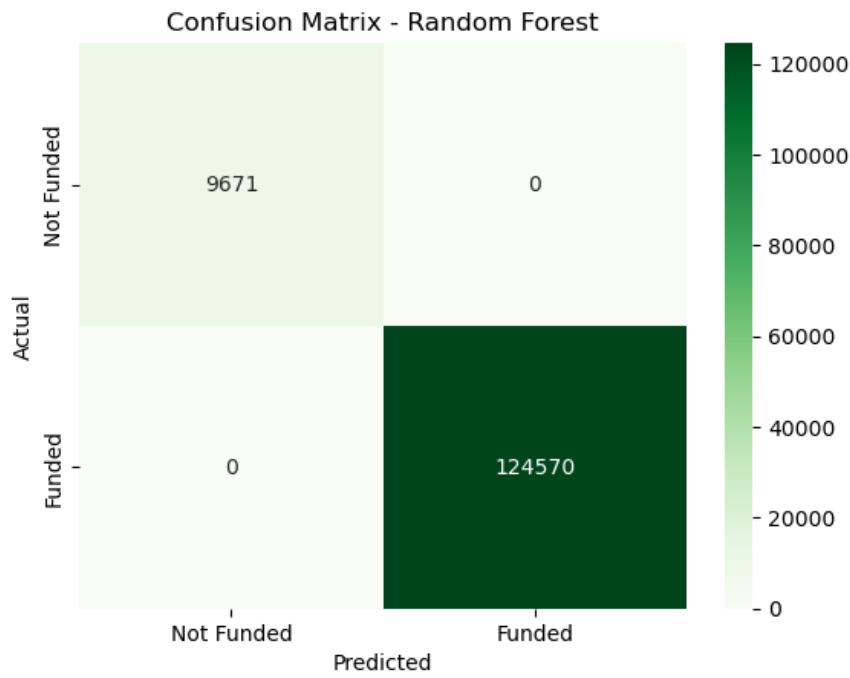
## **MODELLING**

Confusion Matrix - Logistic Regression



Logistic Regression - Confusion Matrix

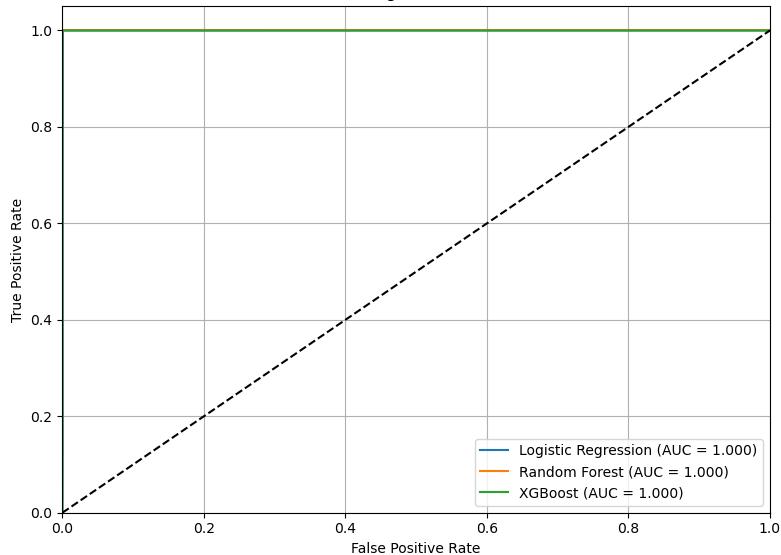




Confusion Matrix - Logistic Regression (With SMOTE)



ROC Curves - Logistic vs RF vs XGBoost



ROC Curve

