

2. Coefficient „F“

$$F = \frac{(Q_3 - Me) - (Me - Q_1)}{(Q_3 - Me) + (Me - Q_1)} = -1 \leq F \leq 1$$

Measures of kurtosis

$$K = \frac{Q_3 - Q_1}{2(D_9 - D_1)} = 0,27$$

upper \nearrow lower \nwarrow

K=0,263 in ideal case

$$D_1 = L_{D_1} + \frac{n/10 - f'_{D_1-1}}{f_{D_1}} w = 3,33$$

$$D_9 = L_{D_9} + \frac{\frac{9}{10}n - f'_{D_9-1}}{f_{D_9}} w = 15,6$$

In case of normal distribution: K=0,263
 0,27 > 0,263

THE MEASURES OF CONCENTRATION

➤ The concentration is the density of sum of values over the population

If 10 percent of population has 80 percent of total income the concentration is very high. It means that only very few reach people capture most of incomes.

⊗ Algebraic way:

The coefficient of concentration: $K = \frac{G}{2\bar{x}} = 0,248$

⊗ Graphical way:

Lorenz curve: it is a cumulative percentage curve. The Lorenz curve is often used to show the level of inequality. For instance, it can be show the number of people saving against the amount saved. The Lorenz curve gives an immediate impression and it is used for comparison rather than as a quantitative measure of inequality.

Practice problem 2

Arrange the employees in ascending order according to their incomes. Divide the population of employees into ¹⁰two equal parts. The next table shows how many percentage of total income each tenth of employees shares.

Tenth (%)	1	2	3	4	5	6	7	8	9	10
Income (%)	4,5	6,0	6,9	7,7	8,5	9,4	10,5	11,8	13,8	20,9

The frequency of the saving account is the following:

The saving account (thousand Fts)	The number of saving books (thousand)
0-25	5458
25-100	1296
100-500	425
500-	21
Sum	7200

← Lorenz curve to make