

Large farms in Europe

Less than 1 % of European farms occupy 20 % of the Utilised Agricultural Area

The ongoing revision of the Common Agricultural Policy brings into focus the size of farms in the European Union. To measure the size of farms, different variables can be taken into account such as the economic performance, the labour force working on the farm, the production or the area.

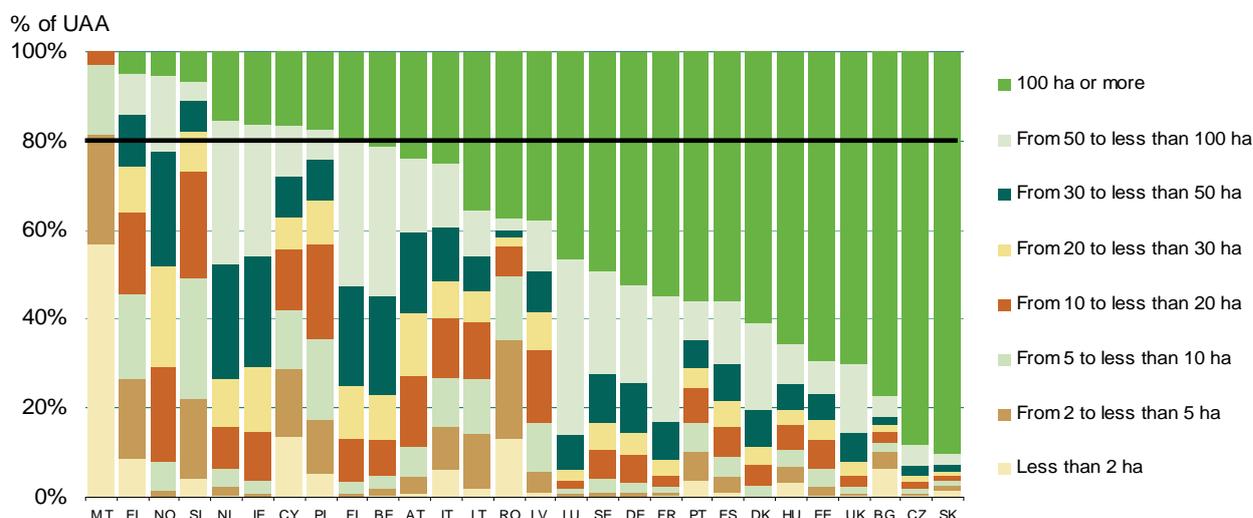
In this publication the Utilised Agricultural Area (UAA) is chosen for classifying farms by size in each country (see methodological notes for more information). This classification provides the basis for a comparative study on the

significance of the larger farms in the EU 27, Norway and Switzerland, using the 2007 data from the Farm Structure Survey (FSS).

The UAA refers to the land used for farming; it includes arable land, permanent grassland, permanent crops and also kitchen gardens.

The distribution of the UAA between large and small farms varies between countries, but in general a relatively small number of farms occupy a high percentage of the agricultural area.

Figure 1: Distribution of UAA by UAA size of the farm, 2007



Source: Eurostat-FSS (online data code: [ef_ov_kvaa](#))

In Figure 1, for each country the total UAA of all farms is broken down into eight classes according to the size of the holding's UAA.

Only a small proportion of the total UAA in Malta, Greece and Norway is used by farms with 100 ha or more, while in Bulgaria, the Czech Republic and Slovakia the great share of the total UAA is occupied by farms in this size class.

In order to compare the weight of the larger agricultural holdings in each country, farms were sorted cumulatively by their UAA size and then divided into two distinct groups:

- **smaller farms**, whose UAA added up to 80% of the UAA (under the 80% threshold);
- **larger farms**, making up the rest (20%) of the UAA (over the 80% threshold).

With this approach to analysis of the larger agricultural holdings, the definition of 'large farm' depends not on a uniform threshold, but reflects the different distribution in the different countries. This means that the measurement of the size of the farms is always **relative** to the distribution of each country's UAA among the holdings.

The average Utilised Agricultural Area of the larger farms is over 1000 ha in 10 EU countries

In Malta, the 20 % of UAA covered by the largest farms is occupied by farms larger than 5 ha. In Slovakia, farms larger than 2 782 ha cover 20 % of the total UAA. These larger farms in Malta have an average UAA of 7 ha and in Slovakia of 3 934 ha.

In 20 countries, the larger farms are all in the biggest UAA class (100 ha or more). Only in Malta and Slovenia does the 80 % threshold lie below 30 ha. The

value of the threshold by country is shown in the last column of Table 1.

In Bulgaria, the Czech Republic, Hungary, Estonia and Slovakia, the larger farms occupying 20 % of the UAA are all above 1000 ha. This pattern occurs in several of the new Member States (EU 12); here the structure of the agricultural holdings is related to the particular ownership structure made up of large-scale corporate farms inherited from former state-owned cooperatives.

Table 1: UAA of the larger farms covering 20% of the UAA, 2007

Country	Average UAA of all farms (ha)	Average UAA of the larger farms (ha)	Number of larger farms	Large farms as % of all farms	Threshold value (ha) (1)
BE	29	150	1 828	3.81	103
BG	6	3 128	195	0.04	1 814
CZ	89	3 531	199	0.51	2 500
DK	60	426	1 249	2.80	277
DE	46	1 391	2 434	0.66	705
EE	39	1 988	91	0.39	1 178
IE	32	136	6 070	4.73	89
EL	5	64	12 690	1.48	37
ES	24	1 087	4 581	0.44	517
FR	52	274	20 032	3.80	196
IT	8	337	7 560	0.45	138
CY	4	147	198	0.49	81
LV	16	844	420	0.39	384
LT	12	923	574	0.25	369
LU	57	212	123	5.34	159
HU	7	3 164	267	0.04	1 868
MT	1	7	291	2.64	5
NL	25	135	2 826	3.68	88
AT	19	295	2 162	1.31	127
PL	6	250	12 392	0.52	74
PT	13	1 231	563	0.20	700
RO	3	1 802	1 526	0.04	832
SI	6	58	1 675	2.22	27
SK	28	3 934	98	0.14	2 782
FI	34	146	3 141	4.60	100
SE	43	388	1 605	2.21	234
UK	54	2 416	1 335	0.45	891
NO	21	79	2 608	5.22	54
CH	17	54	3 912	6.33	39

(1) All holdings with a UAA over this threshold together cover 20 % of total UAA in the respective country

Source: Eurostat — FSS

In Switzerland the average size of the larger farms (54 ha) is three times the average size of all farms (17 ha), while in countries such as Bulgaria (3 128 ha vs 6 ha), Romania (1 802 ha vs 3 ha) and Hungary (3 164 ha vs 7 ha), the average area of the larger farms is close to 500 times the average size of all farms.

As shown in Figure 2, in Slovakia, the Czech Republic, Hungary and Bulgaria the group of larger farms covering 20 % of the total UAA have an average area of

over 3 000 ha. Within the old Member States (EU 15), Greece, with an average area of 64 ha for the larger farms, has the lowest average area while the United Kingdom is the only country showing an average area over 2 000 ha for the group of larger farms. This can be explained for the United Kingdom by the fact that larger farms specialise in grazing livestock extensively.

Table 1 and Figure 2 illustrate that the group of larger farms, occupying 20% of the total UAA, sometimes represents an extremely small proportion of all farms in a given country.

In Bulgaria, Hungary and Romania, only 0.04% of the total number of holdings cover 20% of the total UAA. Also in the Czech Republic, Germany, Estonia, Spain, Italy, Cyprus, Latvia, Lithuania, Poland, Portugal, Slovakia and the United Kingdom less than 1% of the holdings cultivate 20% of the total UAA.

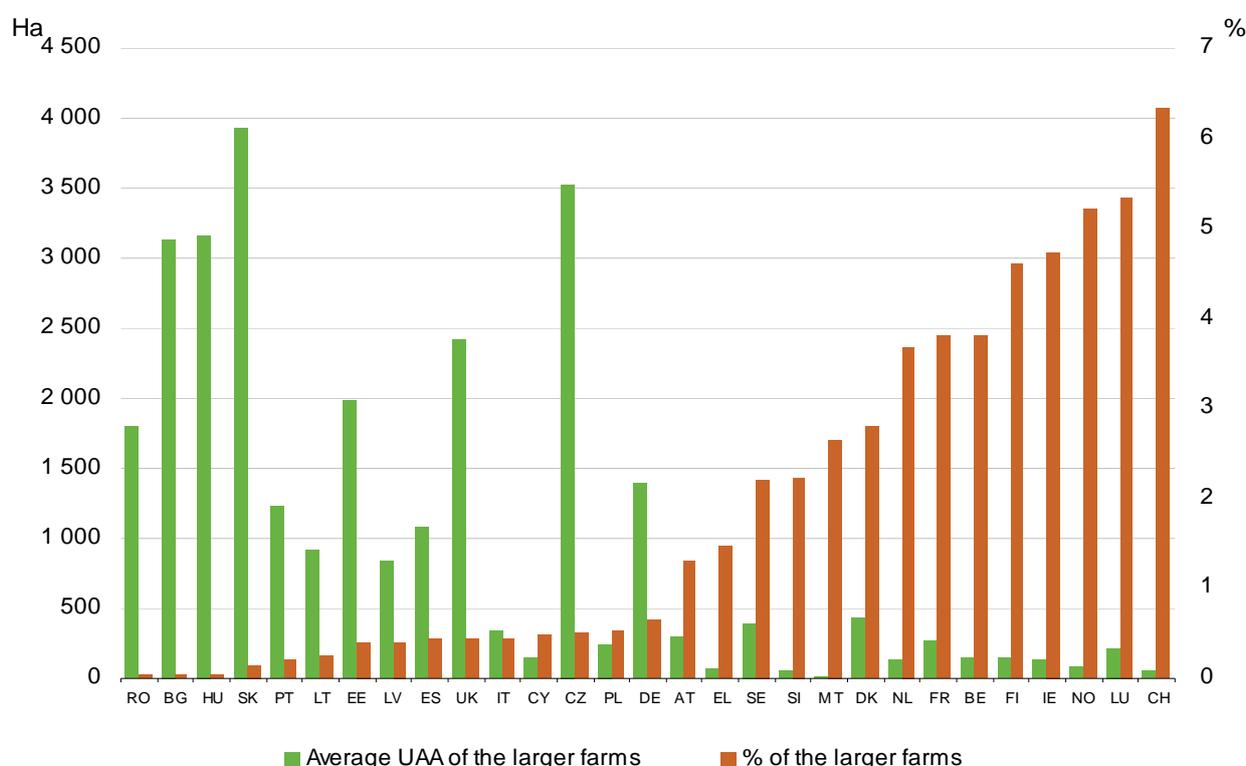
The share of larger farms is only over 1% in 14 countries, and only over 5% in Norway, Luxembourg and Switzerland. The highest percentage is found in

Switzerland; here 6.33% of the farms cover 20% of the country's UAA.

Adding up the number of larger farms (covering 20% of the UAA observed for each country¹) for the EU 27 gives a total of 86 125 farms, which represents 0.6% of all the farms in the 2007 FSS.

As shown in Figure 2, the larger farms do not have such a high average UAA per farm in the countries where they represent a greater percentage. On the other hand, with the exception of Italy, Cyprus and Poland, in countries where the number of larger farms is less than 1% of all farms, the average UAA per large farm is over 500 ha.

Figure 2: Average UAA of the larger farms covering 20% of total UAA, 2007 and Percentage of the larger farms covering 20% of total UAA, 2007



Source: Eurostat — FSS

Larger farms make up 11% of the total EU 27 SGM but represent less than 1% of the total number of farms

The FSS uses the Standard Gross Margin (SGM) to measure the economic size of agricultural holdings. The SGM is the difference between the value of the agricultural output (crops or livestock) and the cost of inputs required to produce that output. The sum of all the margins per hectare of crop and per head of livestock in a farm is a measure of its overall economic size².

Overall, the total SGM of the agricultural holdings of

the EU 27 in 2007 was 185 billion euro.

The average SGM per farm of the smaller farms that cover 80% of the UAA varies from €1 057 in Romania to €23 942 in the Netherlands.

In 16 countries, the average SGM per farm of the smaller farms is under €20 000. All the new Member States except the Czech Republic belong to this group.

¹ 20% of the European UAA is around 35 000 000 ha (equivalent to the area of Germany).

² For more details on Standard Gross Margin please see [Farm Accountancy Data Network \(FADN\)](#).

Table 2: SGM per farm and per hectare , 2007

Country	Average SGM per farm (1000€)		SGM /ha	
	Smaller farms	Larger farms	Smaller farms	Larger farms
BE	76.8	273.6	3 228	1 820
BG	2.3	717.6	465	229
CZ	39.7	1972.6	553	558
DK	81.2	616.9	1 653	1 447
DE	52.2	1140.1	1 419	820
EE	7.1	529.7	228	266
IE	19.5	99.3	719	728
EL	8.0	51.6	2 068	803
ES	23.4	334.0	1 221	307
FR	57.2	243.4	1 321	887
IT	16.0	429.4	2 624	1 274
CY	8.4	243.6	2 881	1 652
LV	2.9	217.0	216	257
LT	2.3	272.1	248	295
LU	54.2	201.2	1 129	945
HU	3.3	1467.0	605	463
MT	5.0	37.6	6 471	5 291
NL	123.9	383.7	5 982	2 832
AT	19.6	53.2	1 256	180
PL	3.6	140.1	700	561
PT	7.5	204.6	738	166
RO	1.1	257.2	378	143
SI	5.9	57.9	1 115	992
SK	6.9	1220.0	308	309
FI	25.3	105.5	899	722
SE	23.8	288.2	677	742
UK	36.3	343.6	839	142
NO	36.9	137.1	2 116	1 732
CH	:	:	:	:

Source: Eurostat — FSS

In the group of the larger holdings covering 20% of the UAA, the average SGM per farm is highest in the Czech Republic (1.97 million euro) and the lowest averages per farm, all under €100 000, are observed in Malta, Greece, Austria, Slovenia and Ireland.

The difference in the average of SGM between the groups of smaller and larger farms is highest in Hungary, Bulgaria, Romania, Slovakia and Latvia. In all these countries, the average SGM per farm of the smaller holdings is less than 1 % of the average SGM per farm of the larger holdings. On average, the SGM of a large holding in Hungary is 448 times the average of a smaller Hungarian farm.

In countries such as Austria, the Netherlands, Belgium, Luxembourg and Norway the smaller holdings have an average SGM per farm that is at least 25 % of the average of the larger farms.

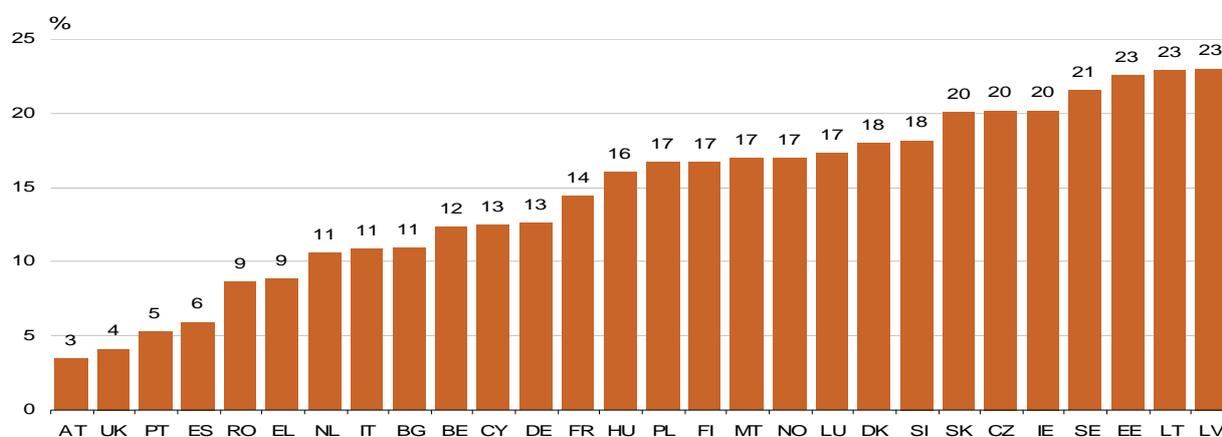
The SGM per hectare within the two groups of farms shows a different pattern from the average SGM. In 21 countries the smaller farms have a higher SGM/ha than the larger farms. In nine of those countries (Bulgaria, Greece, Spain, Italy, the Netherlands, Austria, Portugal, Romania and the United Kingdom) the SGM/ha of the smaller farms is more than twice the SGM/ha of the larger farms. In the Czech Republic, Estonia, Ireland, Latvia, Lithuania, Slovakia and Sweden, the larger farms' SGM/ha is slightly higher than the SGM/ha of the smaller farms.

Figure 3 shows the percentage of the SGM of the larger farms in the total SGM of each country. The differences in the weight of the larger farms' SGM within the total SGM vary from 3 % in Austria to around 23 % in Latvia, Lithuania and Estonia.

In Slovakia, the Czech Republic and Ireland the larger farms, covering 20 % of the UAA, also make up 20 % of the SGM. In Sweden, Estonia, Latvia and Lithuania the share observed in each country exceeds 20 % of the SGM. In all the other countries, a lower share can be seen.

The total SGM of all the larger European farms covering 20% of the UAA in each country makes up 11 % of the total EU 27 SGM but represents less than 1 % of the total number of farms.

Figure 3: Share of the SGM of the larger farms in % of total SGM, 2007



Source: Eurostat — FSS

Larger farms account for 5% of the total EU 27 labour force

In 2007, there was a total of 11.7 million Annual Work Units (AWU)³, the equivalent of 11.7 million people, working full-time in agricultural activities in the EU 27. In 2007, the larger farms accounted for 5% of this total labour force.

In the smaller farms the difference in average AWU per holding between the European countries is quite limited, ranging from 0.3 AWU in Malta to 2.9 AWU in the Czech Republic (Table 3). In the group of the larger farms there is a stronger contrast within the EU 27. The larger farms in Malta on average employ 1.8 AWU while in Slovakia the average per farm reaches 125 AWU.

Figure 4 shows that labour input of the larger farms as a percentage of the total labour force of all agricultural holdings is the lowest in Romania, where only 0.9% of the labour force is occupied on 20% of the UAA.

The 20% of the UAA covered by the larger farms always represents less than 17% of the total AWU. This percentage exceeds 10% in only seven countries (Luxembourg, Switzerland, Denmark, Malta, Slovakia, Estonia and the Czech Republic).

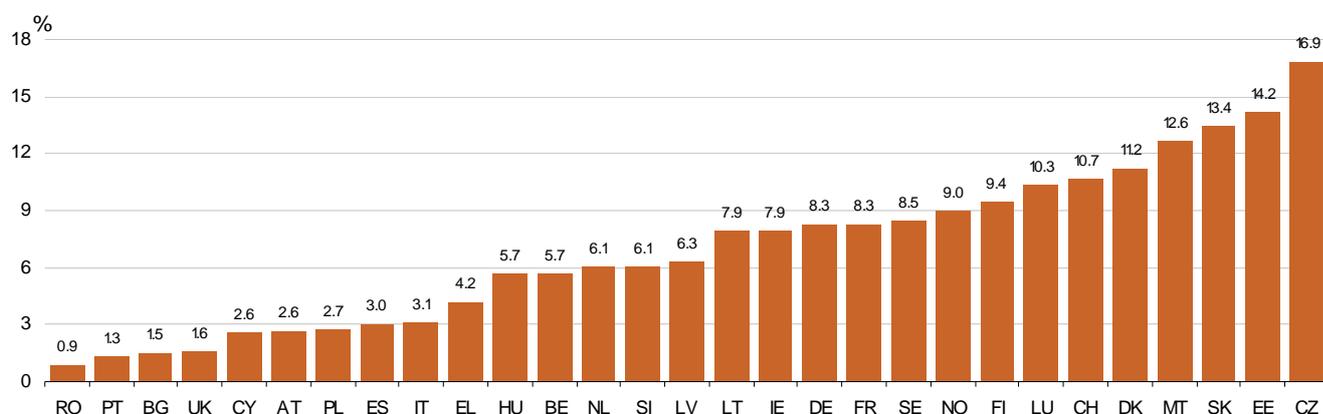
The number of hectares of UAA per AWU is always greater in the larger farms than in the smaller ones. In the group of smaller farms the numbers are not very different, while in the larger farms they can vary considerably. The United Kingdom stands out with a figure of 594 ha/AWU, again related to the extensive rough pastures that make up the largest holdings. In Spain, Austria, Portugal, Romania and Sweden, for each full-time worker on the larger farms there is over 100 ha of UAA.

Table 3: Average labour input per farm, 2007

Countries	Average labour input (AWU)		Ha/AWU	
	Smaller farms	Larger farms	Smaller farms	Larger farms
BE	1.3	2.1	18	73
BG	1.0	38.1	5	82
CZ	2.9	116.5	25	30
DK	1.1	5.0	43	85
DE	1.5	20.7	24	67
EE	1.2	49.9	26	40
IE	1.1	1.9	24	71
EL	0.6	1.9	6	34
ES	0.9	6.3	21	171
FR	1.5	3.3	30	82
IT	0.8	5.4	8	62
CY	0.6	3.4	5	44
LV	0.9	15.7	14	54
LT	0.7	24.8	13	37
LU	1.5	3.2	31	67
HU	0.6	86.6	9	37
MT	0.3	1.8	2	4
NL	2.1	3.6	10	38
AT	1.0	2.0	16	148
PL	0.9	5.0	6	50
PT	1.2	7.8	8	158
RO	0.6	12.9	5	140
SI	1.1	3.0	5	19
SK	1.1	125.0	20	32
FI	1.0	2.1	28	67
SE	0.8	3.5	42	113
UK	1.1	3.9	38	594
NO	1.1	1.9	16	41
CH	1.8	3.2	8	17

Source: Eurostat — FSS

Figure 4: Share of AWU in the larger farms as % of total AWU, 2007



Source: Eurostat — FSS

³ One AWU corresponds to the work performed by a person engaged in full-time agricultural work on the holding over a 12-month period. The annual working time of such a worker is 1 800 hours (225 working days of 8 hours per day), unless there are different specific national provisions governing contracts of employment.

Differences in livestock density among the larger farms

In the Farm Structure Survey the Livestock Unit (LSU)⁴ is used for measuring the quantity of livestock. As shown in Table 4 and Figure 5, the percentage of LSU in larger farms is 20% or more of the total LSU in Finland, Slovakia and Estonia. On the other hand, the larger farms in Austria occupy only 1% of the total LSU. Similar to the situation in the United Kingdom, the larger farms in Austria are made up of rough grazing with a very low livestock density. This is also the case in Bulgaria and Romania, where despite the higher average of LSU in the larger farms, their livestock per hectare (LSU/ha) is very low.

The larger farms of all EU 27 Member States have 10% of the total LSU in the European Union.

The number of LSU per hectare is greater in smaller farms in most of the countries, with the exception of Estonia, Slovakia and Finland.

In Belgium, Malta and the Netherlands there is over 3 000 LSU per 1000 hectare in the small farms, the value in Malta being the highest at 5 157 LSU/1000 ha.

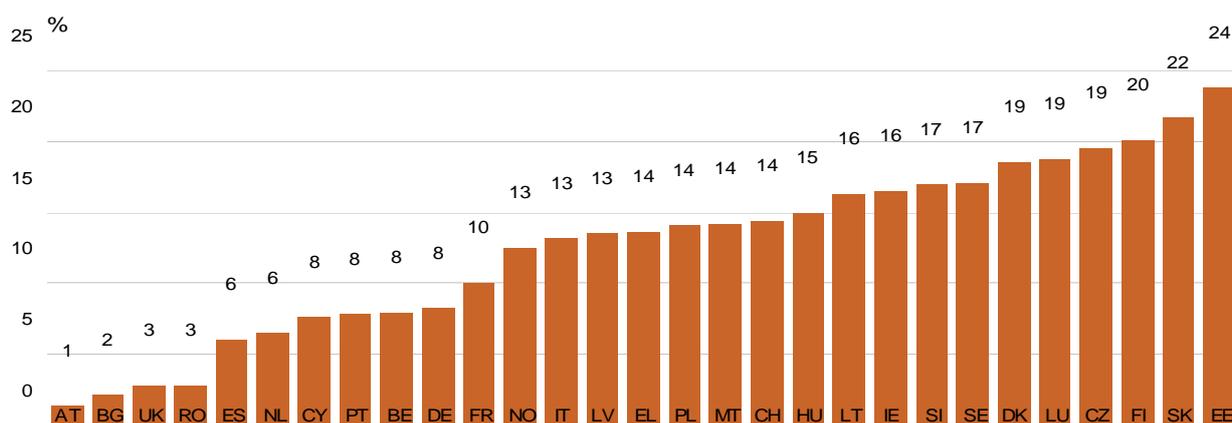
The larger farms are predominantly less intensive regarding livestock density. In Bulgaria, Austria and Romania the LSU/1000 ha is under 100.

Table 4: Average LSU of farms, 2007

Countries	Average LSU		LSU/1000 ha	
	Smaller farms	Larger farms	Small farms	Large farms
BE	76	164	3171	1094
BG	2	134	500	43
CZ	42	2009	587	568
DK	86	681	1752	1597
DE	45	609	1218	438
EE	10	818	329	410
IE	40	161	1492	1179
EL	3	28	696	437
ES	13	189	679	174
FR	40	113	923	411
IT	5	172	843	511
CY	6	95	1951	645
LV	4	157	297	185
LT	4	293	407	317
LU	60	245	1248	1152
HU	3	1351	606	427
MT	4	24	5157	3402
NL	81	146	3920	1077
AT	15	15	956	52
PL	4	126	771	506
PT	7	280	674	227
RO	1	111	534	62
SI	6	56	1175	962
SK	8	1651	378	418
FI	14	74	502	506
SE	21	190	593	488
UK	45	290	1051	120
NO	23	61	1343	768
CH	26	65	1792	1204

Source: Eurostat — FSS

Figure 5: Share of LSU of larger farms in % of total LSU, 2007



Source: Eurostat — FSS

⁴ **LSU:** For each of the 23 categories of livestock surveyed in the FSS, a specific coefficient is established initially on the basis of the nutritional or feed requirement of each type of animal which converts the number of heads to an LSU number (1 LSU corresponds to 1 dairy cow or 10 sheep). For more information see: [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Livestock_unit_\(LSU\)](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Livestock_unit_(LSU)).

Key variables show discrepancies in the sizes of the agricultural sector within the EU

Table 5 presents five key variables for all the holdings included in FSS 2007. These variables show the discrepancies between the sizes of the agricultural sector within the EU 27.

The key figures for the larger farms are included in Table 6; here the values from the group of larger farms in each country were added and compared with the total values of all farms in all the countries.

Table 5: Key figures for total farms, 2007

Country	Number of holdings (1000)	Utilised agricultural area (1000 ha)	SGM (Mio €)	Total Labour force (1000 AWU)	Total Livestock (1000 LSU)
BE	48	1 374	4 049	66	3 788
BG	493	3 051	1 274	494	1 246
CZ	39	3 518	1 948	137	2 053
DK	45	2 663	4 291	56	4 582
DE	370	16 932	21 994	609	17 985
EE	23	907	214	32	313
IE	128	4 139	2 983	148	5 918
EL	860	4 076	7 399	569	2 627
ES	1 044	24 893	25 851	968	14 381
FR	527	27 477	33 910	805	22 544
IT	1 679	12 744	30 000	1 302	9 901
CY	40	146	385	26	247
LV	108	1 774	397	105	488
LT	230	2 649	681	180	1 031
LU	2	131	143	4	161
HU	626	4 229	2 439	403	2 409
MT	11	10	64	4	50
NL	77	1 914	10 245	165	6 415
AT	165	3 189	3 321	163	2 473
PL	2 391	15 477	10 407	2 263	11 118
PT	275	3 473	2 165	338	2 030
RO	3 931	13 753	4 548	2 205	6 042
SI	75	489	533	84	554
SK	69	1 937	596	91	747
FI	68	2 292	1 980	72	1 152
SE	73	3 118	2 152	65	1 785
UK	300	16 130	11 280	341	13 944
NO	50	1 032	2 104	56	1 268
CH	62	1 057	:	117	1 770
EU-27	13 700	172 485	185 251	11 697	135 982
EU-15	5 662	124 546	161 764	5 671	109 685
EU-12	8 038	47 939	23 487	6 026	26 297
EU 27 + NO + CH	13 812	174 574	187 355	11 870	139 020

Source: Eurostat — FSS ([ef_ov_kvaaesu](#))

Table 6: Key figures of the larger farms, 2007

Large farms	Number of holdings	Utilised agricultural area (1000 ha)	SGM (Mio €)	Total Labour force (1000 AWU)	Total Livestock (1000 LSU)
EU-27	86 125	34 486	21 170	449	13 063
% total EU-27 Farms	0.6%	20.0%	11.4%	3.8%	9.6%
EU-15	8 200	24 904	17 546	270	9 950
% total EU-15 farms	1.2%	20.0%	10.8%	4.8%	9.1%
EU-12	17 925	9 581	3 623	179	3 113
% total EU-12 Farms	0.2%	20.0%	15.4%	3.0%	11.8%

Source: Eurostat- FSS

METHODOLOGICAL NOTES:

The FSS 2007 was conducted in all 27 Member States, Norway and Switzerland. In Belgium, Luxembourg, the Netherlands, Finland, Sweden, the United Kingdom, Norway and Switzerland, the FSS was conducted as a census; in all other Member States it was conducted as a sample survey. Regulation (EEC) No 571/88 states that the surveys must cover agricultural holdings where the UAA is at least one hectare or, if under one hectare, holdings which produce a certain proportion for sale or whose production unit exceeds certain physical thresholds. The same Regulation also sets, regardless of the threshold, the coverage to 99% of the SGM.

Although the definition of an agricultural holding* is common to all countries, the thresholds that are applied by each country differ across Member States. This leads in the FSS to different coverage of small farms between countries. As these small farms contribute little to the total UAA in each country, the effect of this variance will be significant when comparing the number of farms, but not when comparing the UAA between Member States.

The size of an agricultural holding can be measured using several variables, such as the UAA, the economic output, the amount of livestock or even the labour force involved in the farm work. The

major advantage of using UAA as a measure for the size of holdings is that the UAA is a very simple concept (that can be easily understood) and stable (no major increases or decreases in the amount of UAA).

* 'Agricultural holding' or 'holding' means a single unit, both technically and economically, which has a single management and which produces agricultural products.

EU 27 — European Union of 27 Member States.

EU 15 — BE (Belgium); DK (Denmark); DE (Germany); IE (Ireland); EL (Greece); ES (Spain); FR (France); IT (Italy); LU (Luxembourg); NL (Netherlands); AT (Austria); PT (Portugal); FI (Finland); SE (Sweden); UK (United Kingdom).

EU 12 — BG (Bulgaria); CZ (Czech Republic); EE (Estonia); CY (Cyprus); LV (Latvia); LT (Lithuania); HU (Hungary); MT (Malta); PL (Poland); RO (Romania); SI (Slovenia); SK (Slovakia).

NO (Norway); CH (Switzerland).

Further information

Eurostat Website: <http://ec.europa.eu/eurostat>

Data on 'Farm Structure Survey'

<http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database>

Select 'Structure of agricultural holdings'

Further information about 'Agriculture statistics'

<http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/introduction>

Further information about the 'Agricultural Census 2010'

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Agricultural_census

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