

## ■ Example for one-dimensional linear regression

Now, we examine the monthly net income and monthly expenditures on living of 10 two-person households.

Household	1	2	3	4	5	6	7	8	9	10
Net income in DM $x_i$	3,500	5,000	4,300	6,100	1,000	4,800	2,900	2,400	5,600	4,100
Expenditures in DM $y_i$	2,000	3,500	3,100	3,900	900	3,000	2,100	1,900	2,900	2,100

These observations are drawn in the following scatterplot. You can see that the net income of a household has a positive influence of the household's expenditures and that this dependence can be estimated by means of a linear regression function.

