

**THE QUALITY REPORT ON THE STRUCTURE OF
EARNINGS SURVEY 2006**

Implementation of the Commission Regulation 698/2006

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QUALITY REPORT ON THE SES

COUNTRY: ESTONIA

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1. Relevance

The SES has been carried out second time in Estonia.

Main users are Eurostat and other EU institutions. Other users are Ministry of Finance, Ministry of Social Affairs, Ministry of Economic Affairs, banks, scientific institutions, foreign and local employer's associations, foreign entrepreneurs, trade unions, media and Statistical Office of Estonia itself. Above-mentioned users are more interested in the short-term wages and salaries per employee. We have no information on user satisfaction. We don't carry out the survey on the user satisfaction on this topic.

2. Accuracy

2.1. Sampling errors

2.1.1. Probability sampling

2.1.1.1. Sample design, selection procedure and stratification.

Sample design of SES is stratified two-stage sample. On the first stage enterprises, organisations and institutions are selected. Before the selecting the first stage sample the units will be stratified with respect to kind of activity and number of employees.

All units with 150 and more employees will be selected into the first stage sample with probability 1. On the second stage in each of them a random sample of employees will be selected by birthday rule whereas the employees belong to the 1 major group of ISCO-88 are completely enumerated.

Among primary sampling units with less than 150 employees a simple random sample will be selected in each stratum. Employees belonging to the units selected into the sample on this first stage will be enumerated totally.

Stage	Stratification	Sampling unit	Inclusion probability
First stage	Economic activity, size of unit	Enterprises, organisations and institutions	Units with less than 150 employees – probability 0.15 - 0.67 Units with 150 employees and more – probability 1.0
Second stage	Size of unit, occupation	Employees	Units with less than 150 employees – probability 1.0 Units with 150 employees and more, ISCO-88 group 1 – probability 1.0 Units with 150 employees and more, ISCO-88 groups 2-9 – probability about 0.1

2.1.1.2. Variance

Coefficients of variation (CV) were calculated for total gross monthly earnings and average gross hourly earnings full-time and part-time employees, sex, economic activity, occupation, age band and size band. CV by NACE and region was omitted because NUTS level 1 is whole country. Software SAS and CLAN were used for calculations. Sample design – stratification and inclusion probabilities in both stages were taken into account estimating sample variance. The results are presented in the tables below where ‘standard error’ denotes the square root of the variance.

Overall CV of total gross monthly earnings was 0.84% for full-time employees and 2.04% for part-time employees. CV was below 5% for most of groups of full-time employees. For some small groups with high variability the CV exceeded 20% (ISCO group 6). Overall CV of average gross hourly earnings was 0.51% for full-time employees and it exceeded 10% for the ISCO group 6. The CVs for part-time employees were significantly higher because of small sample size.

Coefficient of variation of total gross monthly earnings of full-time employees by NACE Rev.1.1 and sex

Sex	NACE Rev.1.1	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	C	48,839,383	1,383,661	2.83
Men	D	649,898,825	11,949,799	1.84
Men	E	59,432,841	2,717,719	4.57
Men	F	379,781,073	11,983,223	3.16
Men	G	432,715,696	15,535,004	3.59
Men	H	23,068,809	1,990,811	8.63
Men	I	300,110,795	13,096,414	4.36
Men	J	54,268,472	4,154,465	7.66
Men	K	299,866,720	13,125,214	4.38
Men	L	177,775,222	4,932,390	2.77
Men	M	88,484,699	3,552,802	4.02
Men	N	39,367,810	2,502,001	6.36
Men	O	70,948,768	3,083,929	4.35
Men	Total	2,624,559,112	30,874,146	1.18
Women	C	5,935,817	573,063	9.65
Women	D	413,597,862	6,706,524	1.62
Women	E	21,328,745	1,008,193	4.73
Women	F	40,773,906	2,077,197	5.09
Women	G	337,129,875	11,116,149	3.30
Women	H	58,872,491	2,840,648	4.83
Women	I	122,609,501	5,200,561	4.24
Women	J	85,950,013	4,024,971	4.68
Women	K	168,000,843	6,112,153	3.64
Women	L	176,325,764	5,799,039	3.29
Women	M	257,683,795	4,452,275	1.73
Women	N	192,128,407	3,616,908	1.88
Women	O	85,561,408	3,083,487	3.60
Women	Total	1,965,898,427	18,131,216	0.92
Men + Women	C	54,775,200	1,347,294	2.46
Men + Women	D	1,063,496,687	14,533,838	1.37
Men + Women	E	80,761,586	3,057,810	3.79
Men + Women	F	420,554,979	12,752,214	3.03
Men + Women	G	769,845,571	21,109,917	2.74
Men + Women	H	81,941,300	3,932,993	4.80
Men + Women	I	422,720,296	15,407,918	3.64
Men + Women	J	140,218,485	6,382,140	4.55
Men + Women	K	467,867,563	15,474,774	3.31
Men + Women	L	354,100,986	8,700,679	2.46
Men + Women	M	346,168,494	5,751,748	1.66
Men + Women	N	231,496,217	4,287,603	1.85
Men + Women	O	156,510,175	5,075,412	3.24
Men + Women	Total	4,590,457,539	38,653,098	0.84

Coefficient of variation of total gross monthly earnings of full-time employees by occupation (ISCO-88 1-digit level) and sex

Sex	ISCO-88 groups	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	1	571,918,231	9,069,300	1.59
Men	2	341,903,344	10,106,606	2.96
Men	3	374,189,514	9,385,556	2.51
Men	4	56,425,888	3,170,530	5.62
Men	5	113,313,187	4,187,162	3.70
Men	6	1,380,355	602,666	43.66
Men	7	625,217,784	15,483,301	2.48
Men	8	397,181,229	11,797,047	2.97
Men	9	112,718,786	4,712,802	4.18
Men	Total	2,624,559,112	30,874,146	1.18
Women	1	233,458,601	4,383,695	1.88
Women	2	481,203,857	11,577,561	2.41
Women	3	459,162,356	7,539,975	1.64
Women	4	168,552,283	4,247,847	2.52
Women	5	254,454,608	4,878,514	1.92
Women	6	1,275,120	323,633	25.38
Women	7	114,343,173	3,874,753	3.39
Women	8	146,299,958	4,951,407	3.38
Women	9	102,803,877	2,517,120	2.45
Women	Total	1,965,898,427	18,131,216	0.92
Men + Women	1	805,376,831	10,757,611	1.34
Men + Women	2	823,107,201	17,467,113	2.12
Men + Women	3	833,351,870	13,033,937	1.56
Men + Women	4	224,978,171	5,898,096	2.62
Men + Women	5	367,767,794	6,376,094	1.73
Men + Women	6	2,655,475	711,463	26.79
Men + Women	7	739,560,957	16,310,665	2.21
Men + Women	8	543,481,188	13,134,596	2.42
Men + Women	9	215,522,663	5,611,314	2.60
Men + Women	Total	4,590,457,539	38,653,098	0.84

Coefficient of variation of total gross monthly earnings of full-time employees by age band and sex

Sex	Age band	Total gross monthly earnings	Standard error	CV
	years	kroons		%
Men	15-19	24,278,872	1,399,596	5.76
Men	20-29	567,009,196	11,755,487	2.07
Men	30-39	756,757,809	13,491,267	1.78
Men	40-49	634,864,063	10,455,531	1.65
Men	50-59	462,954,424	7,530,666	1.63
Men	60+	178,694,749	4,183,917	2.34
Men	Total	2,624,559,112	30,874,146	1.18
Women	15-19	9,132,012	702,834	7.70
Women	20-29	359,340,976	7,187,527	2.00
Women	30-39	487,766,959	7,614,480	1.56
Women	40-49	548,272,649	7,667,164	1.40
Women	50-59	443,844,995	6,144,564	1.38
Women	60+	117,540,835	2,834,054	2.41
Women	Total	1,965,898,427	18,131,216	0.92
Men + Women	15-19	33,410,885	1,594,846	4.77
Men + Women	20-29	926,350,172	15,189,270	1.64
Men + Women	30-39	1,244,524,768	16,555,168	1.33
Men + Women	40-49	1,183,136,712	13,678,242	1.16
Men + Women	50-59	906,799,418	9,972,668	1.10
Men + Women	60+	296,235,584	5,267,363	1.78
Men + Women	Total	4,590,457,539	38,653,098	0.84

Coefficient of variation of total gross monthly earnings of full-time employees by size band of the enterprise and sex

Sex	Size band	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	1-9	400,453,609	15,147,899	3.78
Men	10-49	763,361,165	20,728,730	2.72
Men	50-249	805,116,854	15,501,183	1.93
Men	250-499	230,243,058	3,948,349	1.71
Men	500-999	209,068,851	4,032,123	1.93
Men	1000+	216,315,576	4,683,980	2.17
Men	Total	2,624,559,112	30,874,146	1.18
Women	1-9	200,451,802	7,530,723	3.76
Women	10-49	423,388,249	12,097,625	2.86
Women	50-249	642,591,237	9,440,039	1.47
Women	250-499	220,705,810	3,224,556	1.46
Women	500-999	187,789,070	3,149,013	1.68
Women	1000+	290,972,259	4,030,919	1.39
Women	Total	1,965,898,427	18,131,216	0.92
Men + Women	1-9	600,905,411	19,054,621	3.17
Men + Women	10-49	1,186,749,414	26,562,657	2.24
Men + Women	50-249	1,447,708,091	19,492,271	1.35
Men + Women	250-499	450,948,868	3,297,931	0.73
Men + Women	500-999	396,857,921	3,638,871	0.92
Men + Women	1000+	507,287,834	4,619,768	0.91
Men + Women	Total	4,590,457,539	38,653,098	0.84

Coefficient of variation of total gross monthly earnings of part-time employees by NACE Rev.1.1 and sex

Sex	NACE Rev.1.1	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	C	151,209	36,731	24.29
Men	D	6,388,648	514,451	8.05
Men	E	354,514	78,285	22.08
Men	F	5,032,059	680,280	13.52
Men	G	8,927,090	691,851	7.75
Men	H	2,713,699	447,788	16.50
Men	I	4,570,669	594,961	13.02
Men	J	739,296	253,958	34.35
Men	K	18,612,928	1,401,019	7.53
Men	L	1,777,678	297,680	16.75
Men	M	14,035,194	908,604	6.47
Men	N	5,975,107	675,406	11.30
Men	O	7,899,159	773,627	9.79
Men	Total	77,177,251	2,401,992	3.11
Women	C	252,792	63,832	25.25
Women	D	11,607,173	637,458	5.49
Women	E	550,964	109,586	19.89
Women	F	3,758,102	355,841	9.47
Women	G	23,090,690	1,232,293	5.34
Women	H	6,586,081	577,002	8.76
Women	I	7,259,107	565,059	7.78
Women	J	2,992,500	470,319	15.72
Women	K	29,623,578	2,725,744	9.20
Women	L	2,819,949	279,209	9.90
Women	M	38,233,117	1,461,165	3.82
Women	N	30,214,602	1,689,075	5.59
Women	O	13,785,987	1,065,987	7.73
Women	Total	170,774,641	4,071,619	2.38
Men + Women	C	404,001	91,052	22.54
Men + Women	D	17,995,822	916,930	5.10
Men + Women	E	905,478	143,230	15.82
Men + Women	F	8,790,160	808,545	9.20
Men + Women	G	32,017,780	1,538,182	4.80
Men + Women	H	9,299,780	754,403	8.11
Men + Women	I	11,829,776	862,559	7.29
Men + Women	J	3,731,795	528,343	14.16
Men + Women	K	48,236,505	3,271,833	6.78
Men + Women	L	4,597,626	419,802	9.13
Men + Women	M	52,268,311	1,897,500	3.63
Men + Women	N	36,189,709	1,861,340	5.14
Men + Women	O	21,685,147	1,490,285	6.87
Men + Women	Total	247,951,891	5,067,015	2.04

Coefficient of variation of total gross monthly earnings of part-time employees by occupation (ISCO-88 1-digit level) and sex

Sex	ISCO-88 groups	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	1	13,788,975	1,196,372	8.68
Men	2	22,043,255	1,300,315	5.90
Men	3	13,314,738	863,391	6.48
Men	4	3,037,452	339,618	11.18
Men	5	5,619,867	657,100	11.69
Men	6	36,586	22,744	62.17
Men	7	7,681,582	576,215	7.50
Men	8	3,727,200	506,966	13.60
Men	9	7,927,594	518,104	6.54
Men	Total	77,177,251	2,401,992	3.11
Women	1	7,832,141	494,713	6.32
Women	2	59,999,519	2,147,683	3.58
Women	3	37,019,183	1,240,107	3.35
Women	4	12,810,806	682,714	5.33
Women	5	21,719,518	2,683,574	12.36
Women	6	73,970	40,714	55.04
Women	7	2,721,652	302,318	11.11
Women	8	1,862,603	319,016	17.13
Women	9	26,735,249	987,419	3.69
Women	Total	170,774,641	4,071,619	2.38
Men + Women	1	21,621,117	1,338,867	6.19
Men + Women	2	82,042,774	2,661,533	3.24
Men + Women	3	50,333,921	1,580,431	3.14
Men + Women	4	15,848,258	760,424	4.80
Men + Women	5	27,339,385	2,946,171	10.78
Men + Women	6	110,556	46,632	42.18
Men + Women	7	10,403,234	664,701	6.39
Men + Women	8	5,589,803	616,596	11.03
Men + Women	9	34,662,844	1,166,772	3.37
Men + Women	Total	247,951,891	5,067,015	2.04

Coefficient of variation of total gross monthly earnings of part-time employees by age band and sex

Sex	Age band	Total gross monthly earnings	Standard error	CV
	years	kroons		%
Men	15-19	3,173,724	325,216	10.25
Men	20-29	17,850,388	1,130,082	6.33
Men	30-39	15,131,370	1,237,265	8.18
Men	40-49	14,126,673	828,891	5.87
Men	50-59	13,271,378	735,795	5.54
Men	60+	13,623,718	768,666	5.64
Men	Total	77,177,251	2,401,992	3.11
Women	15-19	4,737,923	610,787	12.89
Women	20-29	28,983,002	1,337,071	4.61
Women	30-39	34,737,076	1,446,273	4.16
Women	40-49	38,206,737	1,518,232	3.97
Women	50-59	34,915,129	1,275,278	3.65
Women	60+	29,194,774	1,018,855	3.49
Women	Total	170,774,641	4,071,619	2.38
Men + Women	15-19	7,911,647	717,116	9.06
Men + Women	20-29	46,833,390	1,897,372	4.05
Men + Women	30-39	49,868,445	1,927,407	3.86
Men + Women	40-49	52,333,410	1,759,984	3.36
Men + Women	50-59	48,186,507	1,534,426	3.18
Men + Women	60+	42,818,492	1,352,384	3.16
Men + Women	Total	247,951,891	5,067,015	2.04

Coefficient of variation of total gross monthly earnings of part-time employees by size band of the enterprise and sex

Sex	Size band	Total gross monthly earnings	Standard error	CV
		kroons		%
Men	1-9	26,610,515	1,639,314	6.16
Men	10-49	16,836,502	859,350	5.10
Men	50-249	16,686,311	1,012,337	6.07
Men	250-499	5,163,281	575,783	11.15
Men	500-999	4,129,900	547,056	13.25
Men	1000+	7,750,741	829,523	10.70
Men	Total	77,177,251	2,401,992	3.11
Women	1-9	42,121,023	2,955,504	7.02
Women	10-49	35,376,641	1,369,031	3.87
Women	50-249	46,677,424	1,732,739	3.71
Women	250-499	10,652,133	666,836	6.26
Women	500-999	12,243,023	939,315	7.67
Women	1000+	23,704,397	1,280,415	5.40
Women	Total	170,774,641	4,071,619	2.38
Men + Women	1-9	68,731,538	3,613,314	5.26
Men + Women	10-49	52,213,143	1,856,333	3.56
Men + Women	50-249	63,363,735	2,289,262	3.61
Men + Women	250-499	15,815,415	828,441	5.24
Men + Women	500-999	16,372,923	1,024,592	6.26
Men + Women	1000+	31,455,138	1,481,823	4.71
Men + Women	Total	247,951,891	5,067,015	2.04

Coefficient of variation of average gross hourly earnings of full-time employees by NACE Rev.1.1 and sex

Sex	NACE Rev.1.1	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	C	68.12	1.33	1.95
Men	D	61.51	0.60	0.97
Men	E	59.35	1.54	2.59
Men	F	64.08	1.13	1.76
Men	G	67.96	1.30	1.91
Men	H	46.11	1.55	3.36
Men	I	60.41	1.27	2.10
Men	J	140.01	5.47	3.91
Men	K	71.03	1.83	2.58
Men	L	63.48	0.71	1.11
Men	M	63.57	1.41	2.22
Men	N	68.70	2.96	4.31
Men	O	53.33	1.35	2.53
Men	Total	64.40	0.41	0.64
Women	C	42.20	1.33	3.14
Women	D	43.41	0.32	0.73
Women	E	51.84	1.48	2.85
Women	F	47.97	1.39	2.90
Women	G	45.89	1.08	2.35
Women	H	34.74	0.82	2.37
Women	I	55.41	1.25	2.26
Women	J	75.59	1.80	2.39
Women	K	53.99	1.14	2.11
Women	L	57.37	0.66	1.16
Women	M	44.57	0.39	0.88
Women	N	46.81	0.61	1.31
Women	O	41.47	0.78	1.89
Women	Total	47.42	0.27	0.56
Men + Women	C	63.87	1.16	1.81
Men + Women	D	52.93	0.40	0.75
Men + Women	E	57.17	1.38	2.41
Men + Women	F	62.06	1.09	1.75
Men + Women	G	56.13	1.00	1.78
Men + Women	H	37.33	0.93	2.48
Men + Women	I	58.87	1.09	1.85
Men + Women	J	91.97	2.49	2.71
Men + Women	K	63.80	1.30	2.04
Men + Women	L	60.29	0.55	0.92
Men + Women	M	48.26	0.47	0.97
Men + Women	N	49.49	0.70	1.41
Men + Women	O	46.12	0.85	1.85
Men + Women	Total	55.84	0.28	0.51

Coefficient of variation of average gross hourly earnings of full-time employees by occupation (ISCO-88 1-digit level) and sex

Sex	ISCO-88 groups	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	1	96.26	1.01	1.05
Men	2	93.41	1.32	1.41
Men	3	73.09	0.85	1.16
Men	4	56.39	1.08	1.91
Men	5	42.04	0.76	1.80
Men	6	47.71	7.53	15.78
Men	7	55.80	0.69	1.24
Men	8	52.29	0.67	1.28
Men	9	38.36	0.73	1.89
Men	Total	64.40	0.41	0.64
Women	1	77.93	0.92	1.18
Women	2	68.00	0.97	1.42
Women	3	52.35	0.37	0.72
Women	4	41.98	0.39	0.93
Women	5	32.71	0.29	0.90
Women	6	35.56	5.26	14.78
Women	7	38.66	0.48	1.25
Women	8	39.24	0.34	0.86
Women	9	25.73	0.23	0.89
Women	Total	47.42	0.27	0.56
Men + Women	1	90.12	0.80	0.89
Men + Women	2	76.66	0.95	1.24
Men + Women	3	60.00	0.45	0.74
Men + Women	4	44.86	0.46	1.02
Men + Women	5	35.11	0.31	0.89
Men + Women	6	40.99	5.28	12.89
Men + Women	7	52.22	0.59	1.13
Men + Women	8	47.99	0.49	1.03
Men + Women	9	31.08	0.40	1.28
Men + Women	Total	55.84	0.28	0.51

Coefficient of variation of average gross hourly earnings of full-time employees by age band and sex

Sex	Age band	Average gross hourly earnings	Standard error	CV
	years	kroons		%
Men	15-19	44.52	1.03	2.30
Men	20-29	63.41	0.58	0.91
Men	30-39	74.55	0.73	0.98
Men	40-49	65.87	0.62	0.95
Men	50-59	58.12	0.53	0.92
Men	60+	50.92	0.64	1.26
Men	Total	64.40	0.41	0.64
Women	15-19	31.95	0.69	2.16
Women	20-29	49.91	0.48	0.97
Women	30-39	52.16	0.47	0.89
Women	40-49	48.09	0.39	0.81
Women	50-59	43.61	0.31	0.72
Women	60+	38.66	0.45	1.17
Women	Total	47.42	0.27	0.56
Men + Women	15-19	40.20	0.76	1.90
Men + Women	20-29	57.39	0.44	0.76
Men + Women	30-39	63.81	0.49	0.77
Men + Women	40-49	56.23	0.39	0.69
Men + Women	50-59	49.98	0.31	0.62
Men + Women	60+	45.23	0.42	0.93
Men + Women	Total	55.84	0.28	0.51

Coefficient of variation of average gross hourly earnings of full-time employees by size band of the enterprise and sex

Sex	Size band	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	1-9	51.76	0.99	1.91
Men	10-49	65.52	0.96	1.46
Men	50-249	69.47	0.72	1.04
Men	250-499	70.17	0.78	1.11
Men	500-999	61.27	0.80	1.30
Men	1000+	70.22	0.93	1.32
Men	Total	64.40	0.41	0.64
Women	1-9	41.23	0.77	1.87
Women	10-49	47.15	0.94	2.00
Women	50-249	48.15	0.36	0.74
Women	250-499	49.73	0.44	0.89
Women	500-999	46.33	0.44	0.95
Women	1000+	50.36	0.44	0.87
Women	Total	47.42	0.27	0.56
Men + Women	1-9	47.69	0.77	1.62
Men + Women	10-49	57.53	0.80	1.40
Men + Women	50-249	58.06	0.46	0.79
Men + Women	250-499	58.42	0.39	0.67
Men + Women	500-999	53.16	0.42	0.80
Men + Women	1000+	57.26	0.43	0.75
Men + Women	Total	55.84	0.28	0.51

Coefficient of variation of average gross hourly earnings of part-time employees by NACE Rev.1.1 and sex

Sex	NACE Rev.1.1	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	C	47.59	5.53	11.62
Men	D	39.36	1.65	4.19
Men	E	33.70	3.86	11.45
Men	F	39.96	2.91	7.29
Men	G	39.63	1.90	4.79
Men	H	40.79	3.47	8.51
Men	I	38.01	4.04	10.64
Men	J	62.91	7.85	12.48
Men	K	41.25	2.22	5.37
Men	L	56.80	3.77	6.64
Men	M	50.09	1.45	2.90
Men	N	62.29	4.18	6.71
Men	O	45.38	2.26	4.98
Men	Total	43.89	0.89	2.02
Women	C	39.95	5.18	12.98
Women	D	35.37	1.05	2.97
Women	E	34.20	3.67	10.73
Women	F	41.44	1.78	4.31
Women	G	35.74	0.86	2.40
Women	H	31.71	1.11	3.51
Women	I	37.43	1.54	4.11
Women	J	56.74	4.48	7.90
Women	K	30.95	0.52	1.69
Women	L	41.24	1.98	4.80
Women	M	44.82	0.61	1.35
Women	N	56.01	1.53	2.74
Women	O	35.21	1.48	4.20
Women	Total	39.25	0.40	1.01
Men + Women	C	42.50	4.61	10.85
Men + Women	D	36.69	0.95	2.59
Men + Women	E	34.00	2.97	8.74
Men + Women	F	40.58	1.89	4.66
Men + Women	G	36.74	0.88	2.39
Men + Women	H	33.92	1.35	3.99
Men + Women	I	37.65	1.90	5.04
Men + Women	J	57.87	4.01	6.94
Men + Women	K	34.25	0.86	2.52
Men + Women	L	46.12	2.12	4.59
Men + Women	M	46.12	0.62	1.35
Men + Women	N	56.96	1.47	2.57
Men + Women	O	38.34	1.39	3.62
Men + Women	Total	40.58	0.41	1.00

Coefficient of variation of average gross hourly earnings of part-time employees by occupation (ISCO-88 1-digit level) and sex

Sex	ISCO-88 groups	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	1	59.48	4.06	6.83
Men	2	65.86	1.73	2.63
Men	3	49.29	1.39	2.82
Men	4	41.84	1.61	3.85
Men	5	37.71	1.92	5.10
Men	6	22.92	0.86	3.76
Men	7	32.72	1.04	3.16
Men	8	29.30	2.10	7.17
Men	9	23.55	0.47	1.98
Men	Total	43.89	0.89	2.02
Women	1	43.84	1.56	3.56
Women	2	62.67	0.97	1.55
Women	3	42.48	0.61	1.43
Women	4	36.07	0.68	1.88
Women	5	30.09	0.54	1.78
Women	6	23.98	3.24	13.49
Women	7	29.90	1.34	4.48
Women	8	33.24	2.24	6.75
Women	9	23.94	0.22	0.92
Women	Total	39.25	0.40	1.01
Men + Women	1	52.67	2.45	4.64
Men + Women	2	63.50	0.87	1.37
Men + Women	3	44.09	0.59	1.34
Men + Women	4	37.05	0.63	1.71
Men + Women	5	31.40	0.59	1.88
Men + Women	6	23.62	2.17	9.19
Men + Women	7	31.93	0.85	2.67
Men + Women	8	30.51	1.80	5.90
Men + Women	9	23.85	0.21	0.88
Men + Women	Total	40.58	0.41	1.00

Coefficient of variation of average gross hourly earnings of part-time employees by age band and sex

Sex	Age band	Average gross hourly earnings	Standard error	CV
	years	kroons		%
Men	15-19	37.22	1.32	3.55
Men	20-29	49.90	1.58	3.17
Men	30-39	51.01	3.28	6.43
Men	40-49	44.22	1.72	3.90
Men	50-59	39.69	1.20	3.02
Men	60+	37.33	1.24	3.31
Men	Total	43.89	0.89	2.02
Women	15-19	30.61	0.64	2.08
Women	20-29	42.08	0.84	2.00
Women	30-39	47.30	1.08	2.27
Women	40-49	40.90	0.76	1.86
Women	50-59	36.51	0.65	1.78
Women	60+	33.07	0.57	1.74
Women	Total	39.25	0.40	1.01
Men + Women	15-19	32.96	0.71	2.14
Men + Women	20-29	44.75	0.85	1.89
Men + Women	30-39	48.37	1.22	2.53
Men + Women	40-49	41.74	0.72	1.73
Men + Women	50-59	37.33	0.59	1.59
Men + Women	60+	34.32	0.57	1.65
Men + Women	Total	40.58	0.41	1.00

Coefficient of variation of average gross hourly earnings of part-time employees by size band of the enterprise and sex

Sex	Size band	Average gross hourly earnings	Standard error	CV
		kroons		%
Men	1-9	37.07	1.63	4.40
Men	10-49	44.50	1.33	2.98
Men	50-249	47.03	1.22	2.59
Men	250-499	49.37	2.88	5.84
Men	500-999	49.38	3.28	6.65
Men	1000+	65.00	3.96	6.10
Men	Total	43.89	0.89	2.02
Women	1-9	32.59	0.65	1.99
Women	10-49	38.99	0.74	1.89
Women	50-249	40.65	0.62	1.52
Women	250-499	41.13	1.29	3.14
Women	500-999	42.85	1.80	4.20
Women	1000+	51.72	1.68	3.24
Women	Total	39.25	0.40	1.01
Men + Women	1-9	34.19	0.75	2.18
Men + Women	10-49	40.61	0.75	1.85
Men + Women	50-249	42.15	0.63	1.48
Men + Women	250-499	43.50	1.23	2.83
Men + Women	500-999	44.33	1.51	3.41
Men + Women	1000+	54.46	1.56	2.87
Men + Women	Total	40.58	0.41	1.00

2.2. Non-sampling errors

2.2.1. Coverage errors

The sample was selected from the register updated in the end of the year 2005. The sampling frame used contained certain amount of over-coverage because in the end of the year 2005 all new-born enterprises had been included into the register and a part of them did not start activities during 2006.

Under-coverage of the sampling frame is caused by delay between selection of the sample and data collection. The sample was selected from the register in May 2006 and the enddate of the data collection was set to the 1st of March 2007. During the year 2006 a number of enterprises were born and had started their activities but were not covered by the survey, i.e. formed the undercoverage. In the table below over-coverage rates broken down by 2-digit NACE code are presented. Those rates are calculated as ratios of the number of nonactive units over the total number of units in the register. The number of non-active units is estimated based on the sample.

NACE Rev. 1	Population size	Over-coverage rate	NACE Rev. 1	Population size	Over-coverage rate
		%			%
10	34		41	73	
11	2		45	3 548	8.5
14	36	29.2	50	1 618	11.4
15	445	13.6	51	6 422	11.7
17	216	7.2	52	4 318	14.7
18	401	16.7	55	1 713	12.0
19	63	15.3	60	2 217	7.8
20	1 015	15.1	61	19	
21	53		62	8	
22	488	4.3	63	981	6.2
23	6		64	125	4.0
24	97		65	233	13.4
25	179	11.6	66	14	
26	180	7.3	67	112	
27	11		70	7 270	3.1
28	721	14.1	71	384	1.3
29	264	3.9	72	771	9.2
30	20		73	93	7.9
31	104		74	4 962	6.3
32	74		75	501	8.6
33	129		80	1 055	4.2
34	33		85	1 274	4.5
35	101	19.8	90	117	
36	545	4.7	91	2 608	3.9
37	26		92	1 708	9.1
40	177	3.9	93	592	9.8
			Total	48 156	8.2

2.2.2. Measurement errors

Structure of earnings survey was conducted in the Statistics Estonia first time in 2002.

In 2002 the structure of earnings pilot survey was the first survey based on individual level survey conducted by the Statistics Estonia. The main purpose of this pilot survey was to test the questionnaire. The pilot survey was conducted from March to May covering the calendar year 2001. All these steps helped to compile the SES questionnaire and the logic tests.

In the main survey 2002 and 2006 the same problem as in the pilot survey follow up again.

From the variable "number of worked and paid days to which the gross annual earnings relate" the days of sick leave and the days not worked and not paid were not subtracted correctly by employers. At the same time the employees who have not been present the whole year the accounting of working time were not correct in lot of cases.

Below the number of corrected cases is presented for the most of the variables asked by Estonian SES. There are some deviations from the list of the variables in the regulation. For instance paid hours but not worked are estimated through paid days but not worked and through standard for working time in a week according to internal work procedure rules in an enterprise or statutory normal working time.

For estimation paid hours but not worked we used the following additional information or breakdowns: total number of days of annual leave of employees in October and days not worked in October but nevertheless paid and standard for working time in a week according to internal work procedure rules in enterprise or statutory normal working time in a week. Total number of hours paid during the October was calculated to the database as variable through the formula.

For estimation the total number of weeks in the year to which the gross annual earnings relate we used the following additional breakdowns: number of worked and paid days in the year to which the gross annual earnings relate, annual days of holiday leave and days not worked in the year but nevertheless paid. The numbers of weeks in the year to which the gross annual earnings relate were calculated to the database as variable through the formula.

Variables which needed the most of cases of correction were overtime hours, days of holiday leave in October, days not worked in October but nevertheless paid, earnings paid for overtime hours, payment for days not worked in October, number of worked and paid days in the year to which the gross annual earnings relate.

The logic test also includes the relation between the gross earning in October and gross annual earnings. Through this test lot of errors were find which needed correction like variable payments for actually worked time in October (irregular bonuses were included).

At the same time lot of errors were find which needed correction like variable number of hours worked in October especially in activity of education.

Above mentioned variables were under extra priority during the checking process.

The logic test has revealed all errors of magnitude made by respondents and during the data entry by NSI staff. After contacts with respondents and corrections the logic tests were used again.

Number of corrected cases is presented in the table below which are calculated comparing the raw database with the corrected database.

Code	Variable	Corrected cases of all respondent cases	Corrected cases of all employees in the sample
		%	%
2.1.	Sex	0.3	0.3
2.2.	Age	0.4	0.4
2.3.	Occupation	11.0	11.0
2.5.	Level of education	0.9	0.9
2.6.	Length of service	6.4	5.7
2.7.	Full-time or part-time	1.7	1.7
2.8.	Type of employment contract	0.7	0.7
	Standard for working time in a week by internal work procedure rules (hours)	3.9	3.9
	Number of hours worked in October	23.8	23.7
3.2.1.	of which overtime hours	30.0	2.8
	Days of holiday leave in October	28.8	2.3
	Days not worked in October but nevertheless paid	27.3	0.4
	Payments for actually worked time in October	22.3	22.2
4.2.1.	of which earnings paid for overtime hours	53.9	4.9
4.2.2.	of which premium payments for shift work, night work and holiday work	22.0	2.8
	Payments for holiday leave in October	21.1	1.6
	Payments for days not worked in October	38.0	0.6
	Number of worked and paid days to which the gross annual earnings relate	26.6	26.6
3.3.	Annual days of holiday leave	9.1	8.1
	Days not worked in the year but nevertheless paid	11.0	0.7
4.1.	Total gross annual earnings in the reference year	2.3	2.3
4.1.1.	Total annual bonuses and allowances not paid in each pay period	4.4	2.3

2.2.3. Non-response error

Table of unit response rates broken down according to the stratification used for the first stage sampling (see below) shows that the overall response rate was 73.9% and the overall response rate except the units less than 10 employees was 83.6%.

It is assumed that in the strata where random sample was selected the distribution of any variable among responded units is the same as among non-responded units. As a matter of fact, in each stratum the set of responded units is considered as a sample available. The units in the sample selected and having no economic activity are taken into account as respondents with zero data. In the completely enumerated strata (150 and more employees) non-response is not adjusted. In the completely enumerated strata overall non-response rate was 3.9% and assumes that 0.9 % of employees were not covered by the statistical register data.

In this survey the imputation method doesn't used.

Response rates, %								
NACE Rev.1	Number of employees							
	1-9	10-19	20-49	50-149	150-249	250-499	500-999	1000 or more
10	100.0	100.0	100.0	100.0	-	100.0	-	-
11	100.0	-	-	-	-	-	-	100.0
14	100.0	100.0	100.0	100.0	-	-	-	-
15	83.9	81.3	80.6	81.8	91.7	100.0	100.0	-
17	84.2	83.3	81.8	80.0	87.5	-	100.0	100.0
18	77.4	57.1	63.3	90.0	100.0	88.9	100.0	-
19	100.0	100.0	66.7	80.0	-	100.0	-	-
20	65.0	78.6	78.0	85.7	85.7	100.0	80.0	-
21	40.0	100.0	75.0	50.0	-	-	100.0	-
22	63.5	81.8	69.6	91.7	100.0	100.0	-	-
23	100.0	-	-	-	-	100.0	100.0	-
24	77.8	66.7	50.0	100.0	100.0	100.0	100.0	-
25	92.9	80.0	66.7	83.3	100.0	-	-	-
26	76.5	100.0	77.8	83.3	90.9	100.0	-	-
27	100.0	100.0	100.0	100.0	-	-	-	-
28	65.2	72.7	75.6	72.2	88.9	100.0	100.0	-
29	84.6	83.3	90.9	85.7	100.0	100.0	-	-
30	50.0	50.0	100.0	50.0	100.0	-	-	-
31	77.8	100.0	100.0	83.3	83.3	100.0	0.0	100.0
32	87.5	50.0	100.0	100.0	100.0	0.0	100.0	100.0
33	64.3	100.0	100.0	100.0	100.0	-	-	-
34	50.0	100.0	80.0	66.7	100.0	-	100.0	-
35	66.7	33.3	66.7	100.0	66.7	-	100.0	-
36	72.2	63.6	65.4	65.2	100.0	100.0	100.0	-
37	66.7	100.0	100.0	100.0	-	-	-	-
40	86.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
41	83.3	100.0	100.0	100.0	-	100.0	-	-
45	64.9	73.5	79.8	92.9	80.0	100.0	100.0	-
50	69.5	75.0	72.7	92.9	100.0	-	100.0	-
51	62.9	78.1	82.0	76.9	100.0	100.0	-	-
52	70.5	74.4	79.4	83.3	85.7	100.0	100.0	100.0
55	73.0	66.0	73.5	81.8	100.0	100.0	-	-
60	62.0	64.4	80.0	72.0	100.0	100.0	100.0	100.0
61	100.0	0.0	100.0	100.0	100.0	100.0	-	-
62	100.0	100.0	100.0	100.0	-	100.0	-	-
63	66.4	80.0	81.8	70.6	100.0	100.0	100.0	-
64	73.3	100.0	50.0	66.7	0.0	100.0	100.0	100.0
65	68.8	100.0	100.0	50.0	100.0	100.0	100.0	100.0
66	0.0	100.0	100.0	100.0	100.0	-	100.0	-
67	69.2	100.0	60.0	100.0	-	-	-	-
70	68.4	75.0	89.7	91.7	100.0	100.0	-	-
71	72.7	33.3	50.0	100.0	-	-	-	-
72	68.6	87.5	81.3	80.0	100.0	-	-	-
73	88.9	100.0	100.0	100.0	100.0	100.0	-	-
74	71.8	70.8	85.0	70.0	92.9	100.0	100.0	100.0
75	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0
80	75.8	80.0	91.2	88.3	100.0	83.3	100.0	100.0
85	75.9	87.5	90.9	92.6	100.0	100.0	100.0	100.0
90	63.6	75.0	83.3	80.0	100.0	-	-	-
91	69.8	87.0	68.0	60.0	-	-	-	-
92	69.1	87.5	89.7	90.9	77.8	100.0	100.0	-
93	57.0	88.9	75.0	100.0	100.0	-	-	-
Total	68.5	76.4	81.3	86.4	94.2	98.0	97.3	100.0

2.2.4. Model assumption errors

The main error caused by the choice of a certain model is probably concerned with the non-response model among sampled units. The assumption is made that the distribution of non-respondents is similar to that of respondents but this assumption may not be true in some strata.

The employee's gross monthly earnings and number of hours actually paid in the reference month are affected by unpaid absence due to sickness, no work or study leave etc. or simply because the employee joined or left the enterprise during the reference month, then the earnings and number of hours actually paid were adjusted in order to provide an estimate of the employee's earnings and number of hours actually paid for a full month. If the employee's overtime hours, overtime earnings and special payments for shift work are affected by unpaid absence, then these variables were adjusted to obtain for a full month.

The number of adjusted cases was 17.9%.

There was no need for adjustments of fiscal year to calendar year because data were asked always about calendar year independent of the accounting system of particular enterprises.

No data from administrative sources were used. All results presented are obtained based only on the survey.

3. Punctuality and timeliness

The Statistics Estonia carried out the structure of earnings survey second time.

The sample was selected in May 2006. The questionnaires were sent out in September 2006 and deadline was in the 1st of March 2007.

The number of received completed questionnaires and the information obtained that unit either had stopped economic activities, lead to the bankruptcy or had no employees was fixed on the 1st of March 2007. At that time the overall response rate was 30.1%. The completed questionnaires were received during February and March. Collected data were visually checked and entered during March and April.

During March - June additional phone calls were made and the reminder letters were sent to non-respondents. Phone calls were made also to the respondents in order to correct possible errors in questionnaires. At the end of June the overall response rate had increased to 73.9%.

During May - June 2007 the final phone calls were made and the reminder letters were sent to non-respondents. The data collection period stopped on the 1st of July of 2007. Collected data were checked at different levels.

Part of data was collected electronically. Data received from electronic questionnaires were transferred to the main database. The number of received completed electronic questionnaires formed 25.6% of all filled questionnaires and at the same time formed 37.8% of all employees in the sample.

The data transmission to Eurostat took place on the 4th of July 2007.

The data would be published in the 1st quarter of 2009 at the national level i.e. the length of time between the release of data and the reference period would be 27 month

4. Accessibility and clarity

Statistical Office of Estonia analysed the data of SES and then the results were available on the website www.stat.ee statistical database.

Results will not be sent to the reporting units, but the results were sent to Eurostat.

Statistical Office of Estonia does not find it useful to provide any more methodological documents than the ones given in this quality report.

The metadata and results of SES 2006 would be available on the website during the 1st quarter of 2009.

5. Comparability

5.1. Geographical comparability

Definitions of variables and classifications used in Estonia coincide with corresponding Commission Regulation no 1916/2000 and no 1738/2005 definitions and classifications, except variable gross annual earnings in the reference year. The gross annual earnings do not include the remuneration in kind. By Estonian legislation the accounting system does not include the calculations remuneration in kind per employee.

However, the population and the sampling frame contained enterprises, institutions and organisations and local units. Enterprises, institutions and organisations with more than 4000 employees accounted 1. This 1 unit would be present the data by local units. At the same time all local governments in the sample presented data by local units.

5.2. Comparability over time

Compared with previous SES no any changes made in definitions, coverage and methods.

6. Coherence

Comparison made between the variable “gross annual earnings in the reference year” expressed per employee and the variable “wages and salaries” per employee of NA.

NACE	SES 2006	NA 2006
	Gross annual earnings in the reference year per employee, kroons	wages and salaries per employee, kroons
C	112 209	135 220
D	93 118	110 969
E	113 025	91 795
F	106 846	134 499
G	97 366	139 728
H	56 369	84 540
I	109 266	114 040
J	185 499	323 029
K	92 009	206 510
L	127 365	135 377
M	84 089	95 996
N	91 695	101 046
O	76 267	98 403