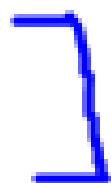


... Before: default

0 23364

1 6636

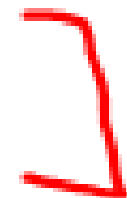


Name: count, dtype: int64

After SMOTE: default

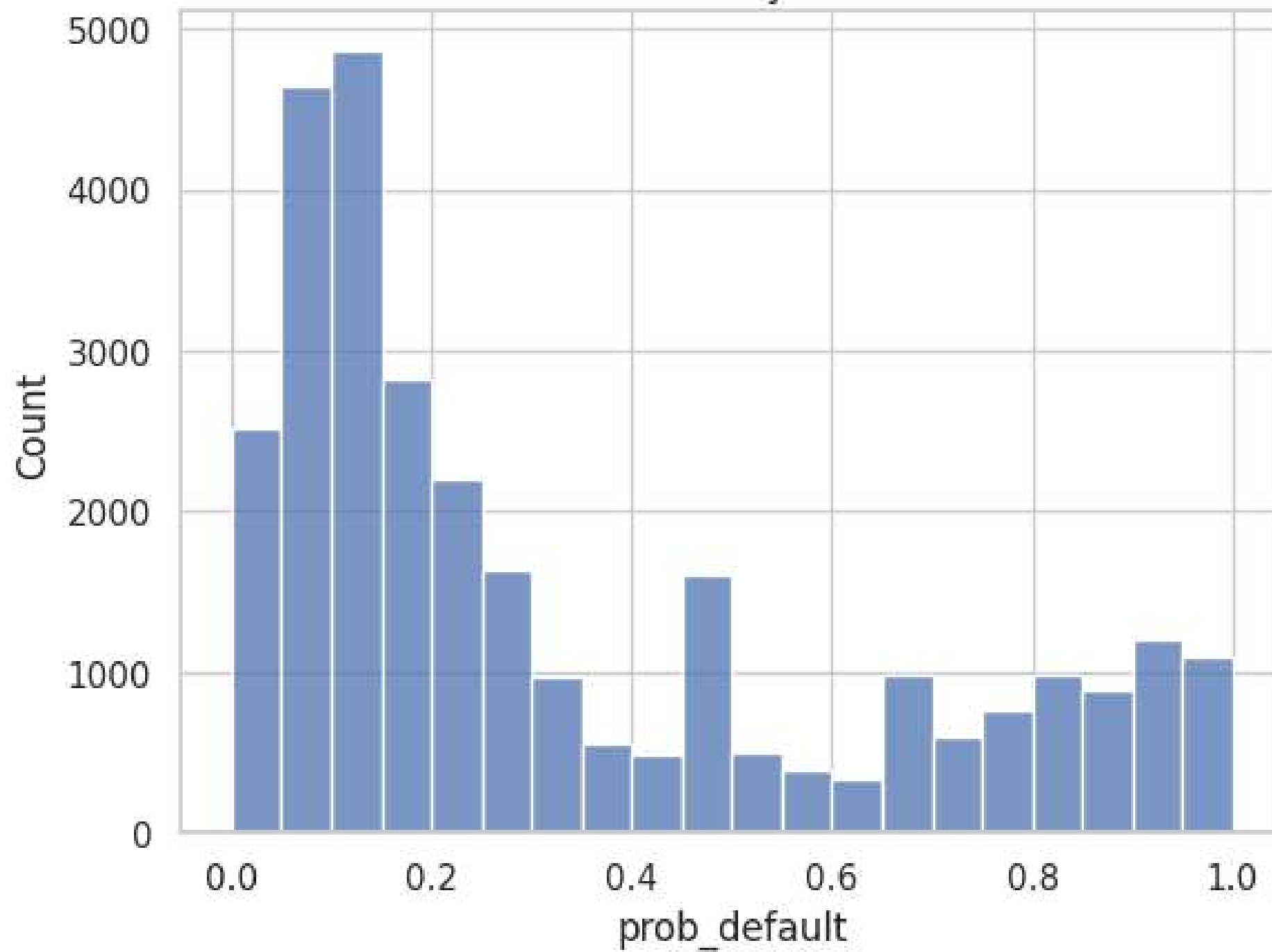
1 23364

0 23364



Name: count, dtype: int64

Default Probability Distribution



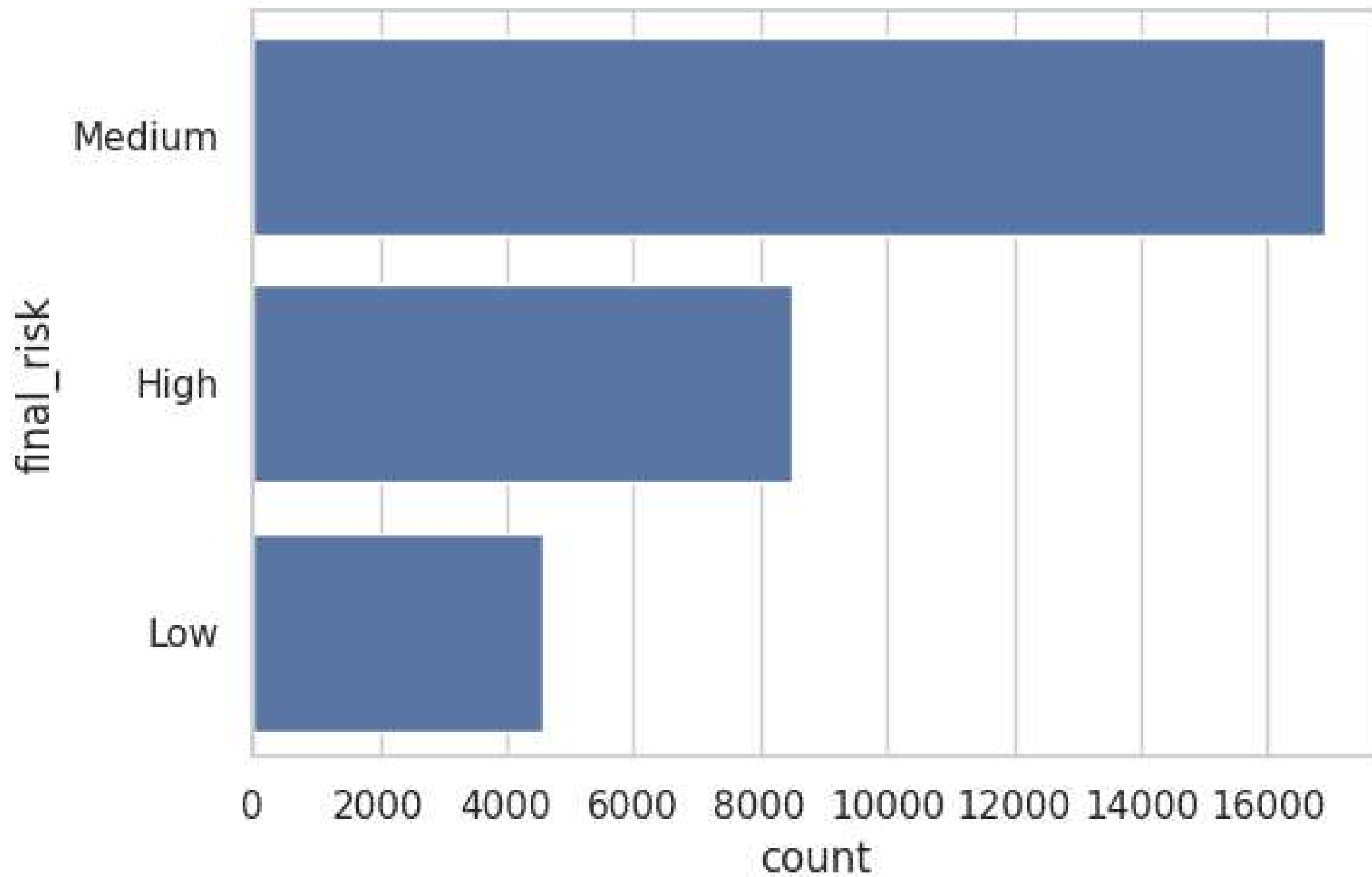
	id	limit_bal	sex	education	marriage	age	pay_0	pay_2	pay_3	pay_4	...	bill_amt4	bill_amt5	bill_amt6	pay_amt1	pay_amt2	pay_amt3	pay_amt4	pay_amt5	pay_amt6	default
0	1	20000.0	2	2	1	24	2	2	-1	-1	...	0.0	0.0	0.0	0.0	689.0	0.0	0.0	0.0	0.0	1
1	2	120000.0	2	2	2	26	-1	2	0	0	...	3272.0	3455.0	3261.0	0.0	1000.0	1000.0	1000.0	0.0	2000.0	1
2	3	90000.0	2	2	2	34	0	0	0	0	...	14331.0	14948.0	15549.0	1518.0	1500.0	1000.0	1000.0	1000.0	5000.0	0
3	4	50000.0	2	2	1	37	0	0	0	0	...	28314.0	28959.0	29547.0	2000.0	2019.0	1200.0	1100.0	1069.0	1000.0	0
4	5	50000.0	1	2	1	57	-1	0	-1	0	...	20940.0	19146.0	19131.0	2000.0	36681.0	10000.0	9000.0	689.0	679.0	0

5 rows × 25 columns

	id	limit_bal	sex	education	marriage	age	pay_0	pay_2	pay_3	pay_4	...	util_6	pay_ratio_4	pay_ratio_5	pay_ratio_6	pay_drop	util_change	spike	delay_trend	ers_score	ers_flag
0	1	20000.0	2	2	1	24	2	2	-1	-1	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0	2	Medium
1	2	120000.0	2	2	2	26	-1	2	0	0	...	0.027175	0.305623	0.000000	0.613309	0.613309	-0.001617	0.979475	-3	0	Low
2	3	90000.0	2	2	2	34	0	0	0	0	...	0.172767	0.069779	0.066899	0.321564	0.254666	0.006678	1.040577	0	2	Medium
3	4	50000.0	2	2	1	37	0	0	0	0	...	0.590940	0.038850	0.036914	0.033844	-0.003070	0.011760	1.020974	0	2	Medium
4	5	50000.0	1	2	1	57	-1	0	-1	0	...	0.382620	0.429799	0.035987	0.035492	-0.000494	-0.000300	0.969198	-1	2	Medium

5 rows × 37 columns

Final Credit Risk Distribution



... LR AUC: 0.589208550263379
RF AUC: 0.8396317069272359

1 to 5 of 5 entries 

index:

 to

id:

 to

prob_default:

 to

ml_bucket:

Search by all fields:

index	id	prob_default	ml_bucket
0	1	0.4988389623876179	Medium
1	2	0.49	Medium
2	3	0.15	Low
3	4	0.16	Low
4	5	0.42	Medium

...

count

final_risk

Medium

16904

High

8521

Low

4575

dtype: int64

templates

```
{'soft': 'Hi , your bill of ₹-- is due on --. Please pay on time.',  
 'insight': 'Hi , your utilization is --%. Paying early can save interest!',  
 'loss': 'Hi , missing due date may add ₹-- late fee. Pay by --.',  
 'urgent': 'Hi , your account shows high risk. Call support immediately.'}
```