CREDIT DEFAULT

USING MACHINE LEARNING CLASSIFICATION ON TAIWANESE DATA

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WHAT IS CREDIT DEFAULT?

▸ Inability to pay a debt in due time

▸ Typically a 6/9 month time frame

Why is default bad?

▸ It represents a large sunk cost to lending societies

▸ Liability contracts often won't recover all costs!

THE IMPORTANCE OF CLASSIFYING DEFAULTERS

▸ Classifying defaulters correctly can indirectly improve profitability

- You can refuse credit to those you deem risky

- Raise interest rates to riskier individuals

- Aversion to offering high credit limits to risky individuals
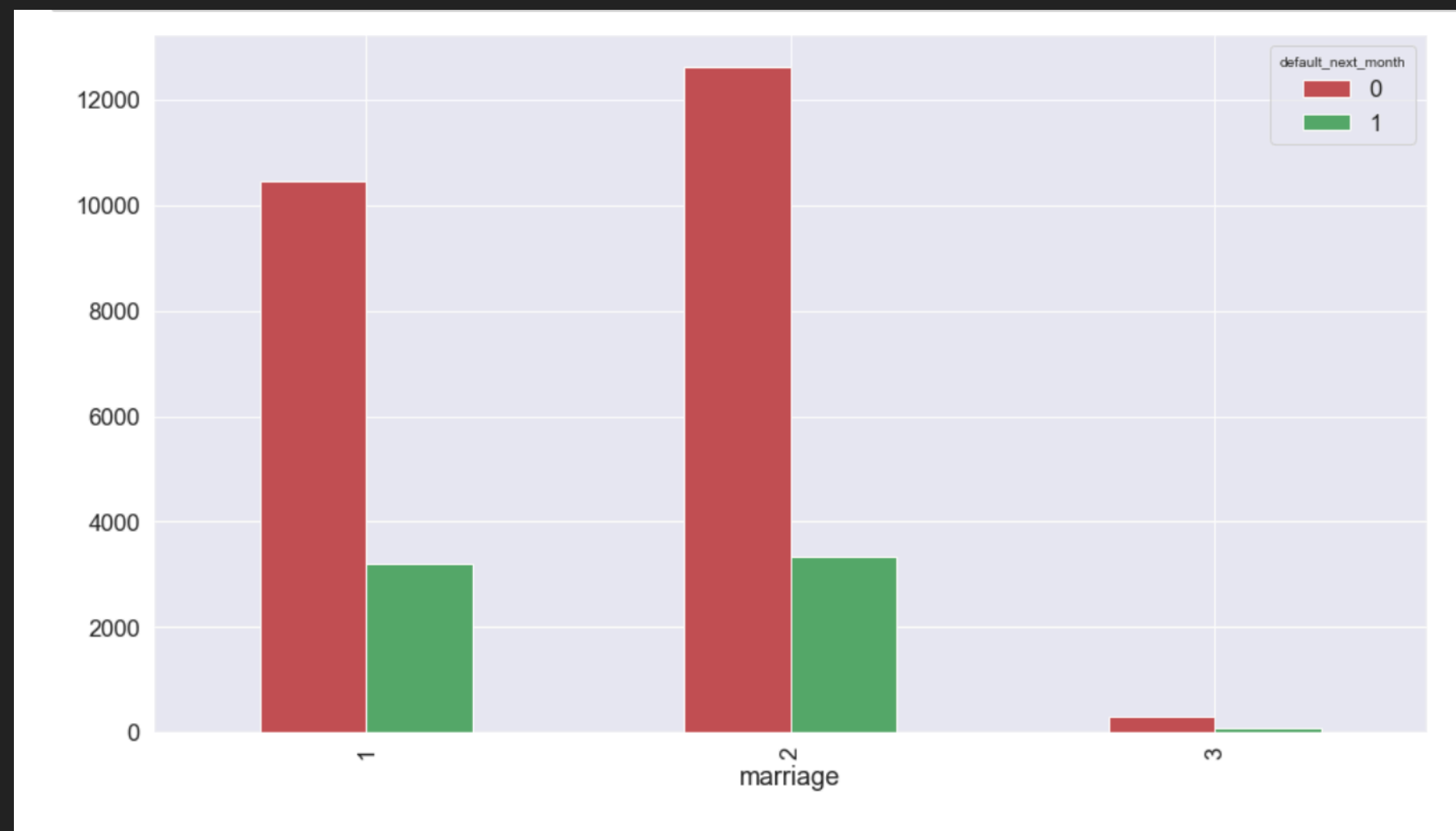
WHAT VARIABLES PREDICT DEFAULT RISK? (1)

GENDER

▸ Male default rate is 24%

▸ Female default rate is 21%
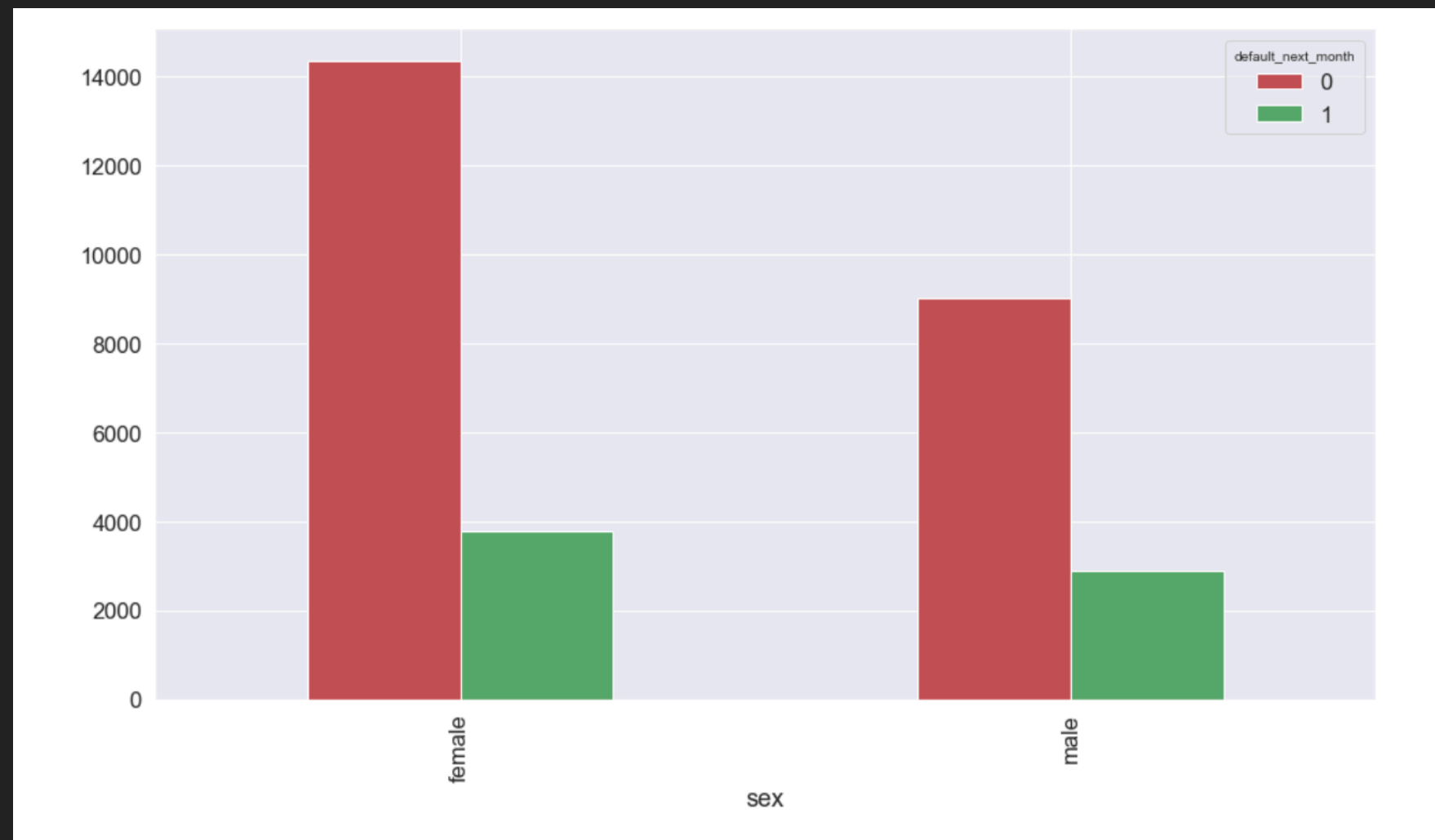
WHAT VARIABLES PREDICT DEFAULT RISK? (2)

MARRIAGE

▸ Singles default rate is 23%

▸ Married individuals default rate is 21%

• Married people have more security?

WHAT VARIABLES PREDICT DEFAULT RISK? (3)

EDUCATION

▸ Graduate schooled (1) individuals default less than university graduates (2) and high school graduates (3)

● Higher education may me less risk of default