

Structural Business Survey on transport, storage and communications

TYPE

Sampling survey

The enterprises were selected from the sampling frame that was based on the updated business register of the NSSG. The enterprises included in the survey were stratified as follows:

- a) By region-NUTS II
- b) By economic activity according to the next table

Code	Economic Activity (NACE Rev 1.1)
1	60.1
2	60.21 + 60.22 + 60.23
3	60.24
4	60.3
5	62
6	63.1 + 63.2 + 63.4
7	64.11
8	64.12
9	64.2

- c) By size class of the enterprises. In each of the major strata (geography x economic activity), the enterprises were stratified into H=6 size strata, according to their size, determined by their annual turnover, as follows:

Class	Turnover description (amounts in Euros)		
1	1	Through	49.999
2	50.000	Through	199.999
3	200.000	Through	599.999
4	600.000	Through	1.999.999
5	2.000.000	Through	4.999.999
6	5.000.000	Through	Highest

The enterprises belonging to size class 6 were surveyed exhaustively.

Survey characteristics estimation

a. Symbols

In each stratum let:

y_{hi} : the value of the characteristic y of enterprise of order i belonging to the stratum h

N_h : the total number of enterprises belonging to the stratum h

n_h : the number of the respondent enterprises

Y_h : the total of the variable y for all enterprises in stratum h

Y: the total of the variable y for all enterprises in all strata. That is:

$$Y = \sum_h Y_h$$

b. Estimation process

The estimation of Y_h and Y is given by the following formulas:

$$\hat{Y}_h = \frac{N_h}{n_h} \sum_{i=1}^{n_h} y_{hi}$$

$$\hat{Y} = \sum_h \hat{Y}_h$$

c. Variance estimation

The variance estimation of $\hat{Y}_h$ and $\hat{Y}$ is given by:

$$V(\hat{Y}_h) = \frac{N_h(N_h - n_h)}{n_h} S_h^2,$$

Where:

$$S_h^2 = \frac{1}{n_h - 1} \left[\sum_{i=1}^{n_h} y_{hi}^2 - \frac{\left(\sum_{i=1}^{n_h} y_{hi} \right)^2}{n_h} \right],$$

$$V(\hat{Y}) = \sum_h V(\hat{Y}_h)$$

The coefficient of variation (%) of total estimation $\hat{Y}$ is given by:

$$CV(\hat{Y}) = \frac{\sqrt{V(\hat{Y})}}{\hat{Y}} * 100$$

The coefficients of variation (%) of the basic survey characteristics are depicted at the following tables by economic activity, employment size class and region:

Table 1: Coefficient of variation (%) by economic activity

NACE Rev. 1	Number of enterprises	Turnover	Value - added at factor cost	Personnel costs	Gross investments in tangible goods	Number of employees
I	-	0,0	0,0	0,1	0,0	0,0
60	-	1,0	1,6	1,1	8,4	4,0
601	0,0	0,0	0,0	0,0	0,0	0,0
602	0,0	1,1	1,6	1,1	17,9	4,7
603	0,0	0,0	0,0	0,0	0,0	0,0
62	-	1,3	1,3	0,0	1,3	3,6
63	-	0,7	2,0	0,7	5,3	4,4
633	0,0	1,2	2,7	0,8	6,6	3,5
63A	0,0	0,9	2,6	1,0	6,8	6,3
64	-	0,1	0,2	0,1	0,1	0,6
641	0,0	0,1	0,1	0,2	0,4	0,3
642	0,0	0,1	0,2	0,1	0,1	1,0

Table 2: Coefficient of variation (%) by economic activity and employment size class

NACE3 Rev. 1	Employment size class	Number of enterprises	Turnover	Value - added at factor cost
601	<= 19.00	0,0	0,0	0,0
601	19.01 - 249.00	0,0	0,0	0,0
601	249.01 - 999.00	0,0	0,0	0,0
601	999.01+	0,0	0,0	0,0
602	<= 19.00	0,0	19,4	13,2
602	19.01 - 249.00	0,0	2,1	1,7
602	249.01 - 999.00	0,0	0,0	0,0
602	999.01+	0,0	0,0	0,0
603	<= 19.00	0,0	0,0	0,0
603	19.01 - 249.00	0,0	0,0	0,0
603	249.01 - 999.00	0,0	0,0	0,0
603	999.01+	0,0	0,0	0,0
62	<= 19.00	0,0	0,0	0,0
62	19.01 - 249.00	0,0	17,2	28,3
62	249.01 - 999.00	0,0	0,0	0,0
62	999.01+	0,0	0,0	0,0
633	<= 19.00	0,0	16,4	9,7
633	19.01 - 249.00	0,0	3,4	3,9
633	249.01 - 999.00	0,0	0,0	0,0
633	999.01+	0,0	0,0	0,0
63A	<= 19.00	0,0	27,7	22,9
63A	19.01 - 249.00	0,0	3,1	7,6
63A	249.01 - 999.00	0,0	0,0	0,0
63A	999.01+	0,0	0,0	0,0
641	<= 19.00	0,0	6,5	8,6
641	19.01 - 249.00	0,0	0,1	0,5
641	249.01 - 999.00	0,0	0,0	0,0
641	999.01+	0,0	0,0	0,0
642	<= 19.00	0,0	22,6	19,8
642	19.01 - 249.00	0,0	2,0	16,4
642	249.01 - 999.00	0,0	0,0	0,0
642	999.01+	0,0	0,0	0,0

Table 3: Coefficient of variation (%) by economic activity and region

NACE2 Rev. 1	Region (NUTS II)	Number of local units	Wages and salaries
60	Eastern Macedonia & Thrace	0,0	5,3
60	Central Macedonia	0,0	3,1
60	Western Macedonia	0,0	7,0
60	Thessaly	0,0	6,6
60	Epirus	0,0	5,2
60	Ionian islands	0,0	10,7
60	Western Greece	0,0	6,5
60	Central Greece	0,0	8,1
60	Peloponnese	0,0	5,4
60	Attica	0,0	0,8
60	North Aegean	0,0	7,2
60	South Aegean	0,0	5,3
60	Crete	0,0	7,0
62	Eastern Macedonia & Thrace	0,0	0,0
62	Central Macedonia	0,0	0,0
62	Western Macedonia	0,0	0,0
62	Thessaly	0,0	0,0
62	Epirus	0,0	0,0
62	Ionian islands	0,0	0,0
62	Western Greece	0,0	0,0
62	Central Greece	0,0	0,0
62	Peloponnese	0,0	0,0
62	Attica	0,0	0,1
62	North Aegean	0,0	0,0
62	South Aegean	0,0	0,0
62	Crete	0,0	0,0
63	Eastern Macedonia & Thrace	0,0	4,1
63	Central Macedonia	0,0	3,5
63	Western Macedonia	0,0	3,8
63	Thessaly	0,0	3,3
63	Epirus	0,0	5,1
63	Ionian islands	0,0	4,6
63	Western Greece	0,0	3,4
63	Central Greece	0,0	4,3
63	Peloponnese	0,0	3,4
63	Attica	0,0	2,3
63	North Aegean	0,0	3,8
63	South Aegean	0,0	4,2
63	Crete	0,0	3,3
64	Eastern Macedonia & Thrace	0,0	3,2
64	Central Macedonia	0,0	9,6
64	Western Macedonia	0,0	5,8
64	Thessaly	0,0	6,6
64	Epirus	0,0	6,5
64	Ionian islands	0,0	3,5
64	Western Greece	0,0	4,7
64	Central Greece	0,0	3,7

64	Peloponnese	0,0	3,6
64	Attica	0,0	0,2
64	North Aegean	0,0	11,9
64	South Aegean	0,0	2,5
64	Crete	0,0	10,8