QUALIFICATION STRUCTURE IN SLOVENIAN WOOD INDUSTRY COMPANIES

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Goals

- **Find out what the educational structure** of employees in Slovenian wood-industry is according to
  - **degree of education**
  - sort of education

- **Find out if there are any changes in educational structure** according to researches in previous years

Working method

- **Check the available data** about staffing and qualification structure from previous years.

- **Collect and analyse data about current staffing and qualification structure** (with use of the method of classic questionnaire).

- **Compare this data with statistic test** (*Pearson x^2 test*), where we verified, if the frequencies (or percentage) from the year 2009 are in accordance with data from the year 2001.

Sampling

- Questionnaire was send to 129 Slovenian wood-industry companies

- We analyzed 15 questionnaires from wood-industry companies of all sizes. Each company filled out a questionnaire for all its employees.

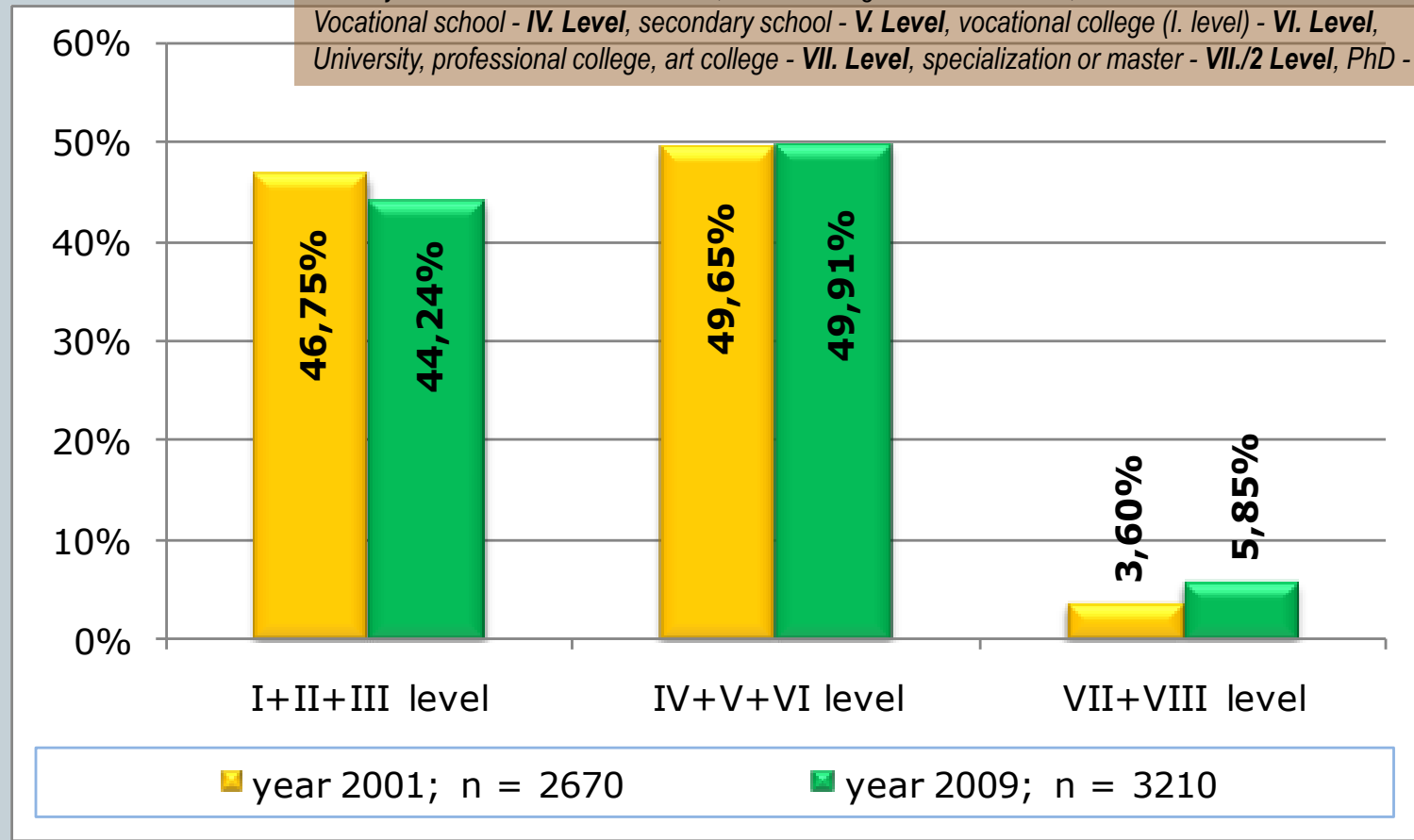- The research covered almost 17% of all population employed in Slovenian wood-industry (3210 employees)

Results

Legend – education levels:
*Primary school or less - **I. in II. Level**, short training - USO - **III. Level**,
Vocational school - **IV. Level**, secondary school - **V. Level**, vocational college (I. level) - **VI. Level**,
University, professional college, art college - **VII. Level**, specialization or master - **VII./2 Level**, PhD - **VIII. Level***

I+II+III level: 46,75% (year 2001), 44,24% (year 2009)
IV+V+VI level: 49,65% (year 2001), 49,91% (year 2009)
VII+VIII level: 3,60% (year 2001), 5,85% (year 2009)

year 2001; n = 2670
year 2009; n = 3210

Comparison of educational structure of employees in years 2001 and 2009

Statistics

We calculated the Pearson $\chi^2 -$ statistics with formula:

$$\chi^2 = \sum_{i=1}^{k} \frac{\left(f_i - f'_i\right)^2}{f'_i} = \sum_{i=1}^{k} \frac{\left(p_i n - p'_i n\right)^2}{p'_i n} = \sum_{i=1}^{k} \frac{\left(p_i - p'_i\right)^2 n}{p'_i}$$

where
k   marks the number of classes in distribution,
f_i   is the actual frequency of i-class,
f'_i   expected frequency of i-class,
p_i   actual share of i-class,
p'_i   expected share of i-class and
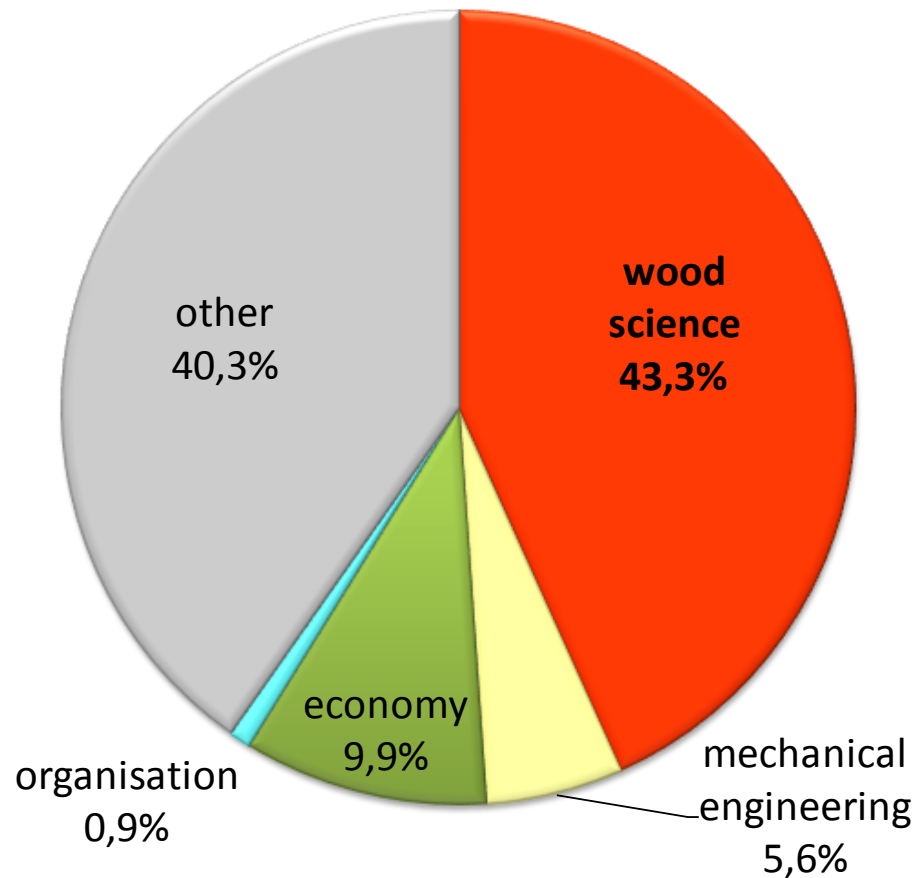**n**   the size of the sample.

$$\chi^2 = 49{,}51$$

We compared it to the value of the table for χ^2 - distribution.

$$\chi_\alpha{}^2 (k-1) = \chi_{0,05}{}^2 (2) = 5{,}991$$

At a significance level of 0,05 we can claim, that
the educational structure in Slovenian wood-industry companies
has changed significantly from the year 2001 to year 2009

Results

Educational structure of employees in Slovenian wood-industry according to sort of education

Conclusion

- The educational structure in Slovenian wood-industry companies **is relatively unfavorable :**
  - *More than 44% of the employees have I., II. or III. level of education*

- The educational structure in Slovenian wood-industry companies **has improved** mostly due to a larger share of employees with higher education (from 3,6 to 6%).

- The only solution for long-term success is **constant and goal-oriented investing in education and training of employees** on all levels.

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THANK YOU VERY MUCH FOR YOUR ATTENTION!

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