Cvičenia z ekonometrie (LS 2006/2007)

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Cvičenie 1 (13.2.2007) – grafy a dáta k príkladom

- **Corruption perceptions index, 2005**

CPI score relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt)
Transparency International (http://www.transparency.org)
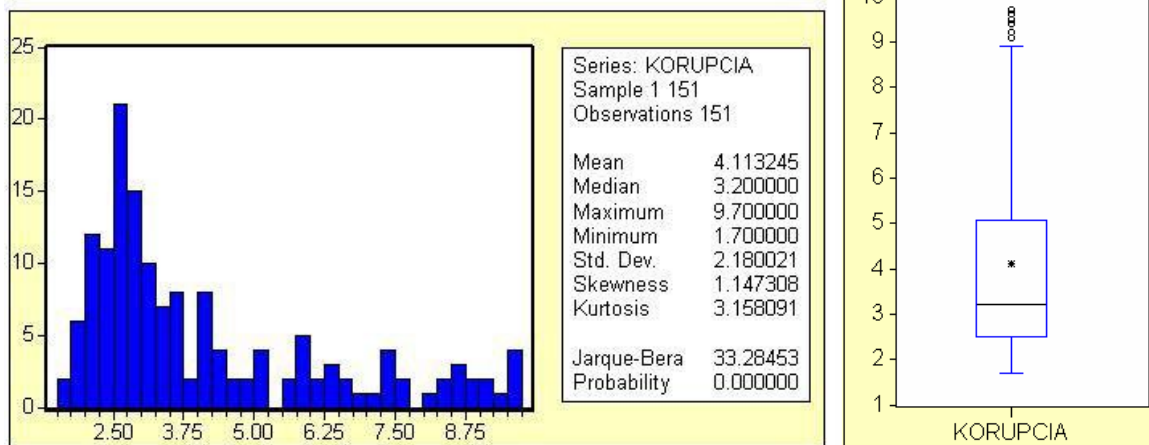
- **Name that variable**
  D. S. Moore: The basic practice of statistics

1.21 Name that variable. Figure 1.12 displays four histograms without axis markings. They are the distributions of these four variables:

1. The gender of the students in a large college course, recorded as 0 for male and 1 for female.

2. The heights of the students in the same class.

3. The handedness of students in the class, recorded as 0 for right-handed and 1 for left-handed.

4. The lengths of words used in Shakespeare's plays.

Identify which distribution each histogram describes. Explain the reasoning behind your choices.

- **Dĺžky telefonických hovorov**
  M. Kulich: Asymptotické testy hypotéz v modeloch s rušivými prametry. ROBUST 2000.

V tabulce 1 jsou uvedeny délky výchozích telefonních hovorů nejmenovaného za městnance KPMS za jeden měsíc (n = 34).

TABULKA 1. Délky telefonních hovorů prof. X (min:sec)

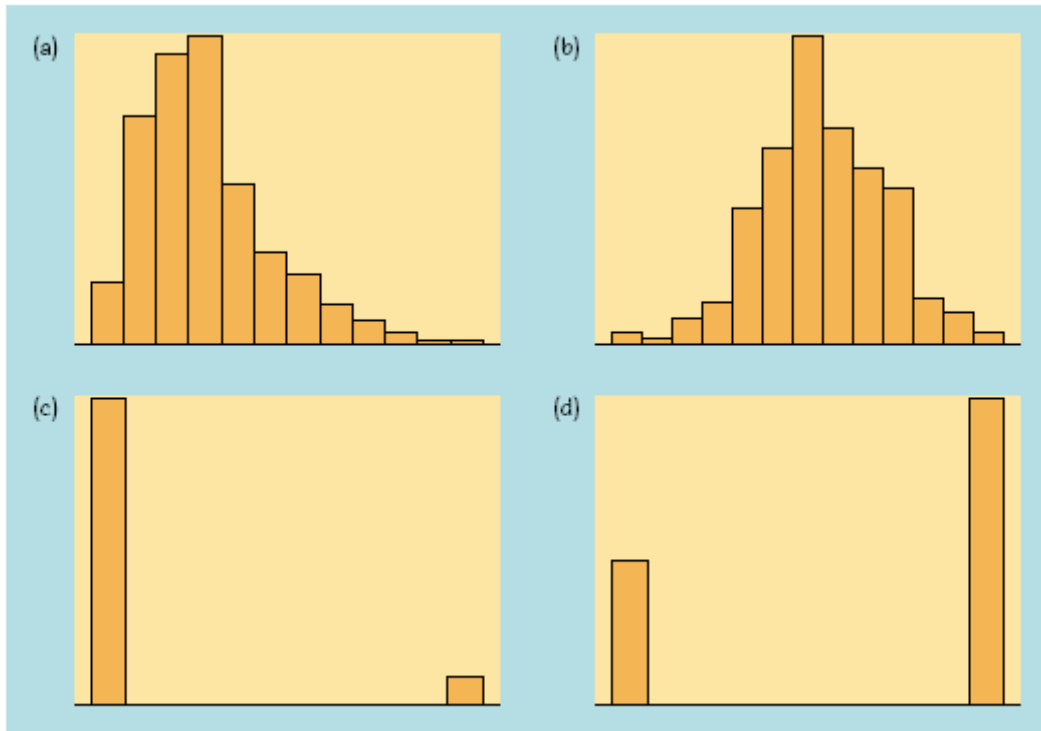|								
0:18	3:42	0:48	0:48	0:54	0:18	1:48	3:24	1:42
0:12	0:36	1:12	2:00	0:42	4:06	3:42	2:00	0:30
2:54	3:42	12:06	0:36	2:12	3:36	1:06	2:30	
2:12	2:54	2:18	0:06	1:54	1:24	1:12	3:24	

Figure 1.12 Histograms of four distributions, for Exercise 1.21.

▪ **How random was the 1998 World Cup?**
Getting the Best from Teaching Statistics

The average number of goals per game scored by the 32 teams in the group matches was 1.3125 (i.e. 48 matches yielded 126 goals: 126/96 = 1.3125).

The actual distribution was as follows:

A Poisson distribution with $m = 1.3125$ gives expected frequencies:

Goals	Frequency
0	26
1	34
2	24
3	8
4	1
5	2
6	1

Goals	Frequency
0	25.8
1	33.9
2	22.3
3	9.7
>3	4.3

NOT A BAD FIT!!!