Description of the German credit dataset.

1. Title: German Credit data

2. Source Information

Professor Dr. Hans Hofmann

Institut f"ur Statistik und "Okonometrie

Universit"at Hamburg

FB Wirtschaftswissenschaften

Von-Melle-Park 5

2000 Hamburg 13

3. Number of Instances: 1000

6. Number of Attributes: 20 (7 numerical, 13 categorical)

7. Attribute description

Attribute 1: (qualitative)

Status of existing checking account

A11 : ... < 0 DM (Variable numérica entre A11 y A13)

A12 : 0 <= ... < 200 DM

A13 : ... >= 200 DM /

salary assignments for at least 1 year

A14 : no checking account (Dummy)

Attribute 2: (numerical)

(categorizamos en estratos <=10,<=20,<=30,<=40,>40)

Duration in month

Attribute 3: (qualitative)

Credit history

A30 : no credits taken/ **(Interpreto no credits taken)**

all credits paid back duly

A31 : all credits at this bank paid back duly (menos info)

A32 : existing credits paid back duly till now (mas info)

A33 : delay in paying off in the past (raro que de igual que A32)

A34 : critical account/ **(Interpreto otros creditos)**

other credits existing (not at this bank)

Attribute 4: (qualitative)

Purpose

A40 : car (new)

A41 : car (used)

A42 : furniture/equipment

A43 : radio/television

A44 : domestic appliances

A45 : repairs

A46 : education

A47 : (vacation - does not exist?)

A48 : retraining

A49 : business

A410 : others

Attribute 5: (numerical)

Credit amount

Attibute 6: (qualitative)

Savings account/bonds

A61 : ... < 100 DM

A62 : 100 <= ... < 500 DM

A63 : 500 <= ... < 1000 DM

A64 : .. >= 1000 DM

A65 : unknown/ no savings account

Attribute 7: (qualitative)

Present employment since

A71 : unemployed

A72 : ... < 1 year

A73 : 1 <= ... < 4 years

A74 : 4 <= ... < 7 years

A75 : .. >= 7 years

Attribute 8: (numerical)

Installment rate in percentage of disposable income

Attribute 9: (qualitative)

Personal status and sex

A91 : male : divorced/separated

A92 : female : divorced/separated/married

A93 : male : single

A94 : male : married/widowed

A95 : female : single ( 0 cases)

Attribute 10: (qualitative)

Other debtors / guarantors

A101 : none

A102 : co-applicant

A103 : guarantor

Attribute 11: (numerical) Poca relevancia (solamente valor 1 ligeramente superior al promedio)

Present residence since

Attribute 12: (qualitative)

Property

A121 : real estate

A122 : if not A121 : building society savings agreement/

life insurance

A123 : if not A121/A122 : car or other, not in attribute 6

A124 : unknown / no property

Attribute 13: (numerical) (segmentar en menor de 30 (1) o mayor de 30 (0), categorizado por décadas se ve que de 40 en adelante da igual)

Age in years

Attribute 14: (qualitative)

Other installment plans

A141 : bank No dan distintos PD entre si bank y stores, d

A142 : stores da igual que usar A143

A143 : none

Attribute 15: (qualitative)

Housing

A151 : rent

A152 : own

A153 : for free

Attribute 16: (numerical)

Number of existing credits at this bank

Attribute 17: (qualitative)

Job

A171 : unemployed/ unskilled - non-resident

A172 : unskilled - resident

A173 : skilled employee / official

A174 : management/ self-employed/

highly qualified employee/ officer

Attribute 18: (numerical)

Number of people being liable to provide maintenance for

Attribute 19: (qualitative)

Telephone

A191 : none

A192 : yes, registered under the customers name

Attribute 20: (qualitative)

domestic worker

A201 : yes

A202 : no

8. Cost Matrix

This dataset requires use of a cost matrix (see below)

1 2

----------------------------

1 0 1

-----------------------

2 5 0

(1 = Good, 2 = Bad)

the rows represent the actual classification and the columns

the predicted classification.

It is worse to class a customer as good when they are bad (5),

than it is to class a customer as bad when they are good (1).