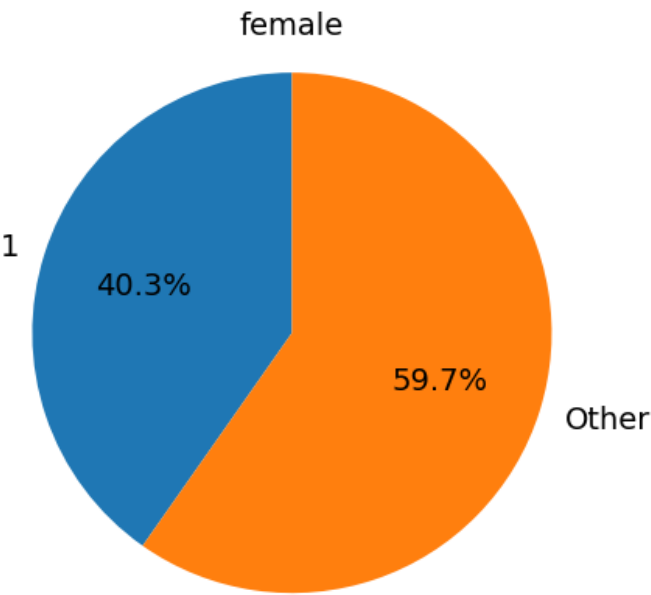# Analysis Report

We report the following SageMaker analysis.

Pre-training Bias Metrics

We computed the bias metrics for the label `fraudulent_provider` using label value(s)/threshold `1`.

- **female**

The groups are represented in the dataset with the following proportions.


Value(s)/Threshold: 1

name	description	value	error
CDDL	Conditional Demographic Disparity in Labels (CDDL)	None	Group variable is empty or not provided
CI	Class Imbalance (CI)	0.195	NaN
DPL	Difference in Positive Proportions in Labels (DPL)	0.001074	NaN
JS	Jensen-Shannon Divergence (JS)	0.000174	NaN
KL	Kullback-Liebler Divergence (KL)	0.000925	NaN
KS	Kolmogorov-Smirnov Distance (KS)	0.001074	NaN
LP	L-p Norm (LP)	0.001519	NaN
TVD	Total Variation Distance (TVD)	0.001074	NaN

Post-training Bias Metrics

We computed the bias metrics for the label `fraudulent_provider` using label value(s)/threshold `1`.

- **female**

The labels and predictions of the group have the following proportions.
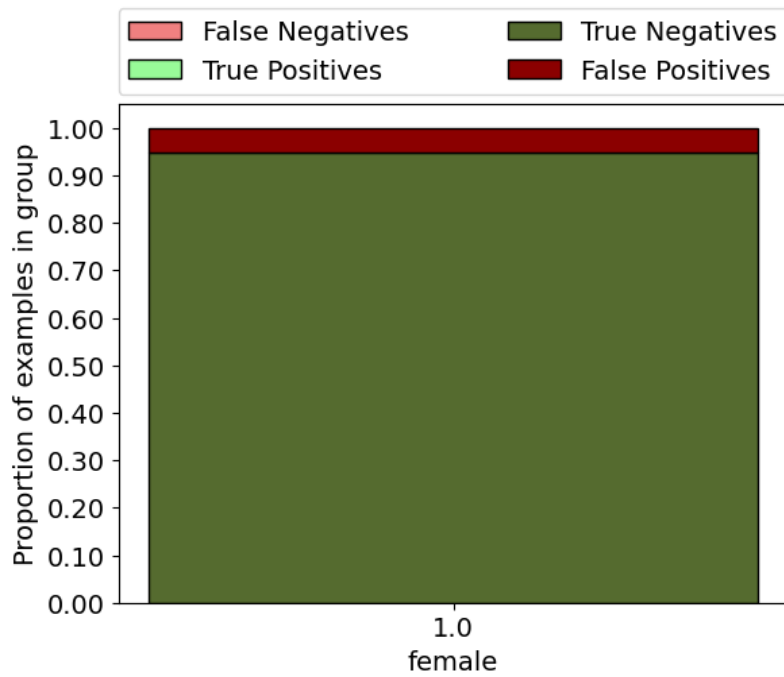
Positive labels = TP + FN --- Used in the following metrics: DPL, JS, KL, KS, LP, TVD
Negative labels = TN + FP
Positive predictions = TP + FP --- Used in the following metrics: DI
Negative predictions = TN + FN
Accuracy = TP + TN --- Used in the following metrics: AD
Recall = TP / (TP + FN) --- Used in the following metrics: RD
Precision = TP / (TP + FP) --- Used in the following metrics: DAR

Value(s)/Threshold: 1

name	description	value	error
AD	Accuracy Difference (AD)	-0.35267	NaN
CDDPL	Conditional Demographic Disparity in Predicted Labels (CDDPL)	None	Group variable is empty or not provided
DAR	Difference in Acceptance Rates (DAR)	-0.001667	NaN
DCA	Difference in Conditional Acceptance (DCA)	-0.00334	NaN
DCR	Difference in Conditional Rejection (DCR)	-0.624558	NaN
DI	Disparate Impact (DI)	0.125996	NaN
DPPL	Difference in Positive Proportions in Predicted Labels (DPPL)	0.353868	NaN
DRR	Difference in Rejection Rates (DRR)	-0.000049	NaN
FT	Flip Test (FT)	-0.381468	NaN
RD	Recall Difference (RD)	0.234873	NaN
TE	Treatment Equality (TE)	0.001681	NaN