

Default of Credit Card Clients

Radhey Shyam

Outline

- Motivation
- Date set (24 attributes and 30,000 instances)
- Relationship between Default and attributes
- Graphs/Results
- Conclusions

Motivation

- Find out the relationship between attributes and probability of default.
- Recognize the attributes which contribute in predicting the default payments of credit cards.

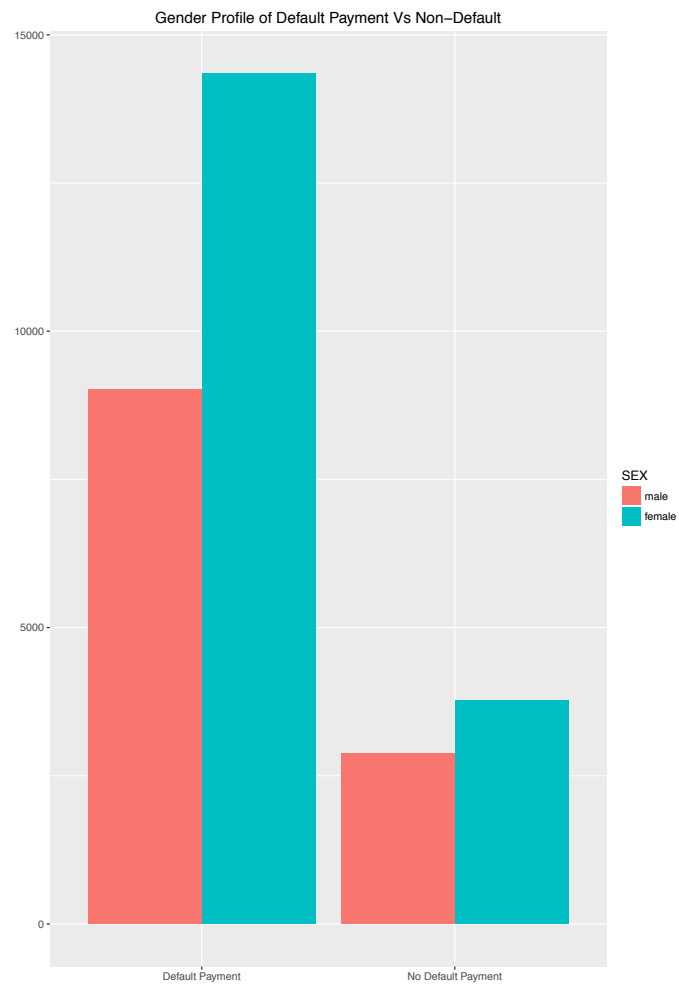
Data

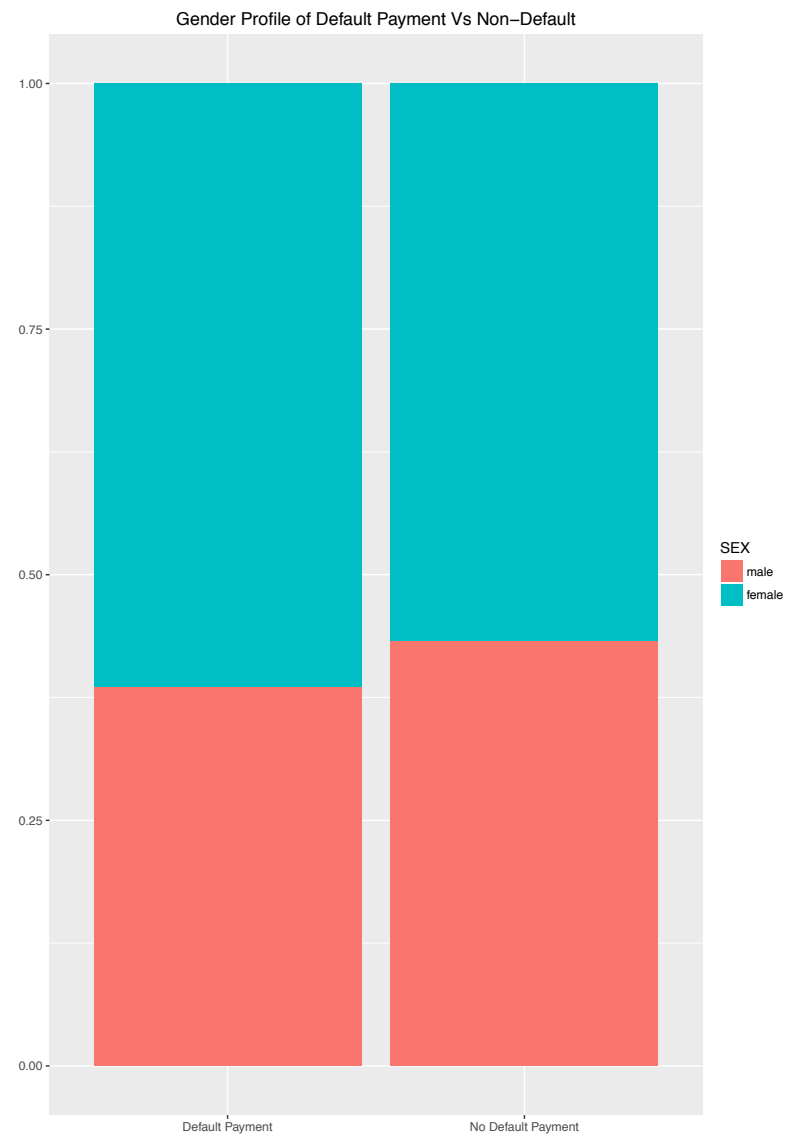
	ID	LIMIT_BAL	SEX	EDUCATION	MARRIAGE	AGE	PAY_0	PAY_2	PAY_3
1	1	20000	female	university	married	24	2	2	-
2	2	120000	female	university	single	26	-1	2	
3	3	90000	female	university	single	34	0	0	
4	4	50000	female	university	married	37	0	0	
5	5	50000	male	university	married	57	-1	0	-
6	6	50000	male	graduate school	single	37	0	0	
7	7	500000	male	graduate school	single	29	0	0	
8	8	100000	female	university	single	23	0	-1	-
9	9	140000	female	high school	married	28	0	0	
10	10	20000	male	high school	single	35	-2	-2	-
11	11	200000	female	high school	single	34	0	0	
12	12	260000	female	graduate school	single	51	-1	-1	-
13	13	630000	female	university	single	41	-1	0	-
14	14	70000	male	university	single	30	1	2	
15	15	250000	male	graduate school	single	29	0	0	

Showing 1 to 15 of 30,000 entries

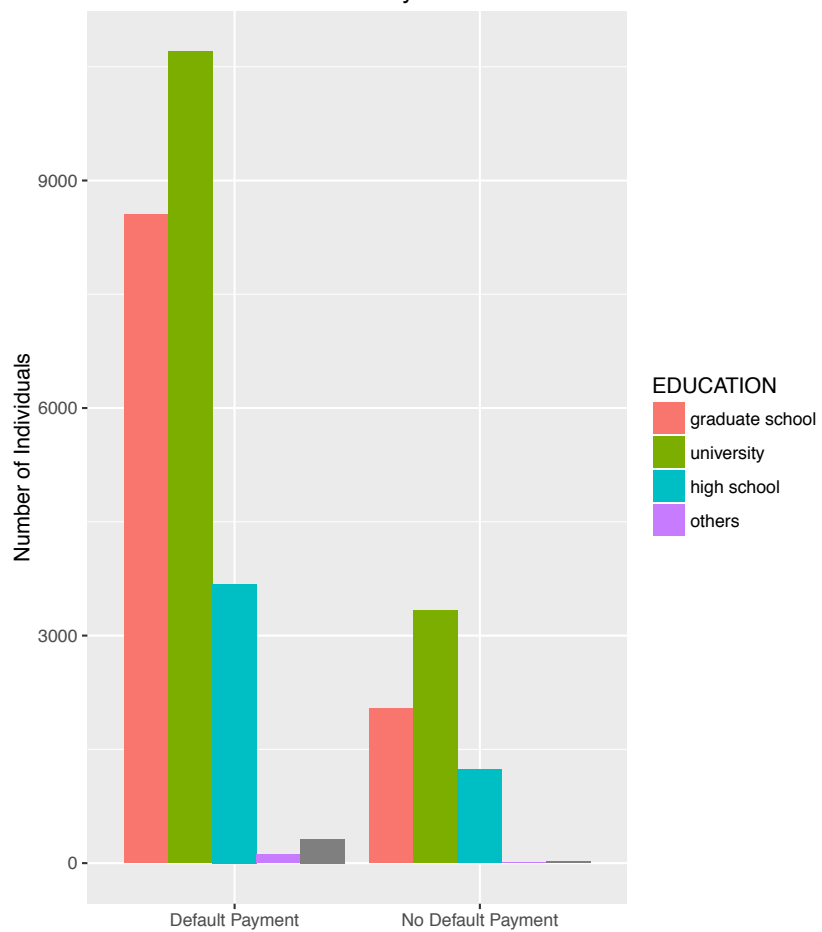
Gender Table

Default Status	Yes	No
Male	9015	2873
Female	14349	3763

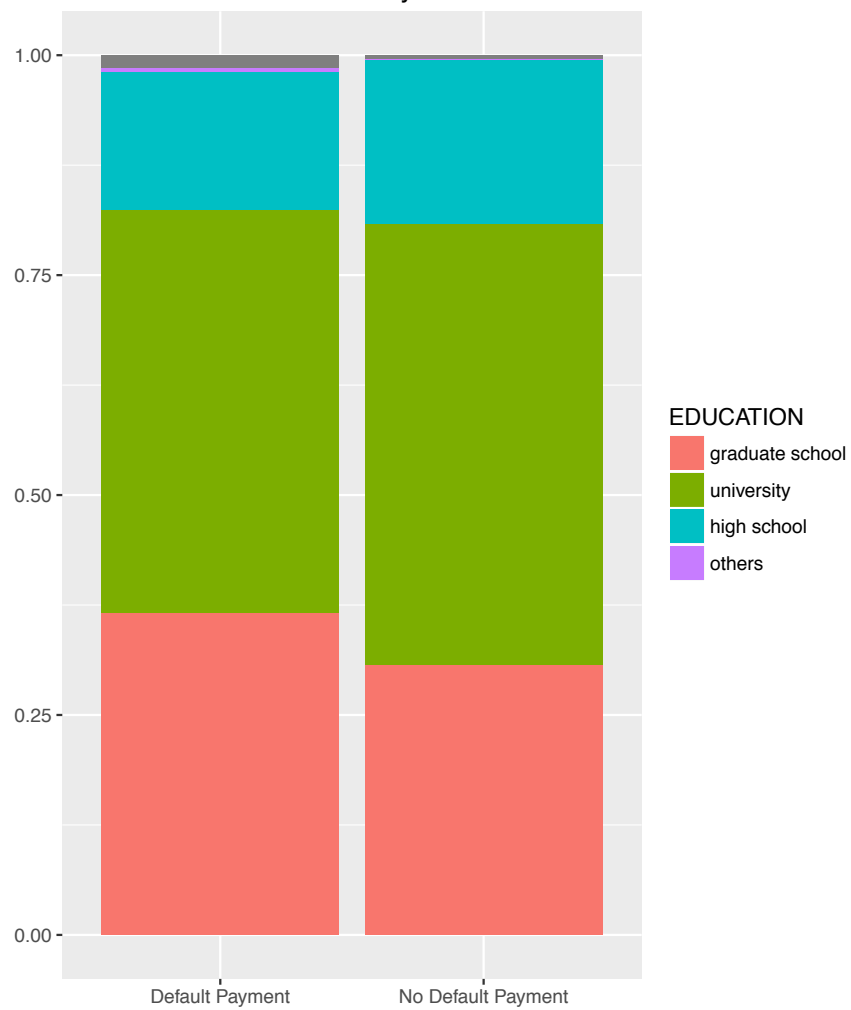




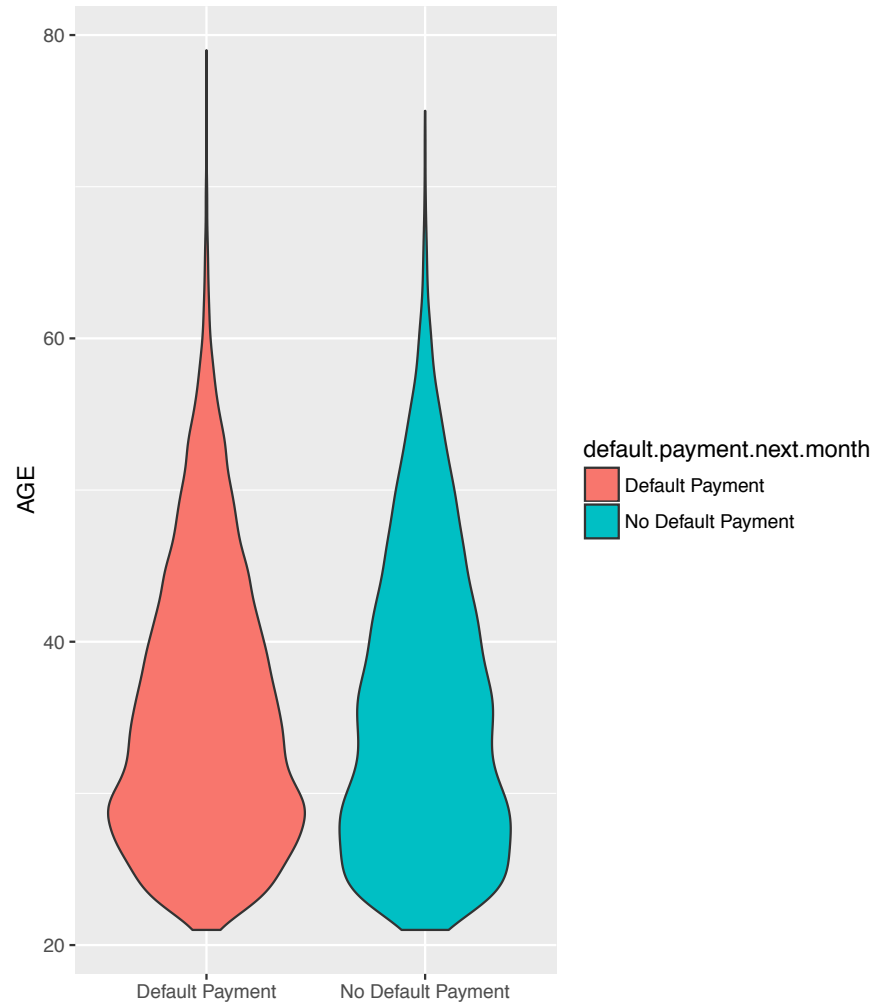
Education Profile of Default Payment Vs Non-Default

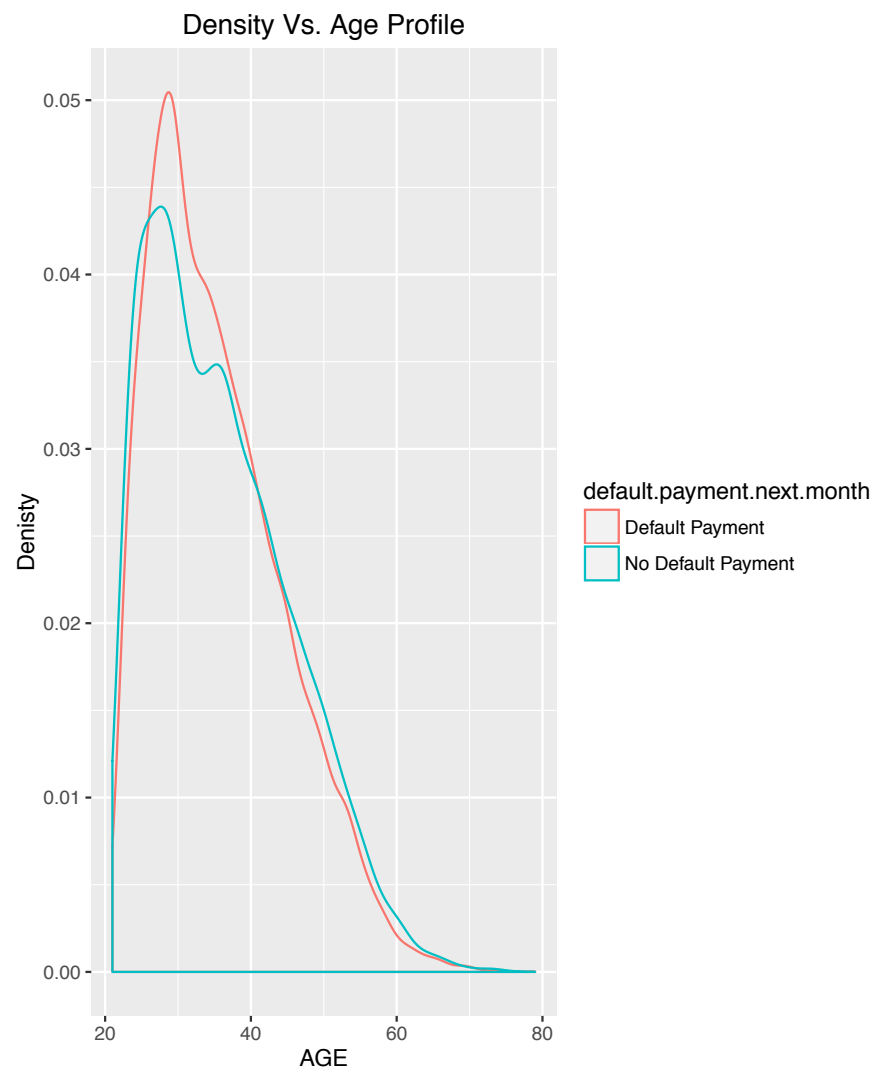


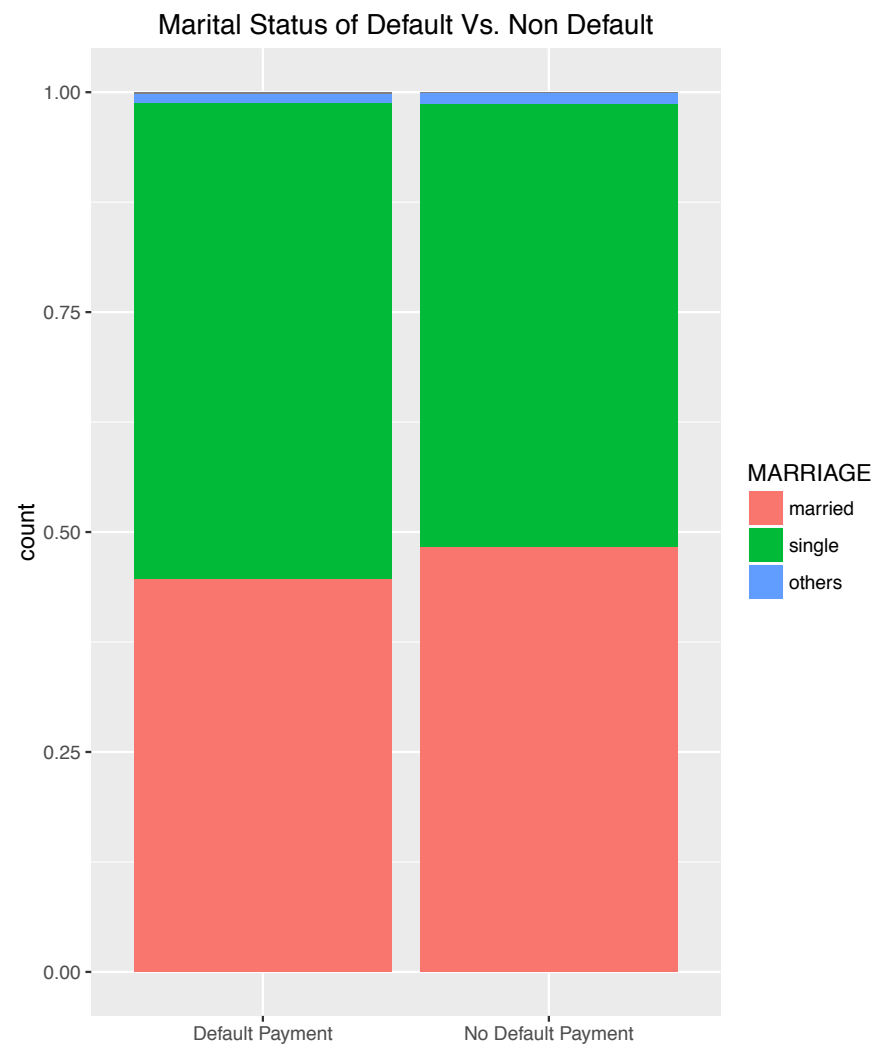
Education Profile of Default Payment Vs Non-Default



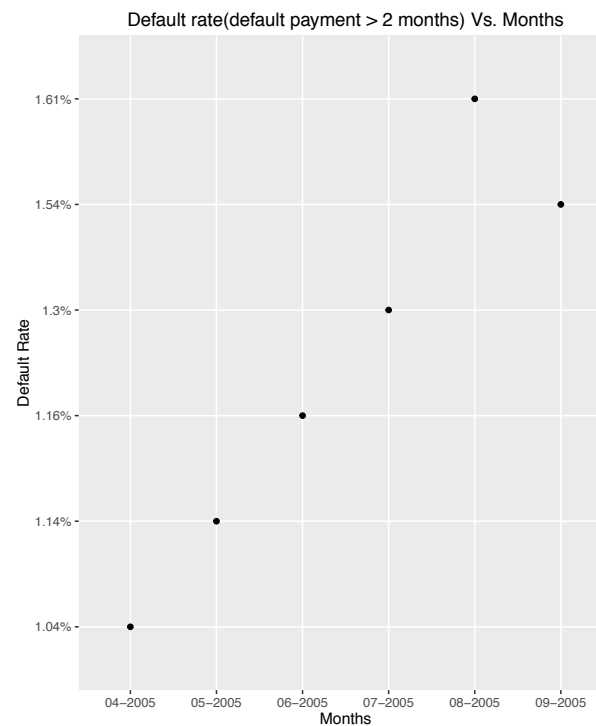
Age Profile of Default Payment Vs.Non Default

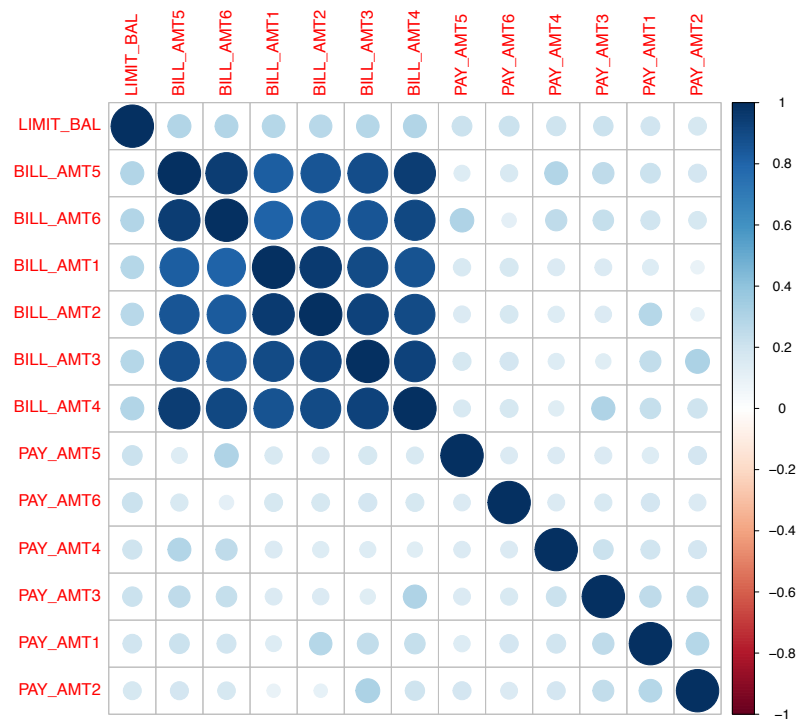






Default Rate: $\# (\text{Payment Due} > 2 \text{ months}) / \text{Total}) * 100$





Conclusion

- Single Status Individuals have higher percentage of default than married.
- Age group 25-30 shows increase in default rate as verified from violin and density profile.
- Default rate increases during the data collection from April 2005 to September 2005.