Description of agricultural land market functioning in partner countries

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1. Introduction

As part of the IDEMA project, workpackage 8 (Land market in current and new Member States) is aimed at drawing a land market review to support modelling work carried out in workpackage 4 (AgriPoliS model improvement and adaptation to regional characteristics) and workpackage 9 (Improvements of existing ESIM sectoral model and country specific GE models).

Workpackage 8 includes two steps: i) a land market review whose aim is to assess broadly the way land markets are operating and allow the confirmation or rejection of basic assumptions of regional as well as sectoral and general equilibrium models; this was provided by the deliverable D02: "Agricultural land markets: main issues in the recent literature"; ii) a compilation of land market information (legal aspects and basic statistics) for the involved partner countries which will serve as an empirical background for the modelling work (specification and calibration) carried out in workpackages 4 and 9; this is the object of the present deliverable D09.

A questionnaire was sent to each partner, regarding several areas: agricultural structure, institutional and legal aspects, agricultural land market activity, overview and extent of factor market imperfections. In each area the information requested involved general qualitative information and specific quantitative data. This deliverable consists in the compilation of all information, qualitative and quantitative, provided by the partners. There are 8 countries concerned, including in the European Union (EU)-15, France, Germany, Italy, Sweden and the United Kingdom (UK), and 3 New Member States (NMS), the Czech Republic, Lithuania and Slovakia. The deliverable is structured as follows. Section 2 describes the agricultural structure in each country, currently and its evolution. In Section 3 information relating to institutional and legal aspects is provided. Section 4 consists in statistics regarding land market activity, presently and over the past decade. Factor market imperfections in each country are summarised in Section 5. Finally Section 6 concludes.

2. Agricultural structure

An overview of the evolution of the agricultural structure in each country is necessary to give some background information. Firstly the current structure is reviewed (figures from

2003 with few exceptions that are mentioned), then the evolution over the past decade (1993-2003) is described.

2.1. Current agricultural structure

a) Agriculture in the economy

Table 1 shows the importance of agriculture in each partner country in 2003, in terms of its contribution to the Gross Domestic Product (GDP), to the total employment and to the total area. Lithuania and Slovakia are the two countries where the share of agriculture in the GDP is still relatively high, respectively 6.2 and 4 percent. By contrast, the UK and Germany present the lowest shares, respectively 0.9 and 1.1 percent. The same countries are at the extremity of the ranking when it comes to farm labour: 17.8 percent of the total employment is on farms in Lithuania while the figure is 0.9 percent for the UK; the other countries presenting figures between 2 and 5 percent. The share of utilised agricultural area (UAA) in the total area is similar for all countries (between 40 percent for Lithuania and 64 percent for the UK) except for Sweden where the figure is less than 8 percent.

Table 1: Agriculture in the economy in 2003 in all countries

	Share of agriculture in GDP (%)	Share of farm labour in total employment (%)	Share of UAA in total area (%)
Czech Republic	2.8	4.5	47.5
France	2.6	4.1	54.5
Germany	1.1	2.4	48.7
Italy	2.5	4.4	51.1
Lithuania	6.2	17.8	40.4
Slovakia	4.0	4.4	46.5
Sweden	1.8	2.3	7.6
United Kingdom	0.9	0.9	66.9

Source: Eurostat

b) Land use

Table 2 presents the total area of each country in 2003, and the distribution in terms of land use. As mentioned earlier, with the exception of Sweden, whose UAA accounts for less than 8

percent of the total area, all countries have an UAA between 40 (Lithuania) and 64 (UK) percent of their total area. In opposite, Sweden presents the largest share of area used for forest activities (54 percent).

Table 2: Land use in 2003 in all countries

	Total area (ths ha)	UAA in total area (%)	Forest area in total area (%)	Other uses of total area (%)
Czech Republic	7,886.5	47.5	34.1	10.5
France	54,908.7	54.5	28.4	17.1
Germany	35,703.1	48.7	30.9	20.4
Italy	30,133.6	51.1	34.9	13.9
Lithuania	6,530.0	40.4	32.0	27.6
Slovakia	4,903.4	46.5	41.6	11.9
Sweden	4,509.5	7.6	54.4	38.0
United Kingdom	24,410.1	66.0	10.3	22.8

Source: Eurostat.

Note: Forest area in 2000 in Germany, in 1998 in the UK.

Table 3 details the use of land for agricultural activities in 2003. The UK is the only country where the share of UAA devoted to permanent pasture exceeded the share devoted to cereal, oilseed and protein crops (COP) (61 against 24 percent of the UAA). This reflects the numerous extensive livestock farms in Scotland and Wales. Italy and Lithuania had equal shares for both activities, while the other countries presented a larger share of UAA devoted to COP.

Vegetables, vineyard and fruits, and flowers and plants are only marginal activities in terms of land use, except in Italy where vineyard and fruits (in particular olive trees) account for 17.6 percent of the UAA. The largest share of set-aside area is found in Sweden (9 percent of the UAA) and the smallest in Slovakia (0.2 percent).

There is a clear relationship between the quality of the land, the use it is devoted to, the potential return from this land and its value and market price. Hence, the structure of agricultural land use may provide some indications as regards the price of agricultural land in

each partner country.[1] For instance, the higher share of UAA devoted to vineyard and fruits in Italy (and to a much lesser extent in France) is likely to raise the average price of agricultural land in this country. At reverse, the higher share of set-aside land in Sweden suggests that returns from farming are probably rather low on a significant share of agricultural land in this country, which is likely to contribute to reduce the Swedish average price of agricultural land.

c) Agricultural production

The agricultural production structure in the countries in 2003 is presented in Table 4, in particular the share of each output in the total agricultural production value. Crop output clearly accounts for the main part of the value of agricultural production in France, Italy and Lithuania, while livestock output is prevailing in the value of agricultural production in Slovakia and the UK. The other countries present similar contributions from crop and livestock outputs.

Within the crop outputs, cereals are the main contributors to the production value for all countries, except for Italy where vegetables, horticulture, vineyard and fruits are prevailing. Vineyard and fruits in France, and vegetables and horticulture in Lithuania and in the UK, contribute equally with cereals. As regard to the share of specific livestock outputs to the agricultural production value, there are three groups of countries: 1) the Czech Republic, Germany, Lithuania and Sweden mainly produce dairy outputs in terms of value; 2) France, Italy and the UK mainly produce dairy and beef outputs; 3) Slovakia also presents a large share of dairy outputs, but as well as outputs from pork production.

[1] Obviously, the use of the land is only one factor amongst many others that may have an influence on land price. Hence, the structure of agricultural land use can provide only rough indications on the compared levels of average prices of agricultural land in partner countries.

Table 3: Agricultural land use in 2003 in all countries

Land area devoted to (%):	Czech R.	France	Germany	Italy	Lithuania	Slovakia	Sweden	United K.
COP (including:) *	52.1	38.1	49.2	30.0	37.8	46.1	39.6	24.0
Cereals	39.7	30.3	40.2	27.5	34.2	35.8	36.6	19.0
Oilseeds	11.5	6.3	7.8	2.0	2.8	9.5	2.0	3.6
Protein crops	0.9	1.6	1.2	0.4	0.8	0.7	0.9	1.5
Forage (including:)	14.0	15.7	9.3	13.4	8.4	11.7	30.8	8.2
Maize forage	5.8	5.4	6.9	1.9	0.5	4.4	0.1	0.7
Other forage crops	2.2	1.5	1.3	5.5	5.5	5.6	1.2	0.0
Temporary pasture	6.0	8.9	1.1	6.0	2.4	1.7	29.5**	7.5
Permanent pasture	23.8	33.7	29.2	29.0	38.4	35.5	15.5	60.6
Vegetables (including:)	1.3	1.3	2.4	3.5	4.1	1.8	1.6	1.7
Potatoes	1.0	0.5	1.7	0.5	3.3	1.1	1.0	0.9
Other	0.3	0.8	0.7	3.0	0.8	0.7	0.6	0.8
Vineyard and fruit (including:)	0.9	3.7	1.2	17.6	1.3	1.3	0.1	0.2
Vineyard	0.3	2.9	0.6	5.7	0.0	0.6	0.0	0.0
Fruit	0.6	0.8	0.6	11.9	1.3	0.8	0.1	0.2
Flowers and plants	0.03	0.07	0.04	0.06	0.01	0.01	0.02	0.09
Set-aside	4.8	4.5	5.5	4.2	6.1	0.2	8.8	3.9

Source: Eurostat.

*: figures from 2000 for the UK; **: ley for grass silage or hay and temporary pasture (the latter accounting for 5.3% of the Swedish UAA)

Table 4: Agricultural production structure in 2003 in all countries

	Czech R.	France	Germany	Italy	Lithuania	Slovakia	Sweden	United K.
Total value of agricultural production (millions euros)	2,877.5	62,446.3	40,211.8	43,028.4	1,197.8	1,492.2	4,553.1	22,751.7
Share of crop output (%) (including:)	47.9	57.2	49.6	63.5	58.3	42.2	46.5	39.5
Cereals	20.5	15.4	17.3	10.1	20.7	17.5	18.1	14.8
Industrials crops	11.5	6.1	6.6	2.5	6.6	7.5	4.2	6.8
Forage crops	5.7	8.6	8.6	4.2	9.7	3.4	12.7	1.1
Vegetables and horticulture	7.2	11.7	11.6	20.2	19.0	9.3	10.6	14.8
Vineyard and fruits	2.6	14.8	4.9	24.7	0.4	3.3	0.9	1.8
Other	0.3	0.5	0.7	1.2	1.9	1.3	0.2	0.2
Share of livestock output (%) (including:)	50.6	38.1	46.9	33.3	40.9	53.5	50.8	56.4
Bovine	5.4	13.0	7.9	8.6	3.7	7.5	10.8	16.8
Milk and dairy	21.1	12.1	20.6	10.0	17.9	16.2	23.9	16.3
Pork	14.5	4.3	12.2	5.6	10.2	15.4	7.9	4.3
Poultry and eggs	9.4	6.1	4.5	6.2	6.8	10.3	4.5	10.4
Other	0.2	2.6	1.7	2.9	2.2	4.1	3.7	8.6

Source: Eurostat

d) Farm structures

Farm structures are detailed in Tables 5 and 6. The total number of farms and general statistics for all farms in 2003 in all countries are presented in Table 5. Despite not being the country with the largest UAA in hectares, Italy has the greatest number of farms, more than three times the following country (France). Hence farms are on average very small in Italy, as confirmed by the average farm area (9.3 ha). This can be explained by the large part of vegetable and fruit farms in this country. The largest farms on average are found in the Czech Republic (114 ha), due to the existence of very large corporate farms (see later). The smallest farms on average are in Italy and Lithuania. For the majority of countries there is no big difference between the average total farm area and the average UAA. The exception is Sweden, where half of the total area of the farms on average is used for other activities than agriculture (mainly forest).

The statistics about labour use show that farms in Italy, Lithuania and the UK use the least labour on average, while farms in the Czech Republic use the most. However, this statistic might capture the average farm size. When labour use is measured per hectare of land, labour use is equivalent in all countries except for Italy which presents the greatest use. Vine and fruit productions are indeed relatively labour intensive activities.

Table 6 gives further details about the farm structure for individual farms and other legal forms. In all countries individual farms are the prevailing form. The share of these farms in the total farm number is greater than 92 percent for all countries, except in France where it is much less (78 percent). A large number of farms in France are partnerships.

However, despite their predominance in the number of farms, individual farms do not farm the majority of land, as the other farms have a much larger average UAA, in particular in the Czech Republic and Slovakia (930 and 1,100 ha).

Table 5: Number of farms and average statistics for all farms in 2003 in all countries

	Number of farms	Total farm area (ha)	Average UAA (ha)	Average labour per farm (AWU/year)	Average labour per ha (AWU/year)
Czech Rep.	45,770	113.8	79.3	3.6	0.046
France	614,000	48.2	45.3	1.5	0.033
Germany	412,300	45.7	41.2	1.7	0.041
Italy	1,963,820	9.3	6.7	0.8	0.113
Lithuania	272,110	10.4	9.2	0.8	0.089
Slovakia	71,740	47.9	29.8	1.6	0.055
Sweden	67,890	99.6	46.1	1.0	0.023
United K.	280,630	60.3	57.4	1.3	0.022

Source: Eurostat

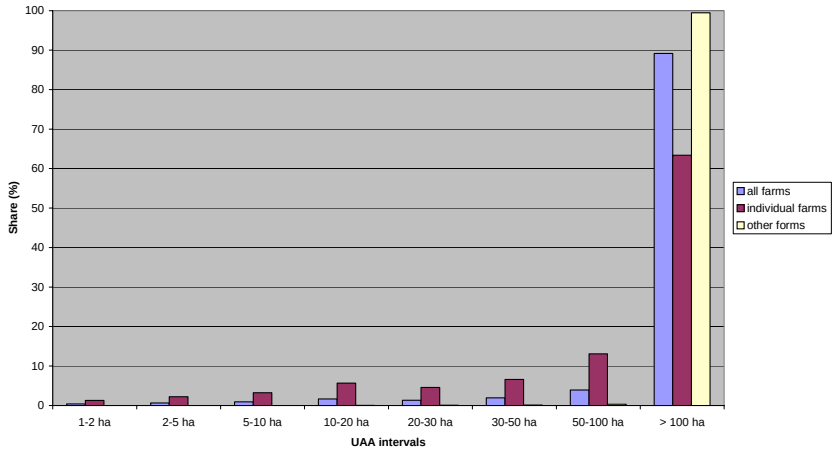
Table 6: Share of farms and average area for individual farms and other forms in 2003

		Share in number of all farms (%)	Average total farm area (ha)	Average UAA (ha)
Czech Rep.	Individual farms	93.9	26.1	24.0
	Other forms	6.1	1,461.2	931.5
France	Individual farms	78.3	33.6	31.0
	Other forms	21.7	101.0	96.9
Germany	Individual farms	94.3	34.2	30.1
	Other forms	5.7	234.6	223.2
Italy	Individual farms	99.3	7.4	5.9
	Other forms	0.7	285.8	113.4
Lithuania	Individual farms	99.8	9.3	8.1
	Other forms	0.2	497.5	468.4
Slovakia	Individual farms	97.7	4.7	4.5
	Other forms	2.3	1,870.8	1,098.2
Sweden	Individual farms	92.7	91.9	40.5
	Other forms	7.3	215.7	116.8
United K.	Individual farms	96.4	55.2	52.7
	Other forms	3.6	234.2	217.3

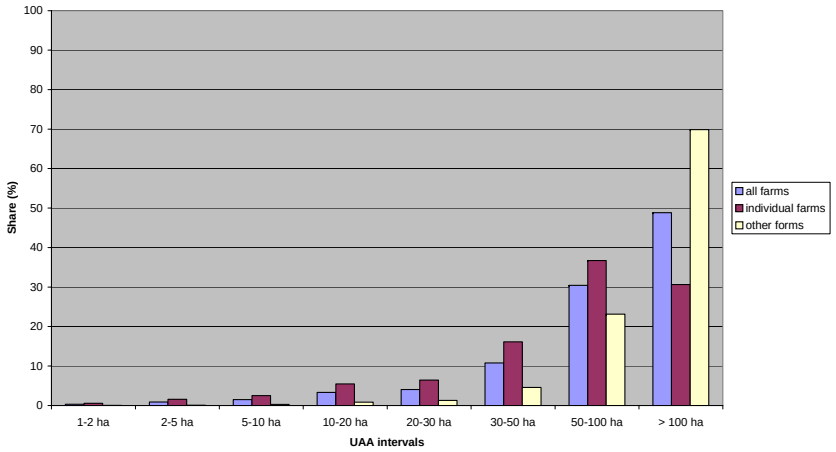
Source: Eurostat

Graphs 1 to 8 show the farm distribution for each country in 2003, according to several size intervals. Exact figures are given in Table A4 in Appendix. In all countries the majority of farms are larger than 100 ha. However, in France, Germany, Sweden and the UK a large share of farms are also within the interval 50-100 ha. In Italy and Lithuania farms are relatively spread between all intervals. But in Slovakia and the Czech Republic very few farms are in the intervals less than 100 ha. In all countries, while individual farms appear in every intervals, other legal forms are present mainly (or almost exclusively for the NMS) in the largest interval.

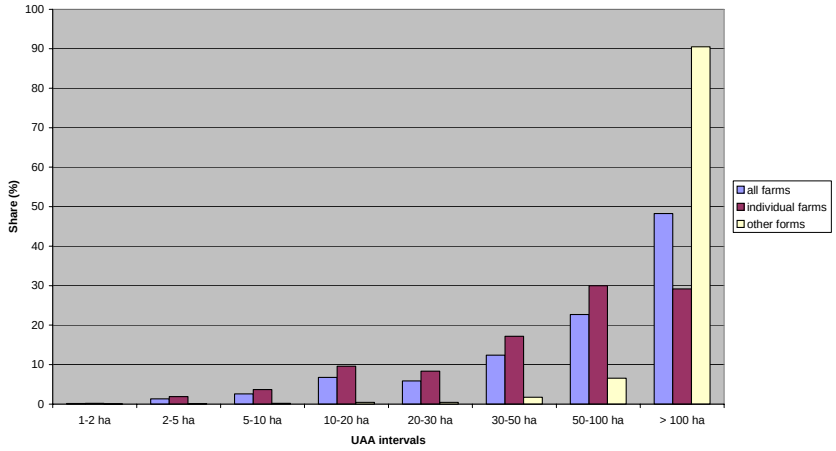
Graph 1: Distribution of farms according to their UAA in 2003 in the Czech Republic



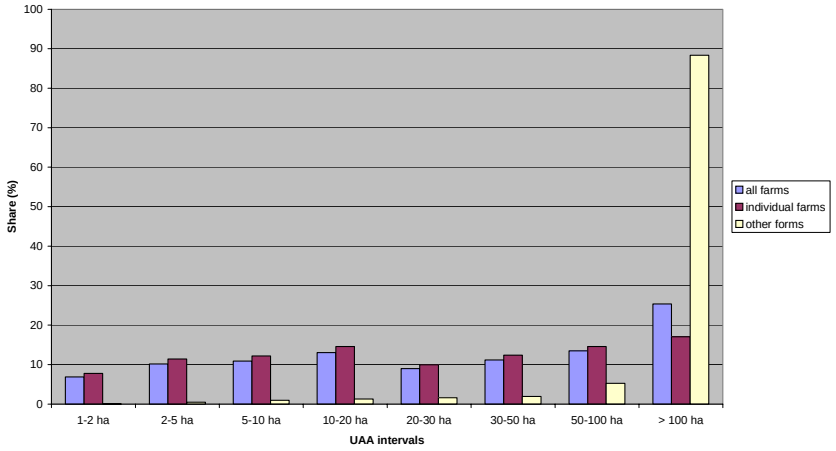
Graph 2: Distribution of farms according to their UAA in 2003 in France



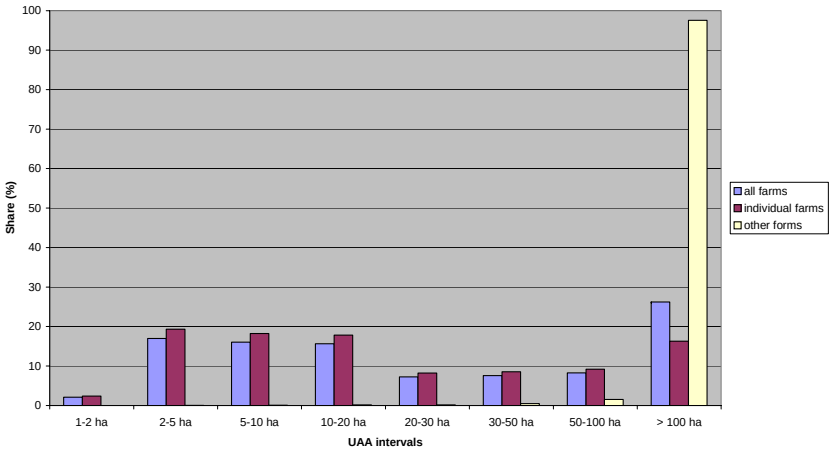
Graph 3: Distribution of farms according to their UAA in 2003 in Germany



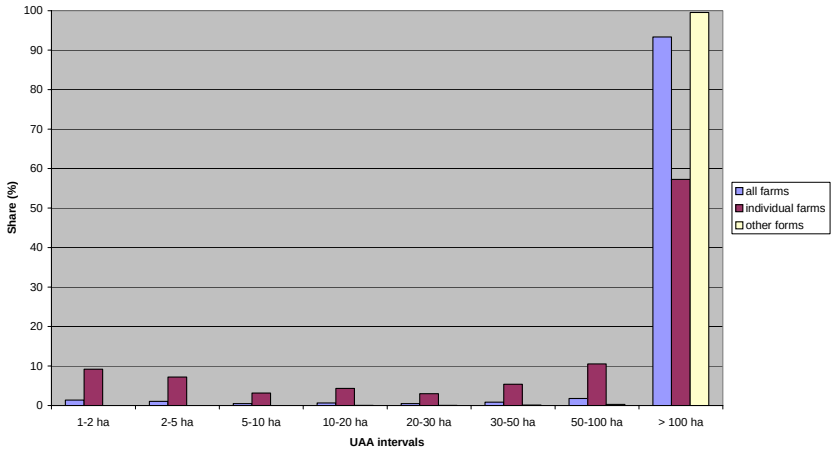
Graph 4: Distribution of farms according to their UAA in 2003 in Italy



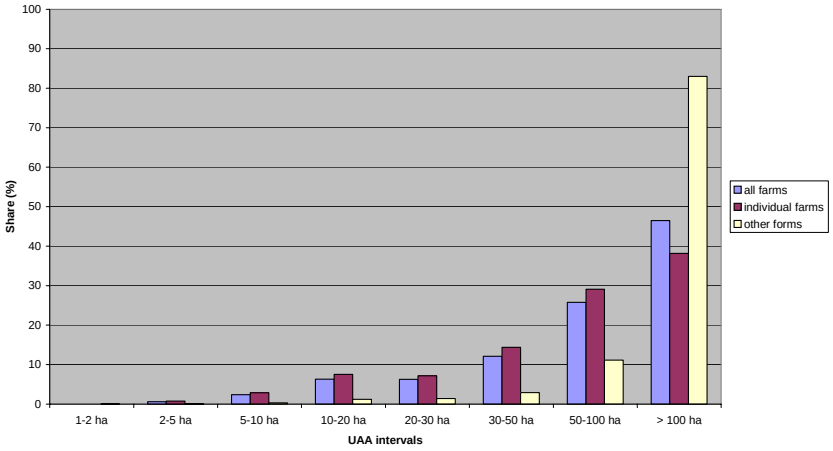
Graph 5: Distribution of farms according to their UAA in 2003 in Lithuania



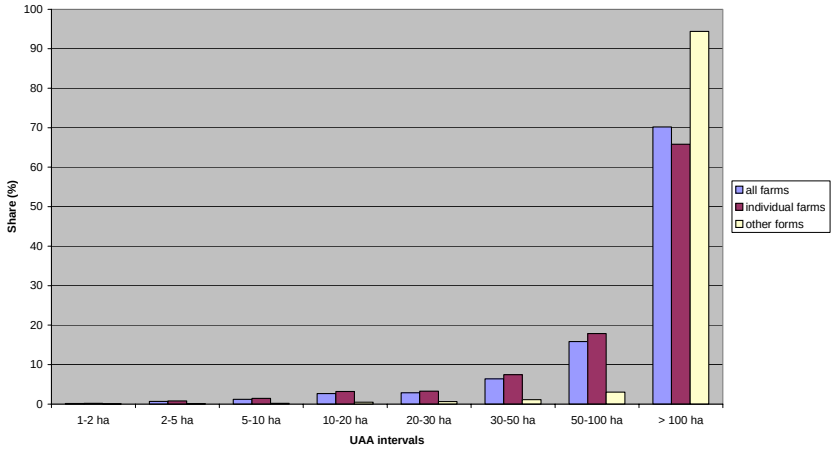
Graph 6: Distribution of farms according to their UAA in 2003 in Slovakia



Graph 7: Distribution of farms according to their UAA in 2003 in Sweden



Graph 8: Distribution of farms according to their UAA in 2003 in the United Kingdom



e) Subsistence farming

Subsistence farming is a concept widely applied to transitional countries, where lots of farms produce mainly for their own needs.

In 2000, in the Czech Republic, among the 53,500 individual farms there were 18,000 farms (33.6%) identified as semi-subsistence farms by the Agrocensus. Households in this country are classified as semi-subsistence farms if they are not registered as professional farms, they have at least 1 ha of agricultural land and they meet at least one of the following criteria: at least 0.15 ha of intensive crops (vineyard, intensive orchard, field vegetables, horticulture), or at least 0.03 ha of greenhouses, or at least 1 head of beef cattle, or at least 2 heads of pigs, or at least 4 heads of sheep or goats, or at least 50 heads of poultry, or at least 100 heads of rabbits or fur animals.

Statistics Lithuania numbered 96,613 subsistence farms in 2003 in this country, that is to say 34.4% of the farms. Farms are classified as subsistence if they have at least 1 ha of agricultural land and produce only for their own consumption. Such farms are accounted for in figures reported in Tables 5 and 6.

In Slovakia the 2003 Farm Structural Survey identified 63,528 subsistence farms. The number in 2001 was almost similar. This amounts to 88.6% of the 71,737 Slovak farms. Farms are categorised as subsistence if they have the minimum size of operations for being considered as a farm, but are not officially registered as such. These subsistence farms are accounted for in the Eurostat figures used in Tables 5 and 6, as these figures come from the Structural Survey on the whole population. When the subsistence farms are not taken into account, the number of individual (commercial) farms is 6,550 and their average UAA is 42 ha, which makes the average UAA of all commercial farms (individual and corporate) 272 ha (Slovak Statistical Office, Green Report).

f) Performances

As shown by Table 7 in terms of cereal and wheat yields France, Germany and, higher than all them, the UK recorded the best performance in 2003. These countries were also among the best performers in terms of milk yield, but far behind Sweden. Countries were quite close in terms of beef and pork slaughter weights, with the exception of Lithuania exhibiting a very low slaughter weight for beef and Italy where the slaughter weight for pork is much higher

than in other countries. [2] As for chicken yield, France seems to be the best performer but for many countries data are unavailable. Overall France and the UK seem to be the best performers and Lithuania the worst.

Table 7: Farm performances in 2003; averages in all countries

	Crop yield (tonne/ha)		Milk yield (kg/cow/year)	Meat slaughter weight (kg/head)		
	All cereals	Wheat	Milk	Beef	Pork	Poultry
Czech Rep.	3.9	4.1	5,781.1	289.2 *	94.0	n.a.
France	6.1	6.2	6,064.7	308.9	88.1	1.91
Germany	5.8	6.5	6,578.2	267.7	93.4	n.a.
Italy	4.3	2.7	5,619.5	286.2	117.0	1.65
Lithuania	3.0	3.6	3,991.7	130.8	72.0	1.60
Slovakia	3.1	3.0	5,180.3	251.9	95.0	n.a.
Sweden	4.7	5.6	8,058.0	289.0	87.0	1.35
United K.	7.0	7.7	6,194.2 *	307.6	76.4	n.a.

Source: Eurostat. n.a.: not available. *: figure from 2000

g) Summary

The Czech Republic is mainly characterised by the existence of very large (corporate) farms, which rent most of their land. The country produces crop and livestock output nearly in the same proportion. Among livestock production, dairy outputs account for the largest share.

France counts a large proportion of partnership farms. The main production is crop. French farmers are among the best performers of the eight countries, in terms of crop and meat yields.

Germany has one of the lowest contributions of agriculture to GDP. The country produces mainly livestock output, and particularly dairy outputs. German farmers have a good crop performance.

Italy presents a very large number of very small individual farms, labour intensive, producing vine and fruits.

[2] Average meat slaughter weights are poor indicators of performances since they may even well reveal differences in habits or traditions characterising the various countries (e.g., the length of chicken fattening may be different from one country to another leading to different average slaughter weights). Growth or feed conversion indices would have been much better indicators. Unfortunately such indices were not available for most of partner countries.

Lithuania has the largest contribution of agriculture to GDP and total employment. Crop is the main production but performances in crop as well as livestock products are quite poor.

Slovakia also presents a large contribution of agriculture to GDP. The country counts very large (corporate) farms, producing mainly livestock outputs, in particular pork.

Sweden has the smallest UAA, with a large share of the country being used by forest. Dairy production using temporary pastures is predominant. Half of the farms' area is used for non-agricultural activities. The country presents the larger share of UAA put into set-aside.

The UK has the lowest contribution of agriculture to GDP and total employment. Livestock output (dairy and beef) remains important in the total agricultural production value. These enterprises use a large area of permanent pasture. UK farms are among the best performers of the 8 countries.

2.2. Evolution of the agricultural structure in the past decade

The evolution of the agricultural structure is investigated from 1993, or more recently when full statistics are not available. Evolutions are presented on graphs to ease the understanding. Some detailed figures are given in Appendix.

a) Agriculture in the economy

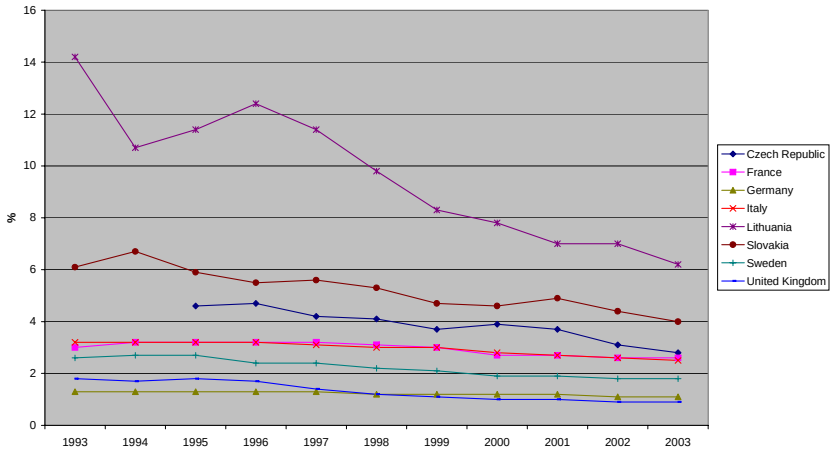
As shown by Graph 9 (and Table A1 in Appendix), in the past decade the share of agriculture in GDP decreased slowly in EU-15 countries, while the decrease was more pronounced in the three NMS, in particular in Lithuania, whose share dropped from 14 to 6 percent. On Graph 10 the evolution of farm labour in total employment is pictured (based on Table A2 in Appendix). The observed trend of the evolution of farm labour in total employment is similar to the one of the share of agriculture in GDP: slightly decreasing for EU-15 countries and a more pronounced decrease for NMS, except for Lithuania where the available 4-year statistics do not allow to draw a conclusion.

Graph 11 (and Table A3 in Appendix) shows that the share of UAA in total area is relatively stable for all EU-15 countries, with a very slight continuous decrease. By contrast, the NMS experienced a major decline in the share in 2000 (-10 percent in the Czech Republic and Slovakia, -15 percent in Lithuania). This suggests that in all partner countries, some agricultural land is normally converted to non-agricultural uses. This conversion seems to be

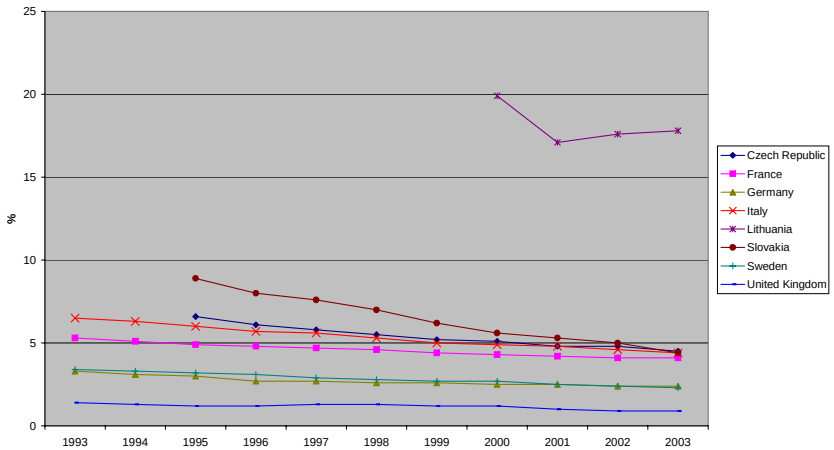
rather limited in the old Member States, and could correspond to agricultural land acquired by the state or local authorities in the framework of development planning schemes or environmental protection planning schemes. Conversion of agricultural land to non-agricultural uses appears as relatively more important in the NMS, especially in recent years. This could indicate that legal restrictions on agricultural land use are less strict in the NMS so that it is easier for a land owner to convert his/her land to non-agricultural uses (cf. Section 3).[3]

[3] However, one must be very cautious regarding this evolution of the share of UAA in NMS. The decrease in the share of UAA can be observed only in recent years. Hence it is too early to conclude that this share is experiencing a decreasing trend. Furthermore this decrease could even result from changes in the way statistics are reported. For instance, the decrease observed in Slovakia between 2000 and 2001 could result from a change implemented by statistical offices in the way UAA is measured: until 2000, the Slovak UAA was measured on the basis of land registry sources while since 2001 UAA is measured on the basis of the general farm census. A similar situation with similar consequences can be advocated for the Czech Republic: before 2002 total agricultural land was measured on the basis of cadastral registers; since 2002, UAA is measured on the basis of LPIS (Land Parcel Identification System); this implies a significant change in the definition of the agricultural land area statistical series.

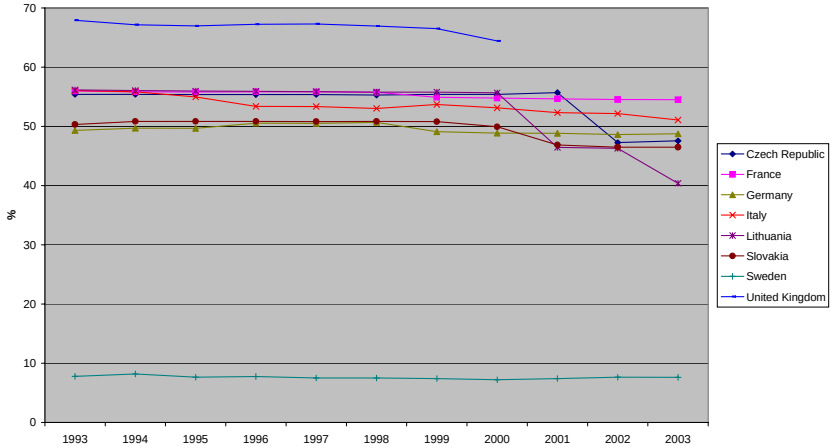
Graph 9: Evolution of the share of agriculture in GDP in all countries



Graph 10: Evolution of the share of farm labour in total employment in all countries



Graph 11: Evolution of the share of UAA in total area in all countries

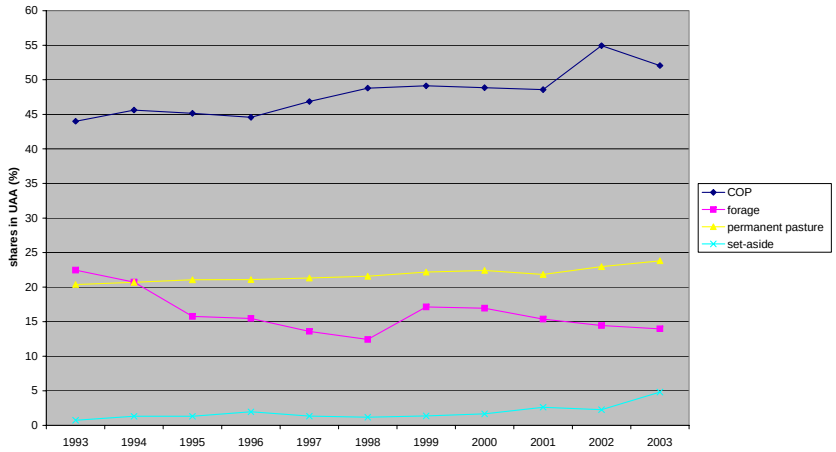


Sources: Eurostat

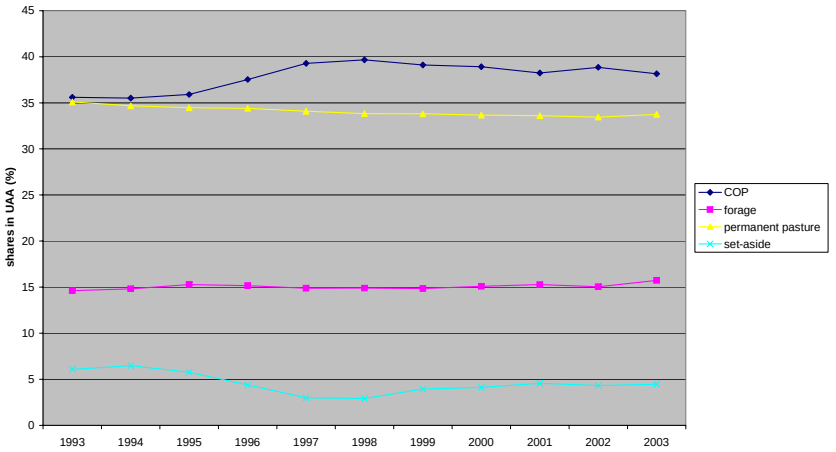
b) Land use

Graphs 12 to 19 present the evolution of the shares of land used for COP, forage, permanent, pasture and set-aside for each country. Except for the UK where all land shares are pretty stable, all countries experienced an increase in the share of land used for COP. In Lithuania this increase was very sharp between 2000 and 2001, and contrasted with a dramatic decrease in the share used for forage at the same period. Although the positive trend is smooth in Germany over most of the period, it is broken in 1995 by a sudden drop, but the trend is back to normal as soon as 1996. This drop might be due to a decrease in sunflower/rapeseed area at this period, following a bad harvest year in 1994.

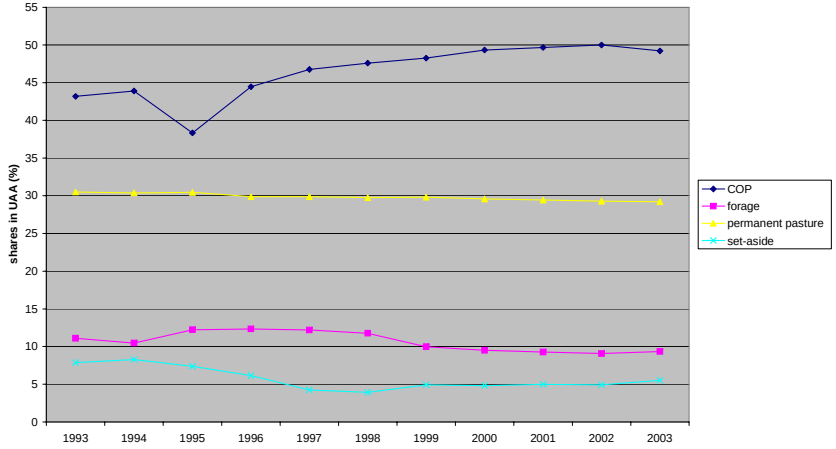
Graph 12: Evolution of agricultural land use in the Czech Republic



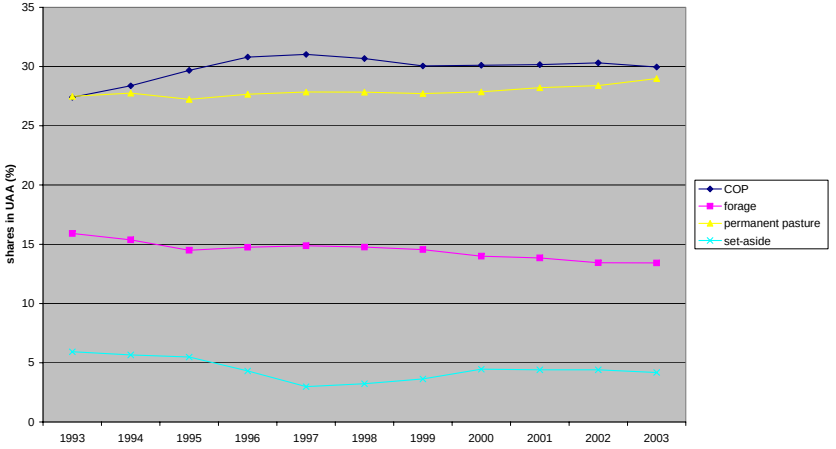
Graph 13: Evolution of agricultural land use in France



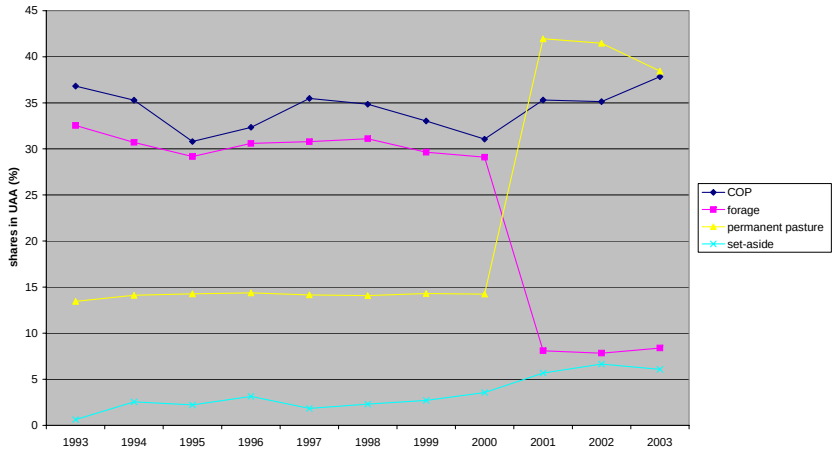
Graph 14: Evolution of agricultural land use in Germany



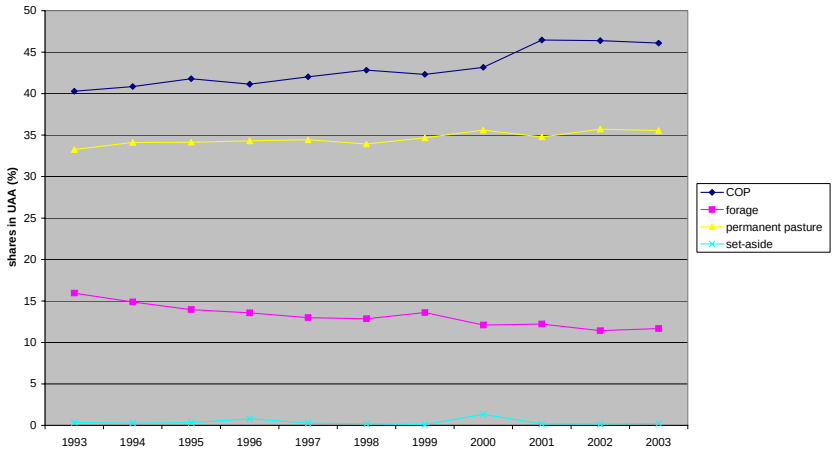
Graph 15: Evolution of agricultural land use in Italy



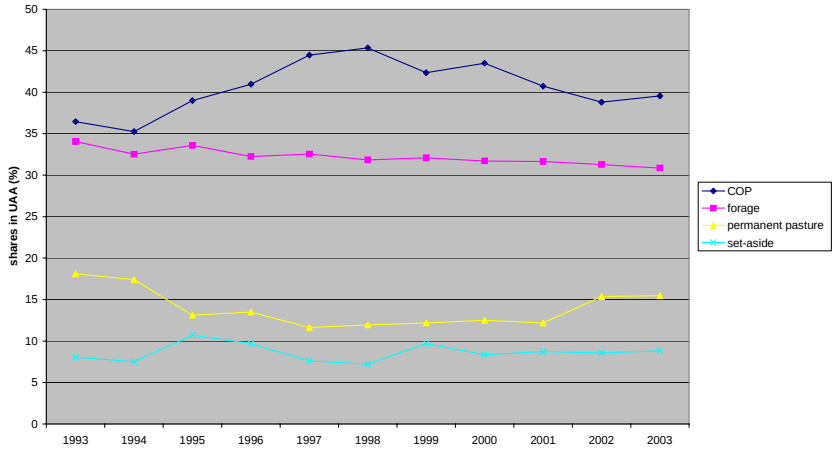
Graph 16: Evolution of agricultural land use in Lithuania



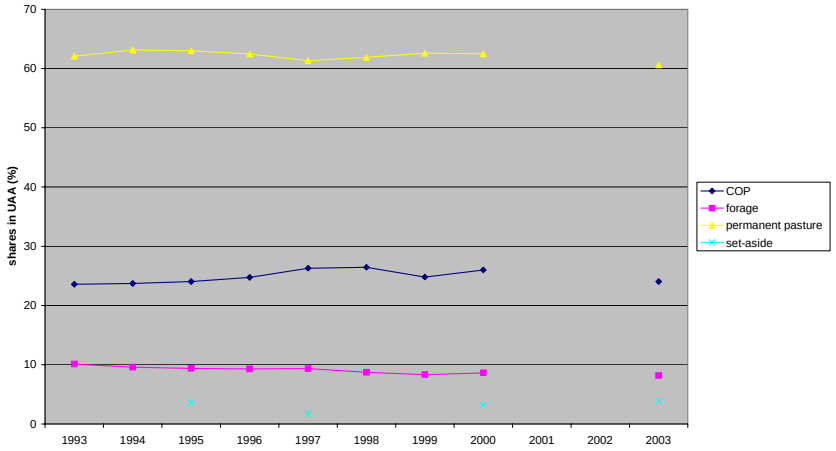
Graph 17: Evolution of agricultural land use in Slovakia



Graph 18: Evolution of agricultural land use in Sweden



Graph 19: Evolution of agricultural land use in the United Kingdom



c) Agricultural production

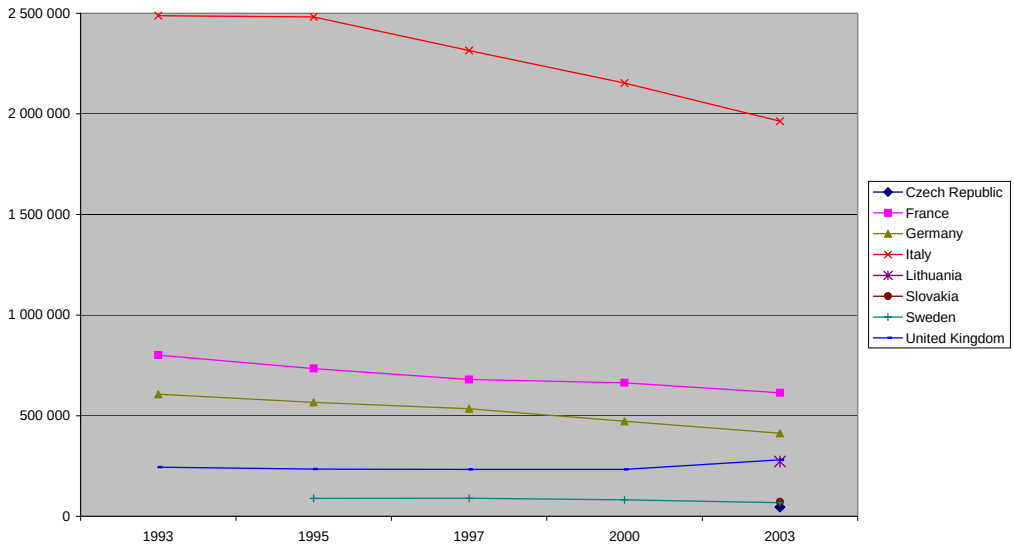
The shares of crop and livestock output in value of total agricultural output have been relatively stable in all countries over the past decade.

d) Farm structures

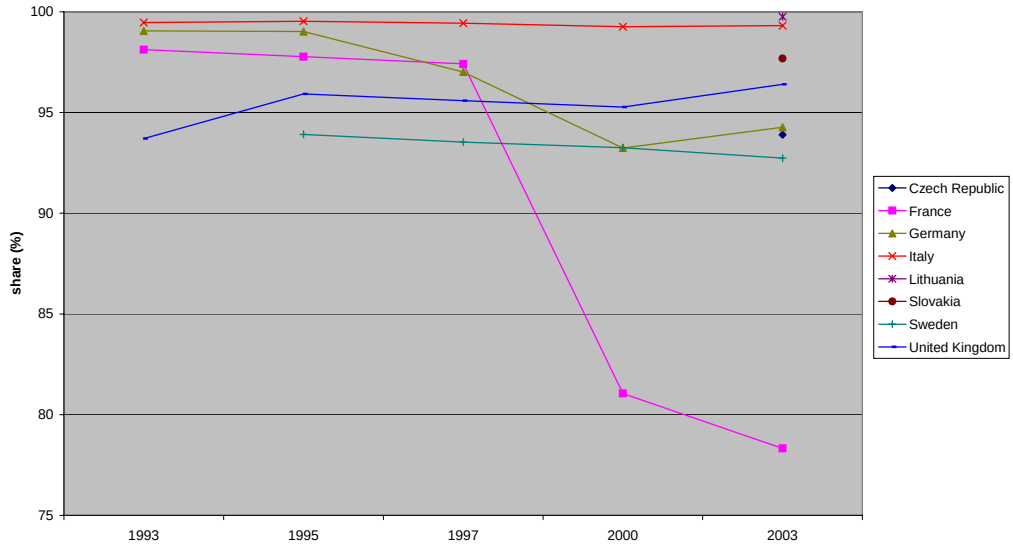
The evolution of the farm structures is presented only for the EU-15 countries. Too many changes in the definitions and the record of statistics have been made in the NMS to give a clear picture.

As shown by Graph 20 the number of farms has slightly decreased in France, Germany and Sweden, and sharply decreased in Italy from 1995. It has slightly increased in the UK, though this may in part be due to definitional changes in the UK statistics which took place in 2000 (up to this date minor holdings, i.e. less than 6 ha were excluded from the statistics, but included from this date onwards). Graph 21 shows that the share of individual farms in all farms has decreased in Germany and in Sweden (more slightly), and also particularly in France.

Graph 20: Evolution of the number of farms in all countries

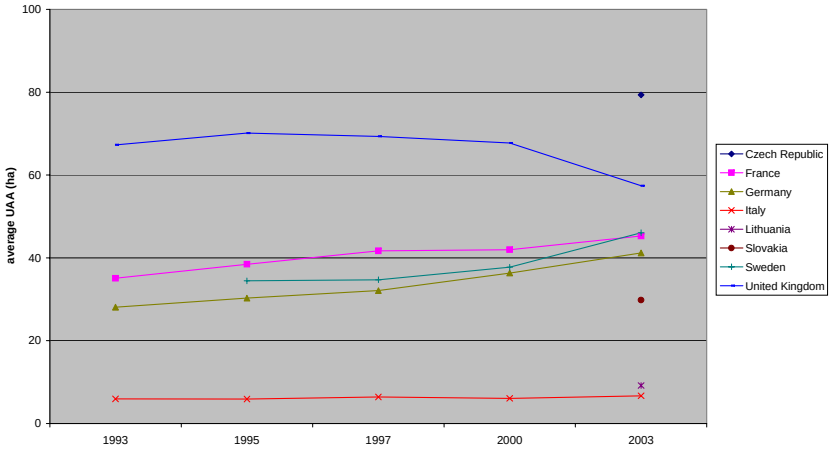


Graph 21: Evolution of the share of individual farms in the total number of farms in all countries

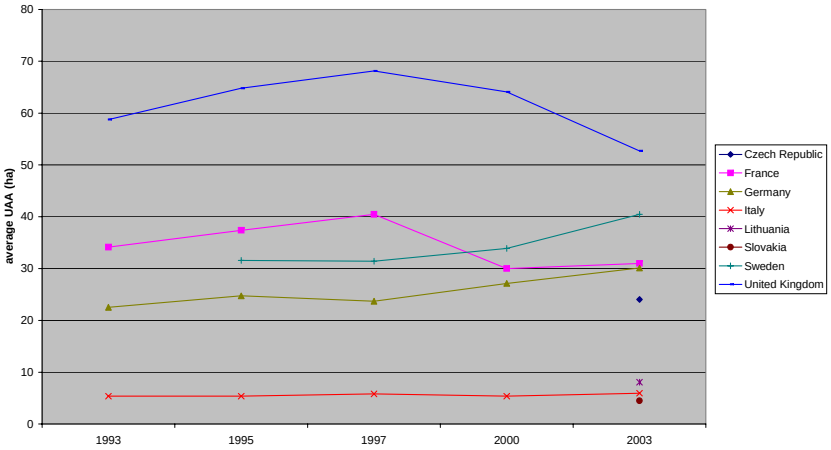


Graph 22 shows that France, Germany and Sweden experienced the same increasing trend in the average UAA per farm, while in Italy the average UAA has remained fairly stable and in the UK the average UAA has decreased. Comparing the legal forms reveals that from 1997 onwards, the average UAA of individual farms decreased in France and the UK, but increased in Germany and Sweden, while it was stable in Italy (Graph 23). As for the other legal type farms, their average UAA decreased in Germany, but remained stable in the other EU-15 countries (Graph 24).

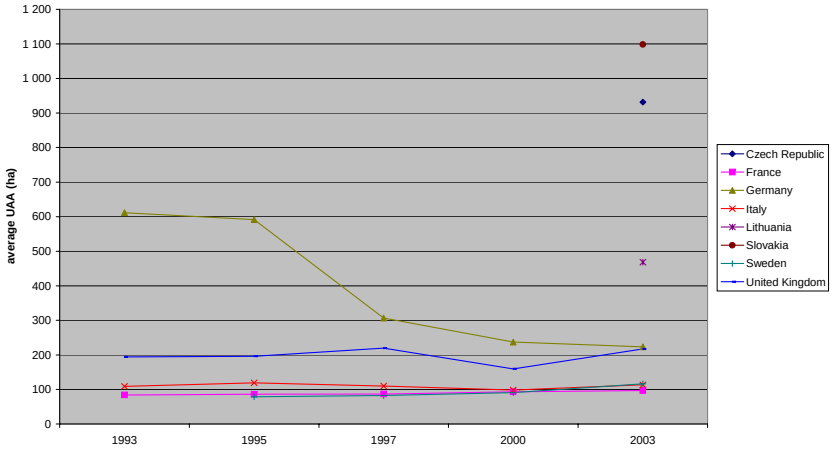
Graph 22: Evolution of the average UAA per farm in all countries



Graph 23: Evolution of the average UAA per individual farm in all countries



Graph 24: Evolution of the average UAA per farm with other legal form in all countries



Overall, Graphs 20 to 22 indicate that farm structures are evolving similarly in France, Germany and Sweden: the number of farms is decreasing continuously while the average UAA size of remaining farms is normally raising; the proportion of individual farms in the total number of farms is decreasing (this last trend is particularly important in France where the individual legal form is increasingly loosing importance to the benefit of partnership forms. This evolution may be related to the increasing share of rented land in the French agricultural sector, cf. Section 4). The same Graphs suggest reverse trends in the UK, with a slightly increasing number of farms, a decreasing average UAA size and a raising share of individual farms. The situation in Italy is specific and somewhat surprising: while the number of farms has decreased sharply over the last decade, the average UAA size of farms has remained fairly stable during the same period.

e) Performances

In all countries crop yields have remained relatively stable (despite yearly fluctuations) and milk yields have increased. As for meat slaughter weights, they are fairly stable in all countries, except for a peak in 2001 for poultry meat in France.

f) Summary

In all 8 countries the share of agriculture in GDP, of farm labour in total employment and of UAA in total area have decreased over the past decade. The observed decrease was slight in EU-15 countries and more pronounced in NMS.

In all 8 countries, the land used for COP production has increased over the past decade.

Farm structures have evolved similarly in France, Germany and Sweden: the number of farms has decreased continuously while the average UAA size of farms has risen; the proportion of individual farms in the total number of farms has decreased.

The UK has experienced reverse trends over the past decade: a slightly increasing number of farms, a decreasing average UAA size and a raising share of individual farms, though this may in part be due to some definitional changes which were introduced in this country in 2000.

3. Agricultural land market environment: Institutional and legal aspects

The objective of this section is to describe the institutional and legal framework within which agricultural land markets operate in the partner countries. Entering into the details of national laws and provisions regarding all aspects of agricultural land ownership, management, transmission and transaction in all countries was not possible practically and out of the scope of workpackage 8. Hence it was decided to focus this part of the questionnaire sent to partners on the institutional and legal elements that are recognised as key factors regarding the functioning of land sale and lease markets.

In the following, we split these key institutional and legal elements into two broad categories. Agricultural land markets operate through participants trading (selling/renting out or buying/renting in) plots of land. The first category of institutional and legal elements involves those which are necessary for such market operations to take place while the second category relates to those which may impact the number of transactions or the level of activity on agricultural land markets.

Regarding the first category, it is widely recognised that a necessary condition for functioning land markets is that property rights are clearly defined, guaranteed and soundly administrated (e.g., Dale and Baldwin, 2000). Definition and administration of land property rights directly refers to land registration and cadastre on the one hand and land valuation on the other hand. Hence, the first paragraph synthesises information provided by partners regarding both these aspects.

The second category is more heterogeneous since it comprises all institutional and legal elements that potentially affect both the number of market participants and/or the incentives to trade (sell/rent out or buy/rent in) agricultural land in each country. This involves many factors among which, principally: inheritance legal rules, the existence of pre-emptive rights, the existence of legal restrictions on land ownership, the existence of legal restrictions on agricultural land use and the characteristics of agricultural land rental contracts.[4] The second paragraph thus gives an overview of information gathered from partners regarding all these aspects.

[4] Obviously, the availability of capital and credit is also an important factor as regards to the level of activity on agricultural land markets. Hence, institutional and legal elements relating to credit (in particular mortgage legislation) could be considered as well in this second category. The same applies to the national systems of taxation and fees attached to agricultural land transactions. However, such elements may also be considered as sources of imperfections on, respectively, credit and land markets. Thus, these aspects are examined as part of section 5 which is concerned with the analysis of imperfections on factor markets.

3.1. Definition and administration of property rights

A basic description of how the legal relationship between land plots and their owners is officially documented in partner countries is provided first. Then, the land valuation procedures in force in each country are detailed. Finally a special attention is paid to the current state of the land restitution process in the 3 considered NMS.

a) Land registration and cadastre

As shown by synthesis Table 8, all 8 partner countries have legally clearly defined and guaranteed property rights. All countries have implemented similar systems of official recording in order to support and manage property right titles. In the 8 countries cadastral maps have been established that provide field boundary data and, most often, information on the quality or use of land (e.g., land class or land "administrative values"), which are used as a basis for taxation purposes. Then, each cadastral unit is recorded in land registers together with information about the ownership structure.

In all countries, official recording is carried out by the state administration. In some countries both the cadastral maps and land registers are integrated into one register and managed by a single authority (e.g., France, Germany and the 3 NMS), while in others land registers and cadastral maps are maintained by separate authorities (e.g., Sweden and UK). However, in all countries, there are close relationships between cadastral services and land registration services and increased integration of cadastral maps and land registers.

One must notice here that although the 3 NMS have implemented similar institutions and systems of land registration than the 4 EU-15 Member States, they face specific problems, mainly due to the incompleteness of the land restitution process on the one hand and to the removal of field boundaries during the communist period, on the other hand. Therefore, in all 3 NMS, there is still agricultural land without owner and thus unclear property rights do remain (see below the point on land restitution process). In addition, the Czech Republic and Lithuania have not completed there cadastral maps yet, since a number of cadastral units still have no clear boundaries.

Table 8: Registration and administration of property rights in partner countries

	France	Germany	Italy	Sweden	UK	Czech Rep.	Lithuania	Slovakia
Property rights clearly defined	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sound legal land registration	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cadastral maps	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Institution in charge of:								
- land registers	Cadastre	Grund-buchämter	Agenzia del Territorio	Inskrivningsmyndigheten	Land registry	Czech Office for Surveying, Mapping and Cadastre	Valstybés Imoné Registru Centras	Urad Geodezi, Kartografie a Katastra
- cadastral maps	Cadastre	Kataster-ämter	Cadastre	Lant-mäteriet	Ordnance survey			
Specific problems	None	None	None	None	None	Missing owners Missing boundaries	Missing owners Missing boundaries	Missing owners

b) Land valuation

While land registration aims at defining physically land property rights, land valuation has at its main objective to assign a monetary value to these property rights. Hence, practically land valuation procedures establish a connection between land property rights and the capital value of the corresponding asset.

There are two main distinct ways used to estimate the capital value of a land plot. The first one is productivity (or income)-based. In that case, the valuation procedure consists in calculating the potential productivity of each land plot in order to derive its income potential. Usually, this implies to establish an official system of classification of land quality, where land classes (from very good soils to very bad soils) are determined according to soil characteristics and agronomic conditions. Then, in a second stage, a productivity score is estimated for each land class. Finally both these information allow for calculating the potential productivity of each land plot, which is used as the basis for estimating its income

potential. The second valuation method is market-based. It consists in evaluating the fair market value of each land plot on the basis of relevant observed buying/selling prices.

In Western European countries, the first method was historically designed and implemented mainly for land taxation purposes. In Central and Eastern European countries, the first method was also used during the communist period. Obviously, the main purpose there was not to value land plots but rather to estimate their potential productivity as a basis for land allocation purposes. Hence, synthesis Table 9 shows that 6 partner countries have inherited the first valuation procedure which, most often, is still in force: the 3 EU-15 Member States applying land tax systems (France, Germany and Italy) and the 3 NMS.

In theory, if all markets were functioning perfectly and if the income potential of each land plot was assessed and discounted correctly, both methods should arrive at similar values. In practice this is rarely the case. In the 3 EU-15 Member States, the productivity-based land valuation procedures were designed several decades ago and, most often, no significant updating has been undertaken recently. In the same time, if the present value of income stream is probably a key determinant of agricultural land buying/selling prices, other factors such as access, utilities, distance to a city, etc. are increasingly significant determinants of agricultural land market prices. Furthermore, changing CAP measures (in particular direct payments and quota assignment) are often not considered in productivity-based valuation procedures. While it is widely recognised that such policy changes actually have an impact on land buying/selling prices. Hence, productivity-based land values have progressively become "virtual" values totally disconnected from fair market values in the 3 old Member States (this is the case for instance of cadastral values –valeur locative cadastrale- in France, book values –Buchwert- in Germany and cadastral values in Italy), while they are usually lower than market values in the 3 NMS cf. Appendix 2).

As a result, in the 6 previously mentioned partner countries, at least, two values of agricultural land do exist, the first one issued from the productivity-based valuation procedure (that we will refer to as the "administrative" price), the second one from the market-based procedure. In all 6 countries (except Lithuania), the "administrative" price is still used as a basis for taxation purposes. In the 3 EU-15 Member States however, the value of land referred to for transaction, mortgage or compensation purposes (in case of expropriation for example) is the fair market value. In the 3 NMS, due to underdeveloped activity of agricultural land markets (see Section 4 below), there is very few information available on land buying/selling prices. Therefore, land market price recording has not developed yet and market-based valuation is

only at its initial stage. Consequently “administrative” prices remain widely used for both administrative and commercial purposes.

In Sweden and the UK, where there is no tax on agricultural land, the land valuation is market-based only.

Table 9: Land valuation in partner countries

	Land valuation process		Institution in charge of land valuation
	productivity-based	market-based	
France	- Valeur locative cadastrale - Disconnected and lower from market prices (no significant update since the 60's) - Used for land taxation purposes	-Yes - Land sale prices recorded systematically	- valeurs locatives cadastrales: Ministry of finance - market values: cadastre and notaries
Germany	- Einheitswert (basis for book values: Buchwert)[1] - Disconnected and lower from market prices (no significant update since the 60's) - Used for land taxation purposes	-Yes - Land sale prices recorded	- market values: Agricultural office (Amt für Landwirtschaft) and local committee of experts (Gutachterausschuss) - administrative prices (for Eastern Germany only): calculated and published annually by Ministry of Finance
Italy	- Cadastral value - Disconnected and lower from market prices - Used for land taxation purposes[2]	-Yes[3]	- cadastral values: ISTAT - market values : INEA
Sweden	No	-Yes - Information on land transaction recorded systematically	Inskrivnings-myndigheten (land registry)
UK	No	-Yes - Land sale prices recorded systematically (but delays in notifications)	Valuation Office Agency Land valuation may be needed for compulsory purchase decisions or other asset valuation purposes. State-employed Regional District Valuers carry out this function
Czech Rep.	- Administrative price (calculated from the "Bonited Soil Ecological Unit" (BPEJ) scheme and computational formulaes of BPEJ's productivity values) - Usually lower than market prices - Used for land taxation purposes	- Not yet but gradually developing[4]	-Administrative prices calculated and published annually by the Ministry of Finance
Lithuania	- Normative price (calculated from a productivity point system - soil classification system – location coefficient system) - Usually lower than market prices - Used for taxation purposes	- Yes -Average land market value for 413 value zones (calculated from market prices)	- Normative prices: Centre of Registers - Average land market values: Centre of Registers
Slovakia	- Administrative price (calculated from "soil-quality ecological unit" scheme and computational formulaes of annual rent level) - Usually lower than market prices - Used for land taxation purposes	- Not yet but gradually developping[5]	- Administrative prices: experts from agricultural research institutions and lay assessors

1. There is also the earning-capacity value (Ertragswert), which is used for inheritance purposes.

2 Also used for legal/administrative matters are the so-called "Agricultural average values", estimated by a commission on a sub-regional level (these are productivity-based values, which are most often different from market values).

3 INEA (National institute of Agricultural Economics) records land market prices through annual interviews to land traders.

4 Since 1993, a sample survey of buying/selling prices of agricultural land has been put in place by VUZE (Research Institute of Agricultural Economics, Prague, partner 7 of IDEMA).

5 Monitoring and evaluation of agricultural land sale prices for selected representative areas has been put in place by VUEPP (Research Institute of Agricultural and Food Economics, Bratislava, partner 9 of IDEMA) and the Research Institute of Geodesy and Cartography (Urad Geodezi a Kartografie, Bratislava) in co-operation with the cadastral administration offices of the six selected surveyed areas.

c) Current state of land restitution in the 3 new Member States

Because it was a political priority and an economic necessity, the land restitution process in the Czech Republic, Lithuania and Slovakia has received high support during the whole transition period and has progressed a lot. As a result, it is currently in its last stages in all 3 countries.

However, the Czech Republic, Lithuania and Slovakia still face some problems that contribute to delay the definitive completion of land restitution. Problems are similar in the 3 countries and relate to the 3 following aspects:

i) Missing owners: there is still agricultural land without owner, and this ultimate share of unclear property rights is very difficult to deal with.

ii) Missing parcels: because field boundaries were frequently removed during the communist period, the restitution process required to recover the right boundaries of plots in order to get a precise physical definition of the corresponding property. Unfortunately it has not been always possible to recover these right boundaries.

iii) Very important fragmentation of agricultural land and of agricultural land ownership that has resulted from the restitution process.

Table 10 below reports data that aim to give an idea of the extent of these problems as far as agricultural land is concerned in each country. As suggested by Table 10, the land restitution process in all 3 countries is still not definitely completed since they all exhibit a remaining share of agricultural land without owner. The problem of missing owners is not very important in the Czech Republic with only 2% of agricultural land without owner. It is more

significant in Lithuania (13% of agricultural land without owner) and particularly in Slovakia where nearly one quarter of agricultural land is still without owner.

There are various reasons explaining this remaining share of agricultural land without owners. In the Czech Republic, though they could not dispose of their ownership rights, citizens remained owners of their land during the communist period. Hence, after the Velvet Revolution, land was restored to former owners. However, at that time some of these owners could have died without heirs, or could have emigrated and could not been recovered. It is also the case that because of unclear inheritance procedures, heirs of former owners have been lost and cannot be recovered, or some plots have been forgotten so that they are still recorded as owned by died owners.[5] Lithuania also face similar problems of lost owners however, the main obstacle to the completion of the restitution process is the option, given to former owners and their heirs, to choose the site of restitution. Until now, the date for claiming the desired land parcel has been prolonged for several times. Furthermore, there may be too many claims focusing on few sites with high economic potential. Therefore, it is likely that the restitution process for the last claims will take a long time because it is still no clear for which area the claimants will decide.

[5] At this stage, one may also mention the specific problem in the Czech Republic regarding the area close to the German borders (Sudety). In this area, a restitution and consolidation process was implemented after the 2nd World War. But, this process remained uncompleted with a significant proportion of incomplete, unclear or false records in cadastral registers. This situation is progressively solved but the process to recover owners, heirs, plots and the property relationships between individuals and plots is difficult and very long.

Table 10: Current state of land restitution and remaining problems in the 3 new Member States

	Czech Rep.	Lithuania	Slovakia
Missing Owners - Total agricultural land area (1,000 ha)	4,269	3,960	2,236
- State agricultural land area (1,000 ha)	690 (16%)	1000 (25%)	116 (5%)
- Agricultural land area with private owner (1,000 ha)	3,500 (82%)	2460 (62%)	1,605 (72%)
- Agricultural land area without owner (1,000 ha)	80 (2%)	500 (13%)	515 (23%)
Missing parcels - extent of missing boundaries (% share of area with lacking boundaries)	70% [1]-92% [2]	n.a.	n.a.
Fragmentation - Number of registered land plots (million) - Average size of a plot (ha) - Number of agricultural land owners (million) - Number of owners per registered land plot - Average size area per owner (ha)	 6.5 0.66 3-3.5 2-4 1.2-1.4	 0.54 4 0.40 0.7 5.7	 12.5 0.45 2 12-15 1.1

1 Some parcels have clear boundaries in cadastral maps but these boundaries are not physically present on corresponding parcels. Such parcels are recorded on new updated digital or digitalised cadastral maps. One estimate that such cadastral maps cover about 30% of area. In most cases these parcels are not physically accessible because they are part of land blocks and therefore owners of these parcels are strictly limited with withdrawing from current landusers. The 70% remaining area cover parcels that are recorded in old cadastral maps that were valid until 1951 (when mandatory recording in cadastre was stopped) and partly updated. Such parcels are not fully described physically, nor are the related ownership relationships.

2 Finally, it can be considered that only parcels after land consolidation process have clear boundaries both in cadastral maps and physically in terrain and at the same time are fully physically accessible. These parcels make about 8 % of total agricultural area.

Source: Czech Republic, data for 2003 provided by Czech partners; Lithuania, data for 2003 from National Land Service under the Ministry of Agriculture; Slovakia, Report Slovak Land Fund (2002) and World Bank (2002) cited in Bandlerova and Marisova (2003).

In both the Czech Republic and Slovakia, agricultural land without owner is managed by Land Funds that were created in the course of the restitution process. Czech and Slovak Land Funds are also in charge of the State-owned agricultural land. Usually, the land under the supervision of Land Funds is leased out. In both countries however, Land Funds have been authorised to start selling the State-owned agricultural land. In the Czech Republic for instance, nearly 121,000 ha of State-owned agricultural land have been transferred (117,000 ha sold and 4,000 ha transferred free of charge to municipalities and public universities) over the period 1999-2003, including roughly 72,000 ha for the only year 2003. According to

experts, if this recent trend is maintained, it can be expected that the sell-off of State-owned agricultural land will be nearly completed by 2009 (Nemec, 2005). Slovakia has started more recently to sell State-owned agricultural land. A new "Act on state owned land privatisation" was planned to enter into force on January 2005, with the objective of selling all current State-owned agricultural land over 3 years, primarily to Slovak farmers. Regarding agricultural land without owner, some provisions are in force in Slovakia stating that from the 1st of September 2005, farmland with unknown owner registered in the real estate cadastre for at least one year will be transferred to state ownership and managed as State-owned land by the Slovak Land Fund (Hudecova and Csókásová, 2004).

The situation is different in Lithuania where agricultural land without owner and State-owned agricultural land are administered by 10 County Administrations and 60 Municipalities/Cities. According to legislation, land without owner may be leased out while State-owned land can be leased out or sold. The lease decisions are proposed by municipalities and have to be approved by County Administrations. The revenue from lease accrues to municipalities' budgets. Sale is organised by County Administrations and the revenue from sale is transferred to these County Administrations (except in cases of sales for non-agricultural use, where the sale payment is thus divided between the municipality and the County). As pointed out by the final report of the Twinning Light Project Lithuania-Germany (Daugaliene and Kauers, 2004), this rather complex organisation may raise some difficulties and result in a lengthy and costly process of privatisation of State-owned agricultural land. As an example, this final report mentions the potential conflict of interest between municipalities and County Administrations due to the division of revenue between lease and sales (and between sales for agricultural and non-agricultural uses): even if sale is giving the priority, municipalities will remain interested in generating revenue by land lease. As far as agricultural land without owner is concerned, already mentioned is the option to choose the site of restitution given to former owners and their heirs. This option and even more the absence of a strict deadline for claiming the desired land parcel not only is clearly an obstacle to the completion of the restitution process but also contributes to freeze all decisions regarding land without owner since the amount of land and the specific parcels that will finally remain without owner are still unknown.

Table 10 also illustrates the extent of agricultural land and land ownership fragmentation that has resulted from the restitution process in all 3 NMS. One may notice that land fragmentation itself is not necessarily an impediment to the development of competitive farm

structures. Actually, the key factor here is not the number of plots and their average size, but the way these plots are or can be spatially organised. To this regard, the degree of land ownership fragmentation is an important element, the way land sale and lease markets are operating as well. One can easily imagine that the conjunction of land and land ownership fragmentation (numerous small plots owned by numerous land owners) contributes to make the spatial organisation of plots complex. In addition, even if land sale and lease markets are operating well, land ownership fragmentation makes it more difficult land selling or leasing transactions that would allow spatial re-organisation of plots and farms to reach sizes that are suitable for competitive production. Obviously, poorly functioning land sale and lease markets make it even more difficult such a spatial re-organisation and farm size adjustment.

Table 10 suggests that agricultural land and land ownership fragmentation is not as important in the Czech Republic and Lithuania than in Slovakia. In particular, land ownership appears as significantly more concentrated in the Czech Republic and Lithuania (for instance, there is in average 0.7 owner per registered plot in Lithuania, and 2 to 4 in the Czech Republic as compared to 12 to 15 in Slovakia). Table 10 shows that fragmentation of agricultural land and of land ownership is particularly high in Slovakia. It is too early to conclude about the potential links between this high degree of land and land ownership fragmentation, the level of activity on agricultural land sale and lease markets and farm restructuring in Slovakia relative to other partner countries. This point will be tackled later on when we will have got a clear picture of the level of activity on agricultural land markets in partner countries (cf. Section 4.). At this stage however, it may be interesting to bring together information reported in Table 10 and average sizes of farms currently observed in the 3 NMS. Figures reported in the previous section show that the average size of farms is 79.3 ha of UAA in the Czech Republic (24 ha for individual farms and 931.5 ha for other forms), 29.8 ha in Slovakia (4.5 ha for individual farms and 1,098.2 ha for other forms) and 9.2 ha in Lithuania (8.1 ha for individual farms and 468.4 ha for other forms). Hence, without proving any causality relationship, one may observe that the lower degree of agricultural land and land ownership fragmentation observed in the Czech Republic comes with significantly larger average farm size. At reverse, the higher degree of fragmentation observed in Slovakia is accompanied by particularly small average size of individual farms. This could suggest that high land and land ownership fragmentation could have contributed to slowing down farm restructuring and the process of farm enlargement (especially for individual farms) in Slovakia.

In order to support this farm restructuring and farm enlargement movement, all 3 NMS have implemented land consolidation programmes. Such programmes are directed at facilitating the creation of competitive agricultural production conditions by enabling farmers to adjust their parcels in order to get farms with fewer, larger and better shaped parcels and to expand the size of their holdings. Land consolidation programmes hence involve both reparcelling (changing boundaries) and modifying the land ownership pattern (exchange of plots between farmers or owners) or the existing leasing arrangements. Usually, land consolidation plans are implemented under the leadership of the state, for given territories. Such plans are not coercive but voluntary-based: they create the conditions for facilitating voluntary agreements between farmers and landowners. As a result, land consolidation is a complex and long process since it requires active participation of farmers and landowners and a number of agreements between farmers, between farmers and landowners and between landowners. To this regards, one may underline that joined ownership of land (as it is the case in Slovakia for instance) makes the land consolidation process even longer and more complicated.

All 3 NMS have implemented land consolidation projects, with as part of the land consolidation planning process, the possibility of privatising free State-owned land. In the Czech Republic the land consolidation process has been launched in 1991. There are 2 types of process currently in force: simple land consolidation (which covers only parts of a cadastral unit and whose main aim is to clarify and consolidate ownership relationships) and complex land consolidation (which covers a whole cadastral unit and whose aim is the total reorganisation of ownership relationships in view of improving farming condition and competitiveness and/or for environmental purposes). Simple land consolidation projects cover about 150,000 ha while complex land consolidation projects have been completed for nearly 192,000 ha in 493 cadastral units. These both types of land consolidation process have been completed on about 8.1 % of total agricultural land till the end of 2004 and are in progress for 9 additional percent of total agricultural land.[6] In Lithuania 3 pilot projects have been implemented since 2001, in co-operation with the Danish Directorate for Food, Fisheries and Agro-business. The first project for instance covered 392 ha, 19 landowners participated and 86 ha changed owner. As a result of the second pilot project, 63 landowners participated and 224 ha changed owner (Daugaliene, 2004). Lithuania is currently defining the guidelines for a

[6] Land consolidation is progressing very slowly because it is a complex and expensive process. Land consolidation programmes are benefiting from 33.47 mil. € in the frame of the Operational programme over the period 2004-2006. It is expected that this financial support will allow to complete land consolidation on 225,000 ha i.e. on 5 % of total agricultural area.

large scale land consolidation programme. This programme will benefit from a 2.2 million euros budget over 2005-2006 (75% from the EU Structural Funds and 25% from the national budget). In Slovakia, land consolidation projects covered an area of about 123,000 ha in 109 cadastral regions in 2004. This area accounted for 2.4% of the national area recognised as necessitating land consolidation plans (Hudecova and Csókásová, 2004).

3.2. Other key elements of the institutional and legal structures

This paragraph focuses on several institutional and legal elements that potentially affect both the number of market participants and/or the incentives to trade (sell/rent out or buy/rent in) agricultural land. The following elements have been retained: inheritance legal rules, the existence of pre-emptive rights, the existence of legal restrictions on land ownership, the existence of legal restrictions on agricultural land use and the characteristics of agricultural land rental contracts.[7] For each element, main legal provisions in force in partner countries are described and compared. Then, the way these provisions may affect agricultural land market activity is highlighted.

This paragraph closes with a specific point devoted to the role of the SAFERs (Sociétés d'Aménagement Foncier et d'Etablissement Rural) in France. As private bodies with public service missions, SAFERs are important players on the French agricultural land market. Such institutions do not exist in other partner countries, hence we thought interesting to examine this French specific feature, which may be related to the specific situation of France as compared to other considered old Member States, in terms of selling and renting prices of agricultural land (cf. Section 4.).

a) Inheritance legal rules

Briefly, there are two broad types of inheritance laws: full testamentary freedom vs. mandatory transfer to rightful heirs. Full testamentary freedom means that the owner can designate totally freely who she/he wants to leave her/his property and other assets to and decide how she/he wants to bequeath them. In other words, there are no legal rules of

[7] There are agricultural land taxation systems in force in all partner countries but Sweden and the UK. Therefore, agricultural land taxation was also retained as a legal element that potentially affects land market activity. However, these agricultural land tax systems were too complex and it was not possible to describe them briefly. In addition, due to this complexity and missing information it was difficult to compare such taxation systems across concerned partner countries.

inheritance and the owner is given full freedom regarding her/his heirs and the share of her/his property and other assets she/he wants to bequeath each of them. On the other hand, mandatory transfer to rightful heirs means that heirs are designated by law as well as the share of the property and other assets they are entitled to. Hence, in this second case, there are strict legal rules of inheritance and the owner is not free to choose her/his heirs, nor their respective share of the inheritance.

If both systems co-exist in nearly all countries, usually one of them is chosen as the basic principle of the national inheritance law. More specifically, in countries where the inheritance law relies on the full testamentary freedom, the owner keeps the possibility not to draft a testimony. In that case, the transfer to rightful heirs applies. At reverse, in countries where the basic principle of the inheritance law is the mandatory transfer to rightful heirs, the owner most often can make a testimony in order to designate a specific heir. But in that case, the share of her/his property and other assets she/he is allowed to bequeath to this specific heir is limited since usually a minimum share is reserved to legal heirs (for instance, in Sweden half of the property/assets is reserved to rightful heirs, the rest can be transferred through a free testimony).

Table 11 shows that the inheritance law rather relies on the full testamentary freedom scheme in the UK and Lithuania. In other partner countries, inheritance law rather relates to the system of the mandatory transfer to rightful heirs. In all these countries, legal heirs are always relatives, from the closest (most often widow/widower/spouse and children) to the most distant ones. And, most often, the property and other assets to be inherited are split first between the widow/widower/spouse and children and then equally between children.

Obviously, legislations that are actually applied in each country are far more complex than the brief description provided above. Specifically, in countries where the inheritance law is based on the mandatory transfer to rightful heirs, there are usually a number of provisions that make the inheritance legal rules less strict and provide the owner with a certain room of manoeuvre to favour one heir over the others. It is not possible here to review all provisions that can be used for that purpose since it would imply to enter into the details of national legislations of each partner country. What is important to note however is that, even if provisions do exist that give the owner some more freedom to decide how to bequeath her/his property and other assets, the fact remains that legal heirs are immutable and most often such provisions only allow to change, to a certain extent, the share that accrues to one heir or the other.

The main impact of the inheritance legal rules that are in force in one country lies in their effects in terms of property fragmentation. To this regards, the full testamentary freedom scheme and the system of mandatory transfer to rightful heirs may have totally different consequences. Let's focus on farms and estates, if the owner is free to choose both her/his heirs and the share she/he wants to bequeath to each of them, she/he will be able to limit land fragmentation and the dismantling of the farm. At reverse, if the inheritance rules imply that the farm must be split equally between children for example, it is likely that the farm will finally be partitioned. In other words, systems of mandatory transfer to rightful heirs are likely to contribute to ownership rights and land fragmentation.

Limiting land fragmentation and avoiding farm dismantling are main reasons explaining the existence of provisions giving the owner some more freedom to favour one heir (usually the one who will continue farming) over the others. As already said, such provisions are numerous and Table 11 only reports some important provisions or mechanisms, emphasised by partners, that are aimed at limiting land fragmentation and farm dismantling.

Table 11: Main inheritance legal rules and taxes in partner countries

	Inheritance law basic principle	Provisions or other mechanisms aimed at limiting land fragmentation	Main inheritance taxes
France	Mandatory transfer to rightful heirs *(equal shares to children, only since recently the widow/widower/spouse is considered in the sharing out)*	Pre-emptive right on agricultural land given to the heir(s) who continue(s) farming: compensation to be given to other heirs, based on market value.	- tax free allowance (76000€ between spouses; 46000€ between parents and children; lower for other relatives); - progressive tax from 5% to 40% of the value of the inherited property/assets[1].
Germany	Mandatory transfer to rightful heirs	- Historically, birthright in the Northern and Eastern part of Germany. - Nowadays, advantage given to the heir(s) who continue(s) farming as regards agricultural land: compensation to be given to other heirs not calculated on the fair market value but on lower administrative values (book value – Buchwerte-in some federal states, earning-capacity value in others)	- tax free allowance (for parents, spouses and children 256 000€ if the farm is part of business assets; 205 000 € if the farm is part of private assets; lower for other relatives) - progressive tax from 7% to 50% of the value of the inherited property/assets
Italy	Mandatory transfer to rightful heirs *(sharing out between widow/widower/spouse and children, equal shares to children)*	Pre-emptive right on agricultural land given to the heir(s) who continue(s) farming: compensation to be given to other heirs, based on market values	tax removed in 2001
Sweden	Mandatory transfer to rightful heirs *(spouses inherit each other, then equal shares to children)*	None	None

UK	Full testamentary freedom	None	Inheritance tax is normally at 40% of the value of the transfer above £265,000. Agricultural land is exempt. Business assets may also be exempt
Czech Rep.	Mandatory transfer to rightful heirs *(sharing out between widow/widower/spouse and children)*	None	Heirs are divided into 3 groups: - heirs in direct line and spouse: tax removed since 1998. - other relatives: progressive tax from 5% to 12%. - others (non-relatives) persons: progressive tax from 7% to 40%.
Lithuania	Full testamentary freedom	Pre-emptive right on the farm and agricultural land given to the heir who has worked most on the farm and wants to continue farming. Compensation to other heirs (based on market values) can be spread over 10 years max; mandatory mortgage on the whole real estate of the considered heir. Pre-emptive right to other heirs if the farm or agricultural land is sold before 10 years and/or before such heirs have received the whole compensation	- Tax free allowance (for close relatives, 41 407€ for other relatives and non-relatives) - progressive tax from 5% to 10% of the value of the inherited property/assets
Slovakia	Mandatory transfer to rightful heirs *(1/2 to the widow/widower/spouse; 1/2 to children, equally divided)*	Sharing out of parcels allowed up to a lower bound of 2,000 m^2	None

1. Partial tax exemption (up to 75% of their value if this value is lower than 76,000€, 50% for value beyond) for inherited agricultural land under long term rental contract and shares of GFA (Groupement foncier agricole).

The second important element regarding inheritance rules and their potential effects in terms of land fragmentation and farm dismantling is the inheritance tax system. High taxes on inheritance are likely to force heirs to sell their inherited estate in order to be able to pay the tax. This will not automatically lead to land fragmentation and farm dismantling. However, one guesses that such situations are likely to complicate arrangements among heirs for the farm and the land to remain as a whole. Table 11 shows that the situation regarding inheritance taxes are contrasted among partner countries, ranging from no tax at all such as in Italy, Sweden, Slovakia and the UK to rather high taxes such as in France and Germany.

Deriving clear insights from the above analysis is somewhat perilous since we would need a much deeper analysis of the overall national inheritance and related legislations to be able to predict their potential impact in terms of land fragmentation and farm dismantling in each country. Nevertheless, it is interesting to note that on the basis on inheritance legal rules,

partner countries reveal contrasted situations, from strong regulation such as in France to total *"laissez-faire"* such as in the UK (which used to have a tradition of primogeniture - transferring the whole of the land asset only to the eldest son). As explained above, the British inheritance rules involving full testamentary freedom and no inheritance taxes may act as to avoid land fragmentation and farm dismantling, while the French legislation based on mandatory transfer to rightful heirs and implying rather high inheritance taxes is likely to play the reverse role. From a long run perspective, both types of legislation are likely to impact differently the land and farm consolidation process. Even if it is not possible to isolate the impact of inheritance legal rules from other institutional and market factors to this regards, it remains a fact that British farms are in average significantly larger than French farms as shown in Section 2 (cf. Table 6: 52.7 ha UAA and 217.3 ha UAA in average in 2003 for respectively individual farms and other legal forms in the UK vs. 30.1 ha and 96.9 in France).

b) Pre-emptive rights

A pre-emptive right is a priority given (usually by law) to an individual or an institution to buy a property. As regards agricultural land, there are various situations where pre-emptive rights apply in partner countries. Three main types of pre-emptive rights may be distinguished:

- The first one has already been mentioned in the previous point. This is the right of pre-emption in inheritance processes that may be given to the heir(s) who want(s) to continue farming.
- The second one relates to the selling of agricultural land: a right of pre-emption may be given to one buyer over the others either because he/she is the tenant of the sold parcel, or because he/she is the neighbouring farmer of the sold parcel or, in case the sold parcel is jointly owned, he/she is a co-owner.
- The third one, different in nature, usually concerns not only agricultural land but all property and estate selling. This is the right of pre-emption hold by the state and/or municipalities. In a lot of countries, the notification to the state/municipality for it decides whether it uses its right of pre-emption constitutes one step in the process of selling any kind of property. States/municipalities may use their pre-emption right for different reasons including: road and rail development, environmental protection purposes (preservation of sensitive areas for example), as part of development

planning schemes established most often by municipalities, in view of housing development or creation of recreational activities for example, etc.

Both first types of pre-emptive rights have as their main objective to help for farm and land consolidation. While the third one is rather aimed at facilitating the implementation of local development or environmental protection plans established by the state or municipalities. Regarding agricultural land sale markets, the main impact of pre-emptive rights, whatever their underlying objective, is to limit the diversity and potentially the number of market participants. Both first types of pre-emptive rights for instance are likely to contribute to restrict potential and actual agricultural land buyers to farmers. The likely impact of the existence of pre-emptive rights on the number of competing buyers is less obvious since it depends greatly on the way the pre-emptive rights are implemented. More specifically, it depends whether free competition across buyers is first allowed, each potential buyer making a bid, with the pre-emptive right being used in a second step and giving the designated beneficiary the opportunity to buy the sold parcel at the highest price proposed and accepted by the seller. In such a case, pre-emptive rights are likely to have no significant effect on the number of competing buyers, provided that their existence does not discourage any potential buyer to make a bid.

Nevertheless, it can be concluded from the discussion above that globally, the existence of pre-emptive rights, in any case, do not favour the intensification of competition on agricultural land sale markets.

Table 12 indicates the pre-emptive rights that are in force in each partner country. Once again one may contrast the UK where pre-emptive rights do not exist at all to other partner countries where few (Sweden, Czech Republic and Slovakia) or all three types of pre-emptive rights are currently in force (France, Germany, Italy and Lithuania). The case of France is specific to this regard with the right of pre-emption given to SAFERs, which provides them with a powerful tool for influencing agricultural land transactions, both in terms of the chosen buyer and the transaction price. As we will see in the last paragraph of this section, each agricultural land sale has to be notified to the concerned SAFER, which can in all cases use its pre-emptive right in order to favour one buyer over the others and to influence the final price of the transaction (see below). As shown by Table 12, such type of pre-emptive right does not exist in other partner countries.

Table 12: Pre-emptive rights in force in partner countries

	Pre-emptive rights in inheritance processes	Pre-emptive rights at the time of land sale	
		For farm and land consolidation	To the state/municipalities
France	YES to the heir(s) who want(s) to continue farming	YES to the tenant and active role of the SAFERs (see below)	YES
Germany	YES to the heir(s) who want(s) to continue farming	YES to the neighbouring farmer against a non-farmer at the negotiated price	YES
Italy	YES to the heir(s) who want(s) to continue farming	YES to the neighbouring farmer	YES but limited to areas with specific cultural (historical, artistic, etc.) values
Sweden	NO	Possibility of adding a clause in rental contracts providing the tenant with a pre-emptive right	YES
UK	NO	NO	NO
Czech Rep.	n.a.	YES - Sale of state agricultural land: pre-emptive rights to claimants for restitution with the right of substitute parcel; co-owners; individual farmers and members of corporate farms that operate more than 10 ha for at least 3 years in corresponding or neighbouring cadastre; pre-emptive rights for tenants (renting that land for at least 3 years; maximum area of 500 ha). - Sale of private agricultural land: pre-emptive rights to co-owners	YES
Lithuania	YES to the heir who has worked most on the farm and wants to continue farming	YES - Sale of state agricultural land: pre-emptive rights to owners of building and facilities standing on that land; to farmers farming that land; to legal entities earning more than 50% of their income from agriculture which have been farming that land for more than 1 year; to young farmers registered and who have been farming more than 1 ha for more than 1 year; if the state land is sold as part of a land consolidation project, to farmers and legal entities located on the territory covered by the consolidation project. - Sale of private agricultural land: pre-emptive rights to joint-owners of the farm farming that land; to farmers farming that land for more than 1 year.	YES
Slovakia	NO	YES to co-owners	NO

c) Legal restrictions on land ownership

As already pointed out, there are a certain number of legal provisions in partner countries, which are directed at favouring farmers as regards agricultural land ownership. However, in EU-15 Member States, there are no explicit legal restrictions on agricultural land ownership: everybody, physical or legal entities, can legally acquire and hold agricultural land. In the 3 NMS, one restriction is currently in force: foreign physical and legal entities cannot acquire agricultural land.[8] This restriction will hold all along the 7 transitional years following the accession, i.e. until 2011. This legal restriction is aimed at preventing speculation on agricultural land in NMS.

The main impact of legal restrictions on agricultural land ownership is to limit the number of potential buyers and competition on the demand side on agricultural land sale markets. However no legal restrictions do exist in France, Germany, Italy, Sweden and the UK, while they are transitory and directed only to foreigners for anti-speculation purpose in the Czech Republic, Lithuania and Slovakia.

d) Legal restrictions on agricultural land use

In all partner countries, land is categorised according to its use. Hence, land devoted to agriculture is officially notified as agricultural land. This categorisation is made either by law (land protection law such as in the Czech Republic and Slovakia for instance) or by various institutions aimed at establishing development planning schemes (town development planning for example such as in France and Italy), or for statistical purposes (such as in Sweden).

Therefore, most often this is the state usually through local administration that has the authority to both put land under the category of agricultural land and shift land from agricultural to non-agricultural uses.

What makes the difference between partner countries is the extent to which the owner of a land parcel that is classified as agricultural land is able to convert his/her parcel to non-agricultural uses. Usually, a land owner who wants to convert agricultural land to non-agricultural uses must make a request to the concerned administration. Then, as shown by Table 13, due to legal provisions in force and/or common practices, it is more or less easy according to partner countries to have the request accepted by the concerned administration.

[8] One may notice that in the Czech Republic foreigners can buy land provided they are EU citizens, have their permanent residence in CR for more than 3 years and are registered as farmer.

To this regards one may oppose the case of France, Germany and the UK where it seems very difficult to convert agricultural land to non-agricultural uses (especially land of high agricultural quality) to Italy, Sweden, the Czech Republic, Lithuania and Slovakia where conversion appears as easier.

Legal restrictions on land use may contribute to limit the number of potential buyers on agricultural land markets since they are likely to discourage non-farmers to buy agricultural land. In the same way, such restrictions are likely to affect the sale price of agricultural land. Indeed it is a matter of fact that in all partner countries the price of land that can be used for non-agricultural purposes (especially for building and housing purposes) is much higher than the price of agricultural land. Hence, restricting the use of agricultural land to agricultural activity is likely to contribute to limit price inflation on agricultural land sale markets by alleviating competition on the demand side.

Without proving any causality relationship, it is interesting to relate the situation in partner countries regarding the easiness to convert agricultural land to non-agricultural uses to figures provided in Section 2 about the evolution of the share of UAA in total area in each partner country over the last decade. This share has continuously decreased in all countries, but the decrease was more marked in Italy relative to other EU-15 Member-States as well as in the 3 NMS relative to EU-15 Member-States, i.e., in the countries where conversion of agricultural land to non-agricultural uses appears as easier.

Table 13: Legal provisions and common practices regarding the conversion of agricultural land to non-agricultural uses

	Official classification of land according to its use	Use of land regulated and controlled by the state	Legal provisions and/or common practices regarding the conversion of agricultural land to non-agricultural uses
France	YES	YES	Municipalities establish the so-called "Plans Locaux d'Urbanisme" for a given period. Under these "Plans", it is decided for each plot what will be its main use during the period. It is very difficult for a land owner to change the use of his/her land if such a change does not fit with the corresponding "Plan Local d'Urbanisme".
Germany	YES	YES	Similar to the French situation
Italy	YES	YES	Similar to the French situation But possibility of special laws of remissions, that make it exceptionally easier to change the use of land (remission laws in 1985, 1994 and 2003)
Sweden	YES	NO	Use of land regulated by the state only in very small specific areas. Conversion to most non-agricultural uses requires permission from authorities. Conversion to forest free in most areas.
UK	YES	YES	There is a planning authority for the use of land in every local Council. Permission must be gained before any conversion of land from agricultural to non-agricultural uses. The planning authority has at its aim the management of all development in the area. Hence, very difficult for a land owner to convert his/her agricultural land if this latter is classified as highest agricultural grades and/or in protected area.
Czech Rep.	YES	YES	There is a land protection law defining under which conditions it is possible to switch agricultural land into non-agricultural uses. Legal provisions make it more difficult to convert agricultural land the highest its grade under the "Bonited Soil Ecological Unit" (BPEJ) classification. Penalties to land owners are applied when they convert their agricultural land to non-agricultural uses. However these penalties are not so high and consequently not so dissuasive. Globally not so difficult to convert agricultural land.
Lithuania	YES	YES	Legal provisions that restrict the alternative uses of agricultural land do actually exist. But high level of corruption that makes a common practice to convert agricultural land to non-agricultural uses
Slovakia	YES	YES	There is a land protection law that defines 4 grades of agricultural land. The highest grade is protected and cannot legally be converted to non-agricultural uses. The 3 other grades are not protected and can be relatively easily be converted.

e) Characteristics of agricultural land rental contracts

A land rental contract involves a landlord on the one hand and a tenant on the other hand. And both actors usually have reverse interests regarding the rental contract. The objective of the landlord is to get the highest rental price while minimising the induced constraints on the use of his/her property right. At reverse, the objective of the tenant is to get the lowest price while maximising freedom in the use of the landlord's property right. That is the main reason why the length and the price are 2 main characteristics of rental contracts.

More specifically, the length of the contract is an indicator of the level of constraint put on the landlord's property right: once the contract is signed, the landlord accepts to transfer his/her property right (i.e., the right of using his/her property) to the tenant over the agreed length of the contract. Hence the longer the rental contract the higher the induced constraint for the landlord. From the tenant's point of view, the length of the contract is an indicator of the degree of security and stability he/she can benefit from in using the landlord's property right. Indeed it is well-recognised that regarding agricultural land lease, the longer the rental contract the higher the security and the stability for the tenant farming the contracted land.

In addition to the length of the contract, the induced constraint for the landlord and level of security and stability for the tenant may be reinforced by common rental contracts' provisions such as the obligation to the landlord for renewing the contract with the current tenant when the latter requires it or the inheritability of the contract.

The way the rental price is fixed also gives some indication about the extent to which rental contracts are designed as to protect the tenant. The rental price may be fixed by mutual agreement between the landlord and the tenant. In such a case, rental prices result from market forces only and there is not any specific protection toward the tenant. But there may be state intervention directed at protecting the tenants' interests. Hence the state may establish (commonly by law) some ranges of rental prices that are usually considered as reference prices and serve as a basis within the process of negotiation between the landlord and the tenant. Most often these reference price ranges are aimed at preventing huge increases in rental prices that would hurt farmers leasing part or all the land they farm.

Table 14 attempts to characterise most usual agricultural land rental contracts in force in partner countries according to above described criteria. Table 14 indicates that agricultural land rental contracts differ from one country to the other. One may distinguish two main types of contracts. The first one is characterised by state intervention: terms of contracts are defined

by law and rental prices are framed by the state. Generally, such contracts have longer terms and are more favourable to tenants. The second type of contract relies on mutual agreement between the landlord and the tenant. Hence the terms of contracts and rental prices mainly result from market forces. Table 14 suggests that one may distinguish three groups of countries. In France, most usual agricultural land rental contracts relate to the first type. They are clearly favouring tenants to the detriment of landlords: terms of contracts defined by law, long-term contracts, provisions favouring the tenant at contracts' expiration, rental prices framed by the state. In Germany, Sweden and the 3 NMS, most usual rental contracts are of the second type. In these countries, agricultural land rental contracts result mainly from market forces. In Italy and the UK, both types of contracts co-exist. However, the second type (mutual agreement) is increasingly used to the detriment of the first type.

It is clear that rental contracts of the first type are likely to introduce rigidities in land rental markets.

Table 14: Main characteristics of agricultural land rental contracts in partner countries

	Types of contract	Length	Further protection for tenants	Rental price
France	Terms of contracts defined by law through the "Statut du fermage" Very high protection of the tenant against the landlord	- Baux ruraux: 9 years - Long term : 18 years min - Career: over the career of the tenant	Nearly impossible for the landlord to get back his/her land at the contract's expiration: - contract automatically renewed - contract inheritable Possible for the landlord to get back her/his land only when he/she commits to farm it her/himself	Range of rental prices fixed by the Administration at the regional level ("department") Used as the basis for negotiated contracts
Germany	Terms of contacts defined by mutual agreement between landlord and tenant	- 1 year (only for very small plots) - 6, 12 or 18 years (generally the larger the rented area the longer the contract) - 18 years min, often 25 years for a whole farm	- At contract's expiration: tacitly renewed for 1 year - prolongation of contract if the tenant proves that his/her means of existence are deprived if the contract is ended up	- No adjustment of rental price allowed during the first 2 years or during 2 years after the last implemented adjustment - Rental price commonly coupled to gross margin averages; possibility to adjust down rental price in case of significant decrease in average gross margins (extent of adjustment decided by mutual agreement between landlord and tenant)

Italy	- Traditional contract: terms defined by law - "Patti in deroga": terms defined by mutual agreement between landlord and tenant	- Standard contract: 15 years - "Patti in deroga": mutual agreement between landlord and tenant	None	- Standard contract: fixed at the regional level by agreement between the Administration and farmers' unions - "Patti in deroga": mutual agreement between landlord and tenant
Sweden	Terms of contacts defined by mutual agreement between landlord and tenant	Mutual agreement between landlord and tenant (from 1 to 25 years)		Fixed by mutual agreement between landlord and tenant Possibility to add a clause of rental price adjustment in case of prices or CAP changes. Commission solving disputes on rental prices between landlord and tenant.
UK	- 1986 Full Agricultural Tenancies (FATs): terms defined by law - 1995 Farm Business Tenancies (FBTs): terms defined by mutual agreement between landlord and tenant	- FATs: 2-5 years - FBTs: mutual agreement between landlord and tenant	- FATs: inheritable - FBTs: no statutory provision on succession	Fixed by mutual agreement between landlord and tenant, with the help of an arbitrator
Czech Rep.	Terms of contracts defined by mutual agreement between landlord and tenant	Mutual agreement between landlord and tenant (from 1 to 5 or 10 years)	None	- Private-owned land: fixed by mutual agreement between landlord and tenant - State-owned land: 1.5% of the administrative price
Lithuania	Terms of contracts defined by mutual agreement between landlord and tenant	- Private-owned land: mutual agreement between landlord and tenant - State-owned land: idem but limited to 25 years	Inheritable	-Mutual agreement between landlord and tenant - State-owned land: a clause allows the leaser to adjust the rental price every 3 years
Slovakia	Terms of contracts defined by law	- Short term: 5 years - Long terms: 20-30 years	None	- Private-owned land: fixed by mutual agreement between landlord and tenant - State-owned land: 1.5% of the administrative price

f) The role of the SAFERs in France

SAFER (Société d'Aménagement Foncier et d'Etablissement Rural) was created in 1960 (as part of the 1960 « Loi d'Orientation Agricole ») in the framework of the implementation of the agricultural structural policy.[9]

SAFERs are private bodies with public service missions (functioning under the non-profit private law). SAFERs' boards of Directors are generally composed of representatives of the agricultural professional organizations, of regional administration and of municipalities. SAFERs' activity is under the control of the state.

Originally, the missions of SAFERs were mainly to support the settlement of farmers, especially young farmers, to support land and farm consolidation and to favor transparency and functioning of rural land markets. Missions of SAFERs have been progressively extended to rural development support and environmental protection.

In order to fulfill their missions, SAFERs benefit from three main tools. Firstly, information: each sale has to be notified to the concerned SAFER. These are notaries who notify the sales to the SAFER. This means that before the intervention of the SAFER, market forces have first played, so that a first agreement has been reached between the seller and one buyer at a given price. Then, the SAFER has 2 months to accept or to refuse the notified transaction. When market forces lead to a transaction that fits with the missions of the SAFER and cannot been suspected of speculation purpose, then the latter accepts the transaction. At reverse, when market forces result in a transaction that goes against the missions of the SAFER or is suspected of speculation purposes (e.g., a sale implying the dismantling of a farm, a sale allowing a settled farmer to enlarge his/her farm to the detriment of a young farmer that would have been able to settle thank to the land on sale, or an agreed price that is judged by the SAFER as non representative of market prices) then the SAFER can and usually refuses the transaction. The second tool appears at this stage: this is negotiation power. This means that the SAFER undertakes a process of discussion with the seller and the buyer to try to reach a mutual agreement upon a new transaction (usually a new buyer who better fits SAFERs' missions, or another price that is judged as more in line with observed market prices). Finally, the third tool, the most powerful one, is used only if a mutual agreement cannot be reached between the seller, the buyer and the SAFER. This is the pre-emptive right of the SAFER. This pre-emptive right allows the SAFER to acquire the land on sale and then

to try to find an arrangement that better fits the SAFERs' missions, e.g., to sale back the land to another buyer or at another price or to rent out the land.

Therefore, SAFERs are key players on agricultural land markets in France. Their active role could explain the relatively low level of sale prices of arable land that is observed in France as compared to other EU-15 countries (except Sweden, probably due to different agronomic conditions) as shown by Graph 33 below. However this remains to be proven.

4. Land market activity

Three land markets are considered in the following. Firstly, the sale market of agricultural land is described. By agricultural land it is meant land only, that is to say without residential or agricultural buildings. Secondly, the land rental market is reviewed. Finally, some information about non-agricultural land sale market is provided. In each case, a review of the current situation (2003 in general) and a review of the evolution in the past decade (1991-2004) are presented, when information is available.

4.1. Agricultural land sale market

a) Current situation

Table 15 presents statistics about the agricultural land sale market in all countries in 2003. A few explanations are firstly given for each country, then a comparison is provided on the basis of graphs. Detailed statistics can be found in Appendix.

Czech Republic

In the Czech Republic the agricultural land market activity is followed since 1993 by the institute VUZE for a sample of 25 districts (out of 77 in the country). These districts are the same each year and are located across the country (see Map 1 in Appendix). The UAA per district is given in Table A5 in Appendix. Estimations for the whole country are then calculated using the total UAA of the districts followed and the total UAA of the country. Data in Table 15 below and in Table A8 in Appendix are estimations for the whole country of the number of transactions and the total area transferred. The average figures of the area of

[9] There is one SAFER by region. Hence, we will alternatively use SAFER or SAFERs to designate this institution.

exchanged plots and the market sale price are those calculated from the sample of 25 districts. Statistics include private and public land, although the latter one is a small share of the all transactions. State-owned land can be sold since 1999 only, at the administrative price for restitution claimants, individual farmers, members of corporate farms, and owners of more than 10 ha of land, while it is sold at the market price for other buyers. Since 2001 a new law allows the state land's official price to be reduced by 10 percent, which has since increased sales for this type of land. The average sale price of one hectare of agricultural land in the Czech Republic is driven up by the high price of plots less than 1 ha, which are eventually used for non-agricultural purposes. In 2003 the average sale price of plots less than 1 ha, between 1 and 5 ha, and over 5 ha were respectively: 1,133,803 CZK/ha, 132,286 CZK/ha, 35,742 CZK/ha.

As for the administrative prices of agricultural land, they are determined by the land evaluation process as explained earlier. The prices are valid for more than one year. Currently (since 2001) the average administrative price for the country is 52,400 CZK/ha, much lower than the average market price (e.g. 205,896 CZK/ha in 2004).

France

Statistics about agricultural land transactions are collected by SAFERs. All transactions are legally assessed by notaries, who are obliged to report to the concerned SAFER all transactions for plots exceeding a specific threshold. The threshold depends on each county's ("département") regulations but is never lower than 0.5 ha. It is not compulsory for notaries to report transactions for plots smaller than the county's threshold, but it is becoming increasingly common. Hence, statistics by SAFER presented here include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha.

The institute Agreste from the Ministry of Agriculture computes an administrative value of agricultural land, based on market prices and experts' opinions. In 2003 the average value was 3,640 euros/ha, lower than the market price of 8,325 euros/ha.

Germany

When a transaction on the land sale market in Germany occurs, notaries are requested to inform the fiscal offices about the transaction, who refer it in turn to the Gutachterausschüssen, a committee of experts. Notaries are obliged to report transactions for arable and grassland only, and of a minimum size that depends on the Länder (e.g. 0.1 ha in Baden-Württemberg, 2 ha in Bavaria).

Administrative prices exist only in Eastern Germany; they were set to privatise the land that was formerly owned by the state. For example in Saxony the price for arable land ranged from 4,500 to 7,650 euros/ha in 2004.

Italy

In Italy data about the agricultural land sale market are collected by INEA from interviews with experts. The UAA transferred is however not compiled. Such information is only available for the Lombardy region and for the period 1993-1996. Using the Lombardy's total UAA and Italy's total UAA, we can estimate that the total UAA transferred in Italy was about 1,080,980 ha in 1993 and 1,086,720 in 1995.

Lithuania

The number of transactions is provided for all plots, but the price is compiled for plots greater than 1 ha only. The institute responsible for following the land market activity is LAEI; it follows it only since 2001. Only the average price of land sold per district is available, not for the whole country. It should be noted that the methods used by the institute for computing averages differ from year to another. Table 14 reports the maximum of the prices computed within the districts excluding Vilnius district where the price is extremely high compared to the other districts; the maximum is thus found in Klaipėda district. The market prices provided by LAEI result from a compilation of data from various sources: local planning specialists, offers in newspapers and internet, and the massive evaluation process which relies on the registered transactions (that are usually with lower prices). Table A21 in Appendix shows the prices from each of the three sources for each district in 2004.

Slovakia

In Slovakia, similarly to the situation in the Czech Republic, there is no comprehensive survey regarding land markets. Since 2001 the institute VUEPP in collaboration with the Institute of Geodesy and Cartography undertake a survey of 6 regions (out of 79 in the country). These regions were chosen as representative regions for the country in terms of soil, climate and topology conditions (see Map 2 in Appendix for their location). We have then calculated national estimations of the number of transactions and area transferred using the share of the regions in the country's UAA. Only private land is included in the statistics given here.

The administrative price is also provided by VUEPP for the 6 regions followed. For example in 2003 the average price in the 6 regions was 44,295 SK/ha, much lower than the market price of 93,877 SK/ha.

Sweden

In Sweden market prices are available only for arable land and pasture together. They are collected by the land registry (Inskrivningsmyndigheten).

United Kingdom

The statistics regarding the agricultural land sale market are compiled by the Ministry of Agriculture (DEFRA) on the basis of data collected by the Valuation Office Agency. The statistics are compiled only for plots strictly greater than 5 ha. Only statistics for England are given here.

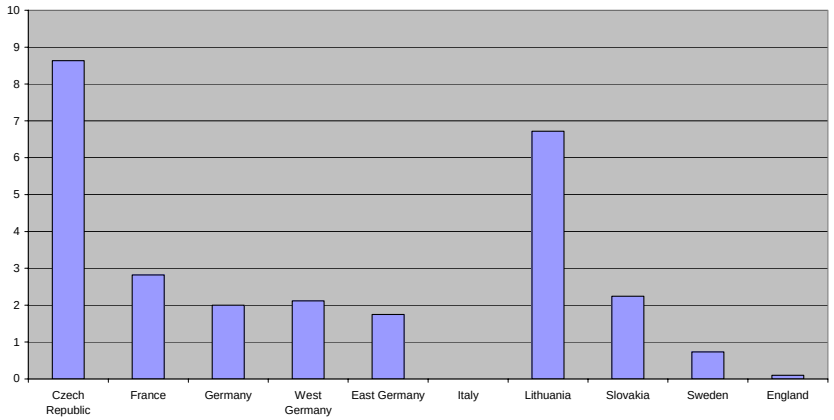
Administrative prices are established by the experts of the Valuation Office Agency. In 2003 the average administrative price for arable land was £6,044/ha in England and Wales. This price is relatively similar to the average market price in England (£6,269/ha).

Comparison of all countries

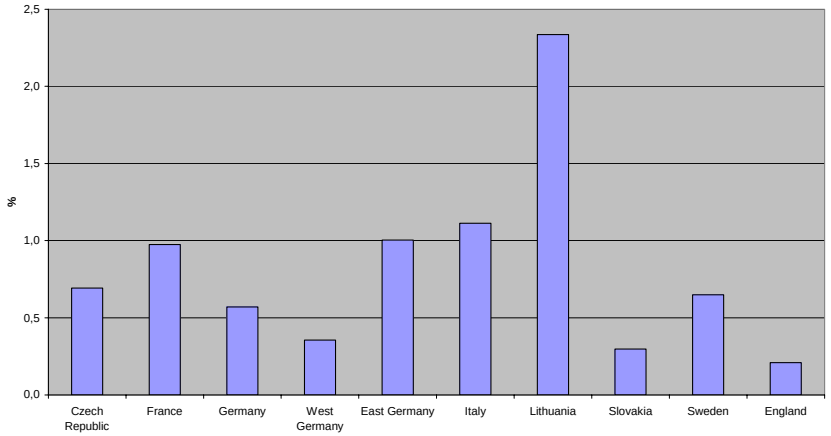
Although Table 15 gives all figures necessary to compare the market activity between all countries, graphs can give a clearer picture.

Graphs 25 and 26 present the number of transactions per 1,000 ha of UAA and the share of UAA sold respectively, in 2003 in all countries. Both graphs reveal that the most active land market is in Lithuania (and in the Czech Republic when the number of transactions only are considered), while the least active is in England. Graph 27 shows the average size of exchanged plots in 2003. England presents the largest average plot size, well above the other countries. One reason for this very high average plot size is the fact that only statistics for plots greater than 5 ha are considered; however, even if transactions of smaller plots were considered, the average figure would still be higher than in the other countries. Among the rest of the countries, larger plots are found in Sweden and East Germany. Graph 28 shows the average market price in euros per ha in 2003. Three groups of countries can be identified in terms of similar price: 1) West Germany and Italy, with the highest price; 2) Czech Republic, France, (whole Germany) and England, with medium price; 3) East Germany, Lithuania, Slovakia and Sweden, with the lowest price. The highest average price is found in West Germany and the lowest price in Lithuania.

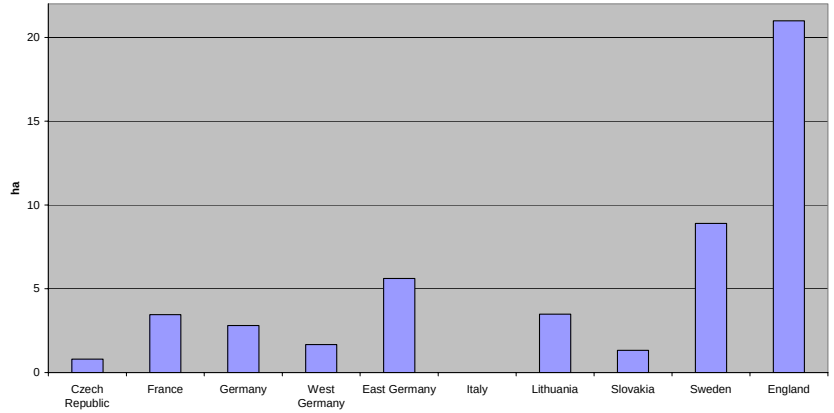
Graph 25: Number of transactions per 1,000 ha of UAA on the sale market of agricultural land in 2003 in all countries
(n.a. for Italy; in 2001 for Sweden; for private+public land in the Czech Republic; for plots>5 ha in England)



Graph 26: Share of sold UAA in total UAA in 2003 in all countries
(in 1996 for Italy; in 2001 for Sweden; for private+public land in the Czech Republic; for plots>5 ha in England)



Graph27: Average size of plots exchanged on the sale market of agricultural land in 2003 in all countries
(for private land only in all countries; n.a. for Italy; 2001 in Sweden)



Graph 28: Average market sale price of agricultural land in 2003 in all countries
(2001 for Sweden; for private+public land in the Czech Republic and in Lithuania; for plots >1ha in Lithuania, >5ha in England)

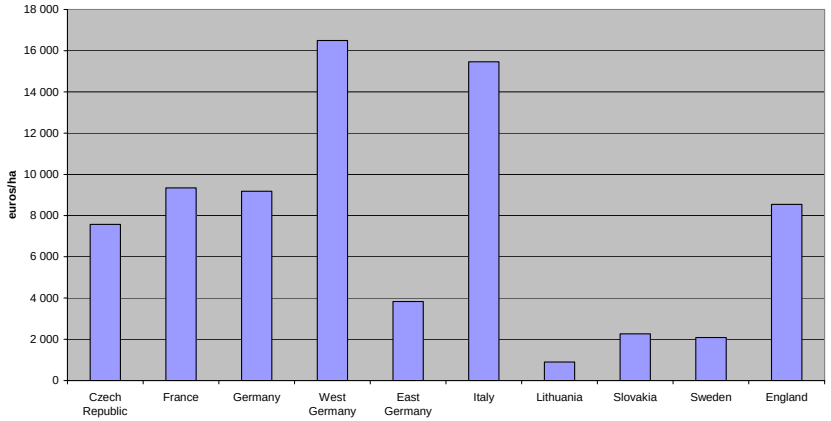


Table 15: Statistics regarding the agricultural land sale market in 2003 in all countries

	A	B	C	D	E
	Number of transactions per 1,000 ha of UAA	Share of transferred area in total UAA (%)	Average size of exchanged plots (ha)	Average market sale price per ha	
				in national currency	in euros
Czech Republic	8.6	0.69	0.8	238,977 CZK	7,568
France	2.8	0.97	3.45	8,325 euros	8,325
Germany	2.0	0.57	2.80	9,184 euros	9,184
West Germany	1.7	0.36	1.66	16,489 euros	16,489
East Germany	2.1	1.00	5.61	3,831 euros	3,831
Italy	n.a.	1.11 in 1996	n.a.	15,462 euros	15,462
Lithuania	6.7	2.34	3.48	3,100 LTL	898
Slovakia	2.2	0.30	1.32	93,877 SK	2,262
Sweden	0.7	0.65	n.a.	18,400 SEK	2,084
England	0.1	0.21	n.a.	£ 5,556	8,541

Exchange rates with euro used in column E are the official rates on 1 January of the year considered. Statistics do not include gifts, except in Lithuania. Statistics for private land only, except in the Czech Republic where they are for private and public land together.
France: Statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha. Germany: Prices for arable land and permanent pasture together only. Lithuania: price in columns D/E is for plots greater than 1 ha; no price averages are available, hence the price in columns D/E is the maximum price for Klaipėda district, which is one of the most expensive districts due to its seaside location. Sweden: All statistics are for the year 2001; prices for arable land and permanent pasture together only. England: Statistics include only plots greater than 5 ha; and are provisional.

b) Evolution

Comparison of all countries

Tables A28, A29, A30 and A31 in Appendix give the figures for the evolution of the average market price, the number of transactions per 1,000 ha of UAA, the share of UAA transferred, and the average size of exchanged plots, during the past decade for all countries. Again, the evolution of these statistics is more easily apprehended by graphs.[10]

Graph 29, showing the evolution of the number of transactions per 1,000 ha of UAA, reveals that this number is relatively stable for the EU-15 countries: France, East and West Germany, and England (for Sweden and Italy the data is not available). By contrast, the evolution for the NMS is less smooth. All three countries seem to have experienced an increase in the number of transactions in the end of the 90es. While the number of transactions in Lithuania increased dramatically from 2003, the number in the Czech Republic and in Slovakia seems to start experiencing a relatively sharp decline from 2002-2003.

Graph 30, showing the evolution of the share of UAA sold, reveals that again this share is very stable for the EU-15 countries, France, Germany and England, although Eastern Germany has experienced a small peak in 1999. As for the NMS, again Lithuania has seen this share soared in 2003, and the Czech Republic has experienced an increase in 2001 (may be partly explained by the law at this date allowing reduction of the price of state-owned land) and a decline from 2002. The share in Slovakia seems to be only decreasing, but this is to be taken with caution as only three years are available.

Graph 31, showing the evolution of the average size of exchanged plots, reveals that for all countries except England, the average size has not fluctuated much. The curve for England is switchback, however the long-term trend is stable (around 20 ha).

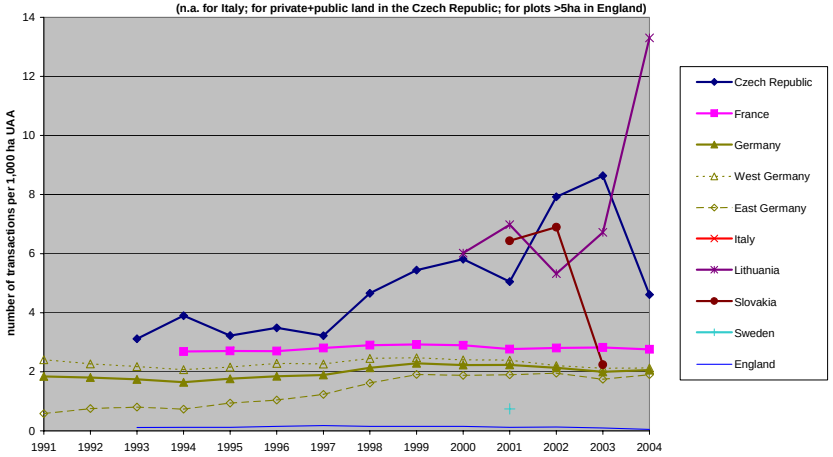
Graph 32, showing the evolution of the market price in euros per ha, reveals that countries can be separated into three categories: 1) countries where the price has remained fairly stable are Lithuania and may be Slovakia (few years available for this country only); 2) countries where the price has decreased are Germany (smoothly) and the Czech Republic (switchback); 3) countries where the price has increased are France, Italy, Sweden and England. The first three of these latter countries experienced a consistent increase, while the price for England seems to have stabilised in 1998. Note that for this country there is a sharp decrease in 1999 (in

[10] Source and notes of Graphs 29 to 33: refer to Tables A28 to A31 in Appendix.

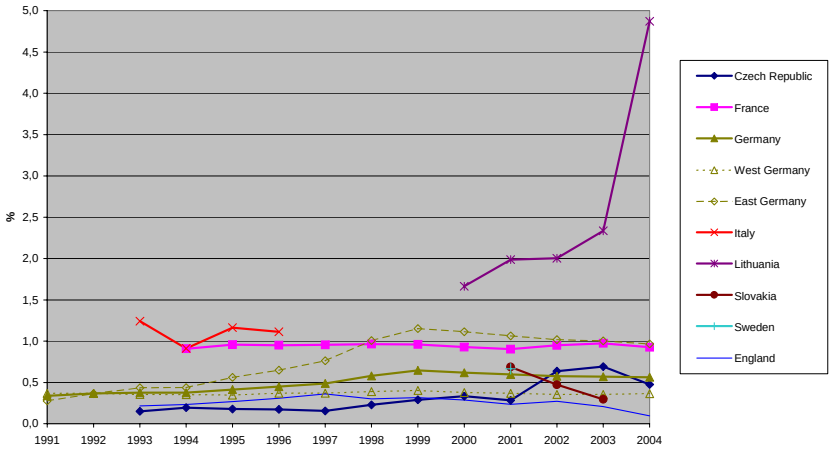
Sweden as well, but to a lesser extent): this is due to a dramatic change in the exchange rate at this date. Interestingly, the prices for France and Italy seem to behave completely in parallel. In Germany the whole country experienced a relatively sharp decreasing trend while both West Germany and East Germany do not seem to have experienced such a clear-cut decrease. This sharp decrease is probably due to the slight decrease in East Germany, which is then weighted by the larger number of transactions in this area compared to West Germany.

Graph 33 presents the evolution of the sale price of arable land for the countries where prices are available for specific land types. For the Czech Republic, Slovakia and England, this is the price for arable land only, while for France, Germany and Sweden it is the price for arable land and pasture together, and for Italy it is the price for arable land including horticulture. The same facts can be observed for arable land as it was observed for all land (on Graph 32). Firstly, there is an increasing trend for all countries, except in Slovakia where there seems to be a decrease in 2002 (and in Germany but probably due to the large weight of transactions in East Germany). Secondly, the countries can be ranked from the highest to the lowest price as follows: Italy, Germany, England and the Czech Republic, France, Slovakia, Sweden. Finally, while the curves are relatively smooth for all the other countries, the one for the Czech Republic is switchback, with a sharp increase in 1997 and in 2001.

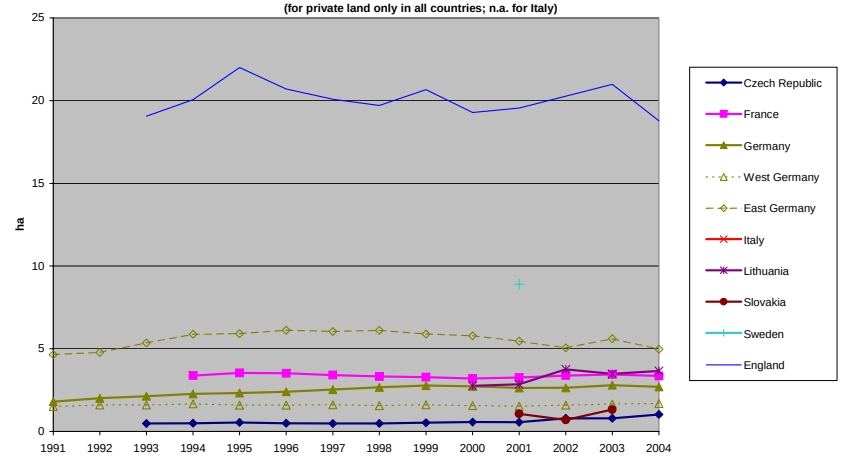
Graph 29: Evolution of the number of transactions per 1,000 ha of UAA on the sale market of agricultural land in all countries
(n.a. for Italy; for private+public land in the Czech Republic; for plots >5ha in England)



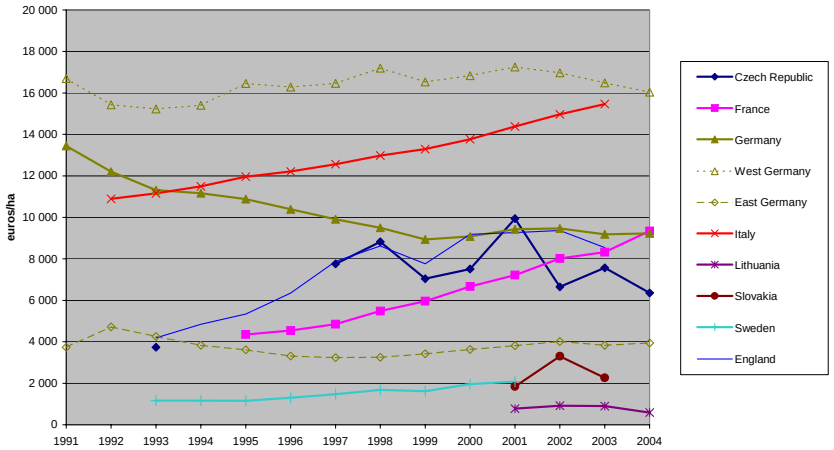
Graph30: Evolution of the share of sold UAA in total UAA in all countries
(n.a. for Italy; for private+public land in the Czech Republic; for plots >5ha in England)



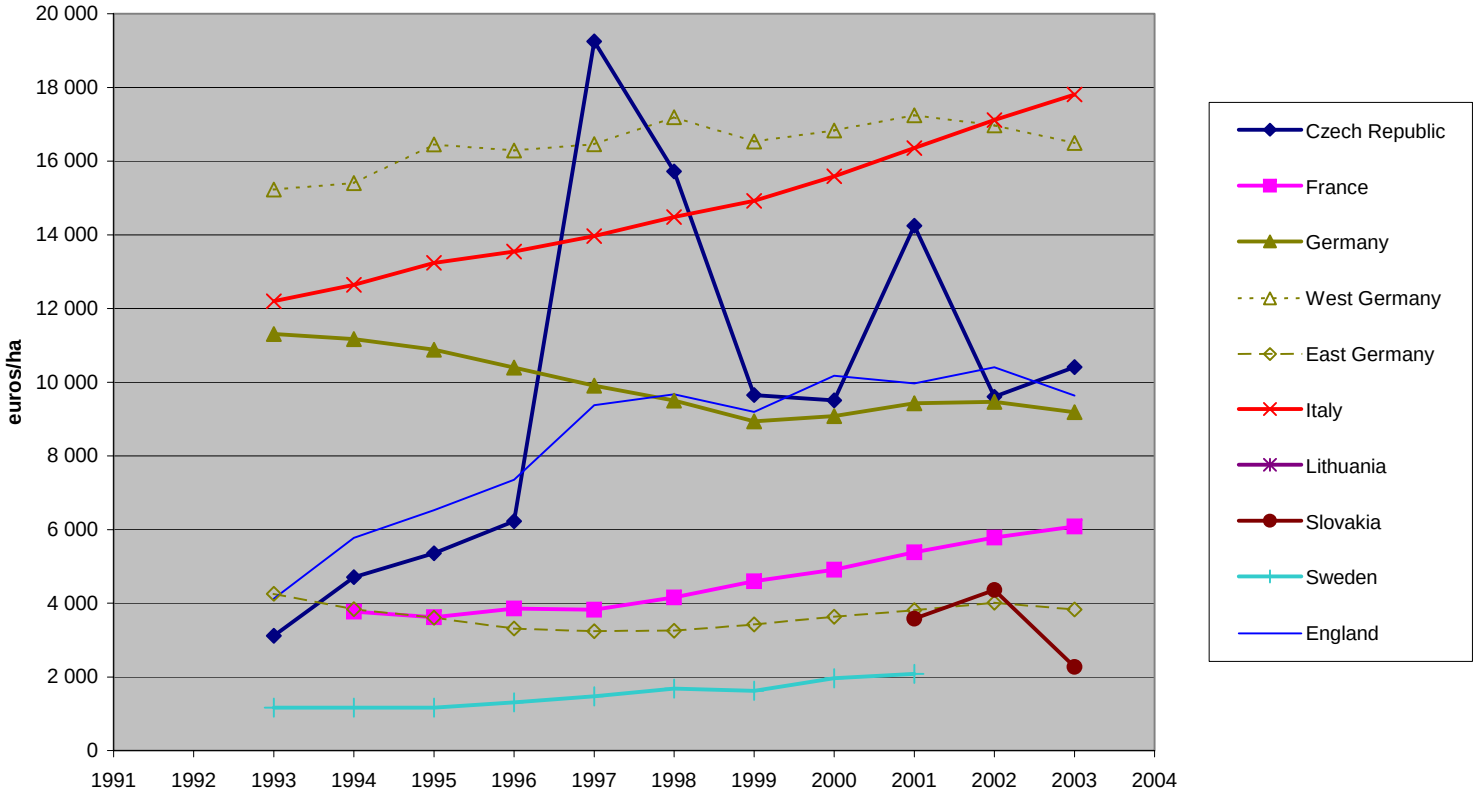
Graph 31:Evolution of the average size of exchange plots on the sale market of agricultural land in all countries
(for private land only in all countries; n.a. for Italy)



Graph 32: Evolution of the average market sale price of agricultural land in all countries
(for private+public land in the Czech Republic and in Lithuania; for plots >1ha in Lithuania, >5ha in England)



Graph 33: Evolution of the average market sale price of arable land in all countries
(for private+public land in the Czech Republic; for plots >1ha in England)



4.2. Agricultural land rental market

a) Current situation

Table 16 presents the share of rented land in total UAA and the average rentals for agricultural land in all countries in 2003. A few explanations are firstly given for each country, then a comparison is provided on the basis of graphs. Detailed statistics can be found in Appendix.

Table 16: Statistics regarding the agricultural rented land in 2003

	A	B	C
	Average share of rented land per farm (%)	Average rentals per ha	
		in national currency	in euros
Czech Republic	89.3	719 CZK	23
France	81.3	122.7 euros	122.7
Germany	63.9	174 euros	174
West Germany	53.6	261 euros	261
East Germany	85.1	116 euros	116
Italy	41.8	396.8	396.8
Lithuania	n.a	70 LTL	20
Slovakia	80.7	423 – 1,057 SK	25
Sweden	45.6	1,203 SEK	129
England	34.2	£ 120.2	198

Notes:
Exchange rates with euro used in column C are the official rates on 1 January of the year considered.
The rental figures do not include contracts where no rent is paid, except in the Czech Republic, Lithuania and Sweden.
France: Data in column A is for FADN farms.
Italy: Data in column A is for FADN farms in 2002.
Slovakia: Average rentals are not available. Figure in column B is calculated with the usual rates charged (between 1% and 2.5% of the average administrative price) and the average administrative price in 2003.
Sweden: Data in column A is for 1999. Data in column B and C are for arable land only in 2002.
England: Data in column B and C are for 2002.

Czech Republic

In the Czech Republic the average figure of 89.3 percent of the UAA rented in 2003 reflects the high share of land rented by legal entities (corporate farms), 96.7 percent. The figure for individual farms is nevertheless relatively high, 70 percent. Rentals paid by legal entities are on average lower than those paid by individual farms (875 against 660 CZK/ha in 2003). Rentals are also higher in the best agri-environmental regions (see Appendix).

France

In France the levels of rentals are ruled by each county ("département") and depend on the soil quality. SAFER estimates national averages on the basis of these regulations.

Germany

In Germany the share of UAA that is rented is lower for individual farms (52.6 percent in 1999) than for other forms (78.3 percent for partnerships, 93.8 percent for corporate farms). There is additionally a difference between West Germany and East Germany, where farms rent in more land on average (89.8 percent in East Germany against 50.0 percent in West Germany in 1999). A difference also exists in terms of average rentals, lower in East Germany than in West Germany (116 against 261 euros/ha in 2003). As for land quality differences the average rentals for arable land (322 euros/ha in Germany in 1999) is greater than for pasture (229 euros/ha).

Italy

In Italy the data is collected by INEA from interviews with experts.

Lithuania

In Lithuania no specific statistics exist about the share of rented land. The average rental given in Table 15 was computed from a specific research undertaken in 2003 to local planning specialists from 8 districts (out of 10). The average rentals per districts are given in Appendix.

Slovakia

In Slovakia the Act on Land Lease (No 504/2003 Coll., par. 10) sets a minimum land rent price at 1 percent of the administrative land price. In practice, the largest body renting out land, that is to say the Slovak Land Fund which controls about 600,000 ha of land (state-owned and with unidentified owners) charges a rental price of 1.5 percent of the

administrative land value. There are no available data about the effective rental price from private landowners, but it is believed that the latter usually set the rental level between 1 and 2.5 percent of the administrative price of land. In 2003 the average administrative price of land for the 6 surveyed regions was 44,295 SK/ha. An approximate idea of the average rental in the country would then be between 423 and 1,057 SK/ha.

Sweden

In Sweden rental agreements are not registered, and statistics are only obtained by surveys. The average rentals differ widely according to the regions, from 127 SEK/ha in Nothern Sweden (Norra Sverige) to 2,412 SEK/ha in Southern Sweden (Sydsverige) in 2002 (see Appendix).

United Kingdom

Statistics about rentals in England are obtained from a survey conducted by DEFRA on a sample of 7,500 holdings covering about 1-2 percent of the total rented UAA in England. Figures from 2003 are not available as the survey is run every two years from 2002. Statistics exclude agreements where no rent is paid or when rent is paid in kind. The shares of rented land in England and the UK, provided in Appendix, are from the Agricultural Census and hence for the whole farm population.

Comparison of all countries

Again graphs can help compare the countries, in terms of share of rented land in UAA per farm (Graph 34) and average rental in euro per ha (Graph 35) in 2003.

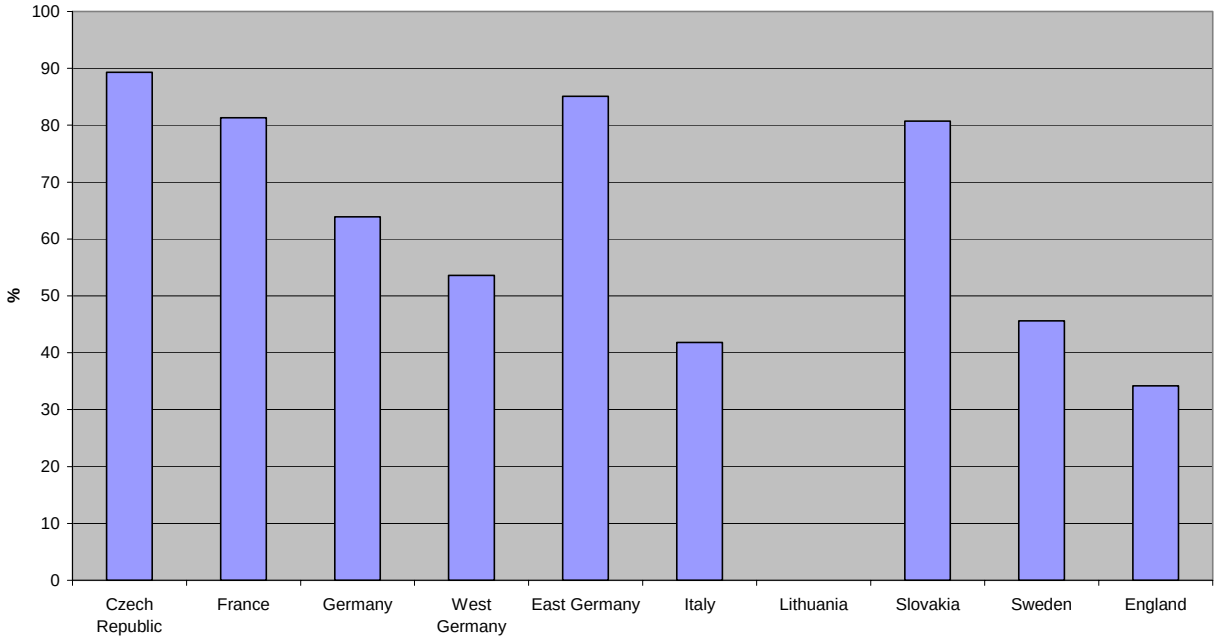
Graph 34 shows that the Czech Republic, East Germany and Slovakia have the higher share of rented UAA on average. This is due to the presence of corporate farms in this country. More interestingly is that these countries are closely followed by France, despite the absence of corporate farms in this country (but a large presence of partnerships). As for the other EU-15 countries, the share of rented UAA is relatively low, particularly in England.

Graph 35 shows that Italy is by far the country where the average rental per hectare is the highest. The next country with high average rental is West Germany, followed by the other EU-15 countries, England, Sweden and France. The NMS have a very low average rental.

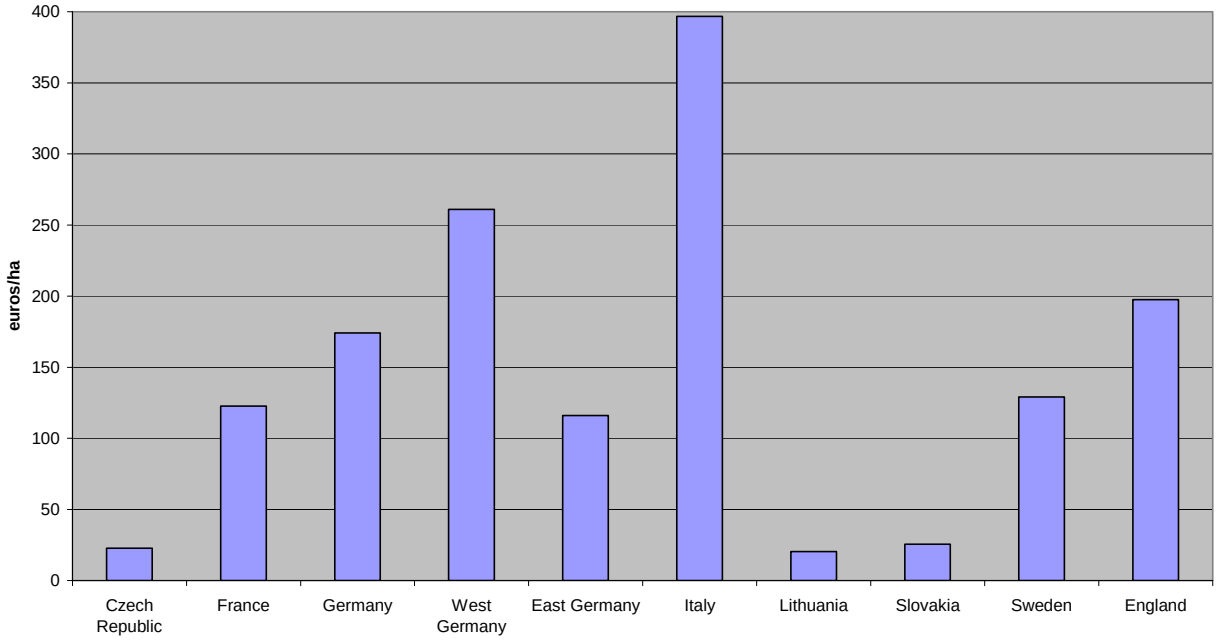
It is interesting to notice that average rental per hectare is significantly lower in France than in other EU-15 countries (especially when considering West Germany instead of Germany as a whole). Still without assuming any causality relationship, one may recall here the significant

state intervention in the design of rental contracts in this country, which favours tenants and is likely to contribute to limit rental price increase.

Graph 34: Average share of rented UAA per farm in 2003 in all countries
(2002 for Italy; 1999 for Sweden; n.a. for Lithuania)



Graph 35: Average rental of agricultural land in 2003 in all countries
(2002 for Sweden and England)



Source and notes: refer to Table 16

b) Evolution

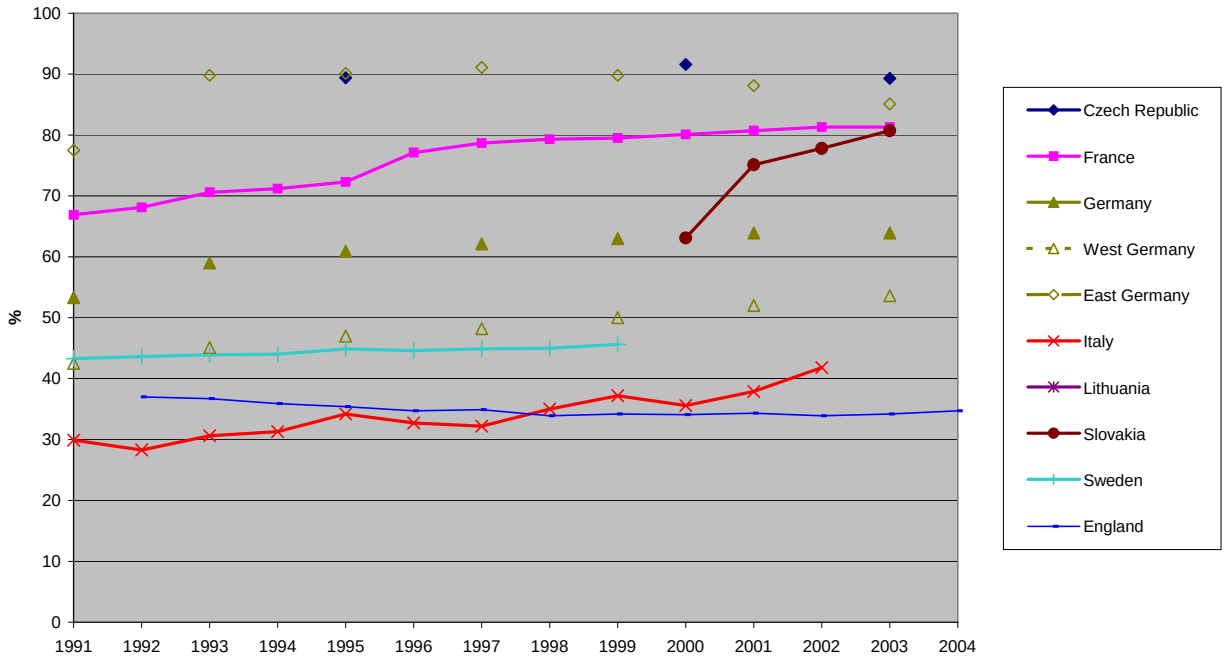
Comparison of all countries

Tables A45and A46 in Appendix give the figures for the evolution of the share of rented land in UAA per farm and the evolution of the average rental in euro per ha over the past decade in all countries. These evolutions are more clearly seen on Graphs 36 and 37.

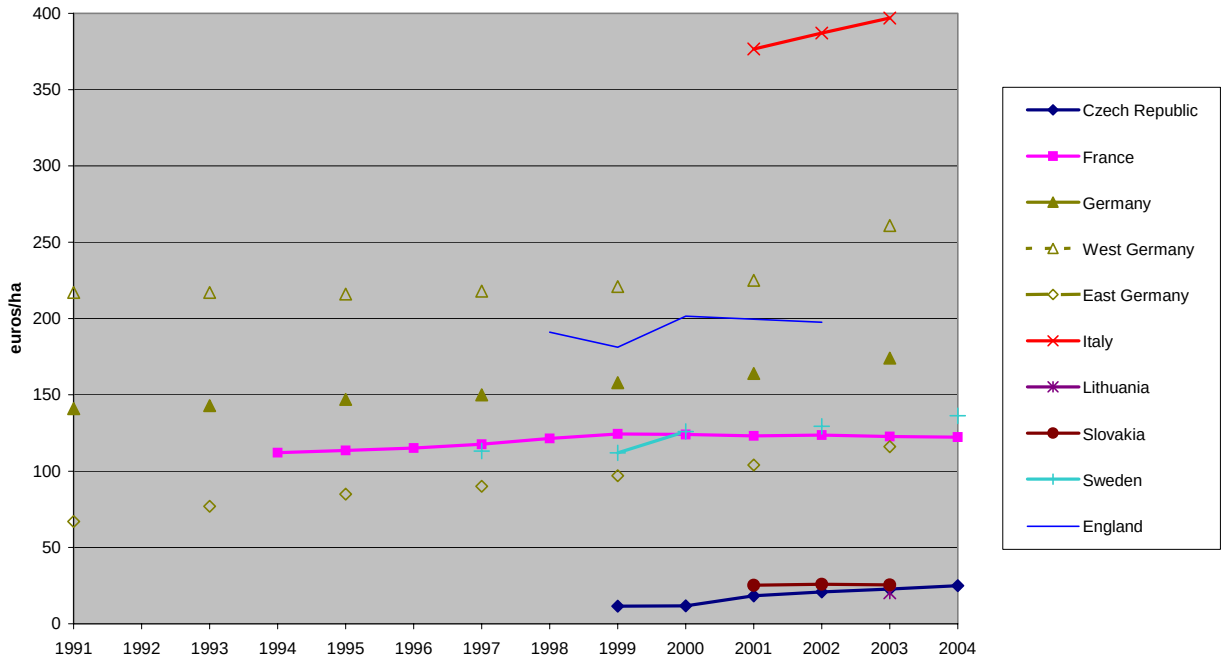
Graph 36 shows that the countries can be classified in three or four categories: 1) countries with a very stable average share of rented UAA are Sweden and England; 2) countries with a slight decrease are the Czech Republic and East Germany; 3) countries with a slight increase are France, West Germany and Italy. Slovakia stands alone with a sharp increase, but again the picture is difficult to grasp with only a few years available.

Graph 37 shows that for all countries except Italy the average rental per hectare is fairly stable, although it seems that Germany has started experiencing a small increase in 2001. The drop in 1999 for Sweden and England is only due to a drop in the exchange rate; within these countries the values in national currency are the same in 1997/1998 and in 1999. As for Italy, the average rental presents an increasing curve, but this trend cannot be asserted with certainty as only three years are available.

Graph 36: Evolution of the average share of rented UAA per farm in all countries
(n.a. for Lithuania)



Graph 37: Evolution of the average rental of agricultural land in all countries



Source and notes: refer to Tables A45 and A46 in Appendix

4.3. Non-agricultural land market

Detailed statistics about the price of non-agricultural land are given in Appendix, when available. One can simply note that the average price of forest is lower than the average price of agricultural land, in the countries where these statistics are available (Czech Republic, France, Lithuania, England). As for the average price of building land, provided for the Czech Republic and for Germany only, it is much higher than the average price of agricultural land.

4.4. Summary

Tables 17 and 18 summarise the comparison of all countries in terms of rental and sale markets of agricultural land.

Table 17: Comparison of all countries in terms of rental and sale markets of agricultural land (currently)

	Activity of the sale market	Share of UAA rented	Average rental price	Average sale price
Czech Republic	Low	High	Low	High
France	Low	High	High[1]	High[2]
Germany				
West Germany	Low	Low	High	Very high
East Germany	High	High	Low	Low
Italy	Low	Low	Very high	Very high
Lithuania	Very high	-	Low	Very low
Slovakia	Low	High	Low	Low
Sweden	Low	Low	High	Low
England	Very low	Low	High	High

1. Low in comparison to other EU-15 countries.
2. Low in comparison to other EU-15 countries but Sweden for arable land and pasture.

Table 18: Comparison of all countries in terms of rental and sale markets of agricultural land (evolution over the past decade)

	Evolution of sale market activity	Evolution of share of UAA rented	Evolution of average rental price	Evolution of average sale price
Czech Republic	Increase	Decrease	Stable	Decrease
France	Stable	Increase	Stable	Increase
Germany West Germany East Germany	 Stable Increase	 Increase Decrease	 Increase Increase	 Stable Decrease
Italy	-	Increase	Increase	Increase
Lithuania	Increase	-	-	Stable
Slovakia	Increase	Increase	Stable	Stable
Sweden	-	Stable	Stable	Increase
England	Stable	Stable	Stable	Increase

5. Potential imperfections on factor markets

Imperfections on markets of production factors (land, labour, capital) may impede land transactions. The activity of a land market in a specific country will therefore depend on the extent of land transaction costs and on the functioning of labour and capital markets. In a first subsection, the fees and other transaction costs on the land market are described for each country. The second and third subsections deal with labour market and credit market respectively.

5.1. Land markets

When participating to a land transaction, the main costs for the buyer and the seller are the cost of the land itself, plus taxes and notaries fees. There may also be additional costs for both the buyer and the seller (finding a seller or a buyer, negotiation costs, etc.). Table 19

summarises the nature and extent of the costs on the land market in all countries, while details are provided below for each country.

Czech Republic

In the Czech Republic a fee has to be paid to the Cadastral Office for a certificate of the plot's property rights. The basic fee is 100 CZK, and can be topped up by 50 CZK for cadastral map copy, 50 CZK for legalisation, and 300 CZK for a cross-check with former cadastre. The land seller also has to pay a real estate-transfer tax amounting to 3 percent of the plot price. The latter is the greater between the sale price and the official price assessed by a legal expert based on land valuation. The expert fee ranges from 1,400 to 5,000 CZK per plot, and is at the charge of the land seller. The buyer has to pay a fee of 500 CZK for ownership transfer, except in the case of heritage. The main transaction costs however, that are a significant impediment to the land market activity in this country, relate to the identification of plots and access to them. In the majority of cadastres the land had been organised to suit the requirements of large-scale socialistic farming. Hence, land programmes implemented in the communist era destroyed the physical identifications of the plots' boundaries (e.g. field paths). This makes plots' identification and access difficult. At the beginning of the transition land re-consolidation programmes were launched. Although there has been some simplified land consolidation implemented for 150,000 ha (3.5 percent of the total agricultural area), so far complex re-consolidations have however been completed for only 192,000 ha (4.5 percent of the total agricultural area), that is in only 493 cadastres (out of more than 13,000). Due to the high financial and administrative requirements (for example re-consolidations are undertaken if at least 50 percent of land owners in the concerned cadastre have asked for it), complex re-consolidations are estimated to be completed in 30 years.

France

In France the transfer of land or property is subject to a total tax of 4.89 percent. It includes the tax for right to transfer of 3.60 percent, a county ("département") tax of 0.09 percent, and a municipality tax of 1.20 percent. Additionally, there is a compulsory stamp of 6 euros per sheet of the transfer deed that has been written by the notary. Besides, registration in the cadastre is about 3 euros. Optional fees include 3 euros for a cadastral extract and 2 euros for a map copy.

Germany

Buyers of agricultural land in Germany have to pay a tax levied on acquisition of real estate, that amounts to 3.5 percent of the sale price. Additionally, notary and cadastral registration fee charged to buyers are up to 1.0 percent of the sale price.

Italy

Fees including transfer tax and cadastral registration for buyers of land in Italy amount to 18 percent of the sale price value, but for farmers they are 11 percent. Special conditions apply to owners of land in mountainous areas, where the fees are reduced to 258.22 euros plus 1 percent of the transaction price.

Lithuania

In Lithuania only since 1 January 2006 there is a tax on real estate transfer. Administrative fees (excluding notary fees) are of threefold. Firstly, there is a fee for certificate issuance indicating the market value of the plot, which is between 11.8 and 23.6 LTL depending on the request urgency. Secondly, there is a fee for registration of the plot in cadastre, which depends on the location (urban vs. rural areas), on the market value of the land, and on the legal form of the buyer. The range of this fee is 20 to 10,000 LTL, but is lowered by 25 percent for public land rental contract. Finally, additional certificates are usually needed, in particular proof of current land ownership of the buyers, to ensure that they do not exceed the maximum allowable agricultural area. Depending on the urgency and the type of certificate, applicable fees vary between 10 and 50 LTL. Detailed figures can be found in Tables A53, A54 and A55 in Appendix.

Slovakia

In Slovakia buyers are charged with a fee of 2,000 SKK for cadastral registration, 3,000 SKK in case of urgent request. Additionally, an expert evaluation of the value of land costs at least 5,000 SKK, depending on the size of the plot. Finally, in case a geometrical plan is needed the minimum fee is 6,000 SKK topped up by a fee stamp of 500 SKK. Hence, the minimum fee for buyers is 7,000 SKK without geometric plan. Since 2005 there is no tax on real estate transfer. But the abovementioned figures obviously exclude notary fees for purchase deed (which are believed to cost at least 560 SKK).

Sweden

In Sweden there is a stamp duty of 1.5 percent of the purchase price for natural persons and 3 percent for legal persons. Additionally, the seller has to pay a tax based on the increase in the value of the asset during the period of ownership, except in the cases of gifts and inheritance. There is also a service charge of 825 SEK for issuing ownership certificates.

England

In England transfer of land is subject to a stamp duty, which is a sliding scale. It is between 1 and 4 percent of the value (see table A56 Appendix). Not all land in England is registered in the cadastre. However, when there is a transaction, the registration is compulsory and is subject to a fee of £40 to £700 depending on the land value (see Table A57 in Appendix). If the registration is voluntary (i.e. outside a transaction) the fee is reduced, between £30 and £525 depending on the value. The value considered for the stamp duty and the fees is the maximum amount for which the property could be sold in the open market free of charge. The registrar may require a written statement signed by the seller or his/her conveyancer as an evidence of the value.

Additional optional fees include fees for the search in the cadastre (£2-10), for the copy of a registration or of a map (£2-8), for altering or removing a registration (£40), for determination of exact boundaries (£80).

Comparison of all countries

Only in Lithuania (before 2006) and in Slovakia there is no real-estate tax or duty. In the other countries, the tax/duty level is quite similar (up to 4 percent) except in Italy where it is much higher (11 percent). As for the fees for various cadastral or expertise operations, their level is not lower in new Member States compared to old Member States; Slovakia in particular presents high fees, with a minimum of 315 euros (13,000 SKK).

Table 19: Description and valuation of the transaction costs on the agricultural land market in all countries

	Description of the transaction costs	Valuation of the costs
Czech Republic	Fee for certificate of the plot property rights Real estate-transfer tax Fee for expert assessment of the plot value Fee for ownership transfer (except if heritage) Transaction costs for plot identification/access (re-consolidation)	100 CZK minimum 3% of value assessed by expert 1,400 – 5,000 CZK 500 CZK High
France	Real-estate transfer tax Stamps on the purchase deed Cadastral registration fee Fees for cadastral extracts or maps (optional)	4.89% of sale price 6 euros per sheet of the deed 3 euros 2-3 euros
Germany	Real estate-acquisition tax Cadastral registration fee	3% of sale price 1% of sale price
Italy	Transfer tax and cadastral registration fee	11% of sale price
Lithuania	Fee for certificate of the plot value Cadastral registration fee Fee for additional certificates (optional)	11.8 to 23.6 LTL 20 to 10,000 LTL 10 to 50 LTL
Slovakia	Fee for cadastral registration Fee for expert assessment of the plot value Fee for geometrical plan (optional)	2,000-3,000 SKK 5,000 SKK minimum 6,000 SKK minimum
Sweden	Stamp duty Fee for certificate of the plot property rights	1.5 to 3% of sale price 825 SEK
England	Stamp duty Cadastral registration fees Other fees (optional)	1 to 4% of value £30 to £700 £2 to £80

5.2. Labour markets

The lack of job opportunities outside the agricultural sector and the low level or inexistent level of non-agricultural education may lead some farmers to keep on farm and, as

a result, to restrict agricultural land (sale and rental) supply. The potential off-farm opportunities for farmers are approached here by the wages and education in agriculture.

Table 20 compares the ratio of wage in agriculture to the whole economy, and the education level of agricultural workers, between countries. Additional details are provided in Appendix.

Table 20: Ratio of wage agriculture/whole economy and education level of agricultural workers

	Ratio of wage agriculture/whole economy (%)	Share of persons employed in agriculture according to their highest education (any education) (%)
Czech Republic	69.5	Primary or none: 18.6 Secondary: 75.2 Post-secondary: 6.2
France	87.2	Primary or none: 34.1 Secondary: 63.9 Post-secondary: 2.0
Germany	57.3	Primary or none: 3.8 Secondary: 85.0 Post-secondary: 11.2
Italy	57	Primary or none: 56.8 Secondary: 39.7 Post-secondary: 3.5
Lithuania	75	Primary or none: 8.3 Secondary: 86.9 Post-secondary: 4.7
Slovakia	71.8	Primary or none: 14.8 Secondary: 78.5 Post-secondary: 6.7
Sweden	78.6	Primary or none: 31.8 Secondary: 55.6 Post-secondary: 12.6
United Kingdom	72.4	Primary or none: 6.9 Secondary: 74.2 Post-secondary: 18.9
Notes	Note: CZ: individual farms not included Date of the statistics: CZ 2003; FR 2000; GER 2002; IT 2000; LIT 2002; SLK 2003; SW 2003; UK Spring 2005	Notes: FR: FADN farmers only; GER: farmers with both agricultural and non agricultural education are not included; ITAL: farmers owners only; UK: English FADN farmers only Date of the statistics: CZ 2004; FR 2003; GER 1999; IT 2000; LIT 2003; SLK 2003; SW 2002; UK 2002

Although part of the difference between countries can be attributed to differences in the calculation methods, France seems to be by far the country with the highest ratio of wage,

while Germany and Italy are the countries with the lowest. As for the education, Italy has the highest share of farmers without any education, followed by France and Sweden. Farmers with the highest education on average are in Germany and England.

5.3. Credit markets

Imperfections on credit markets can influence the activity of the land market for two reasons: lack of credit may prevent land purchase; in addition, land might be used as collateral. The potential existence of credit rationing among farmers in the partner countries was an issue of interest for this deliverable and was asked in the questionnaire to partners. However information on this topic is rare, and could usually not be collected. For this reason, this subsection concerns mainly the loan characteristics (interest rates, collateral, preferential credit).

Table 21 summarises the schemes of credit support, while Table 22 compares the interest rates and collateral requirements between countries. Additional description is provided below for each country. Detailed figures are given in Appendix.

Czech Republic

Czech farmers can benefit from preferential loans introduced since 1994 by a programme funded by the Support and Guarantee, Farm and Forestry Fund (SGFFF). Under this programme 71 banks provide subsidised credit for operational and non-land investment loans (with larger subsidisation for farmers under 40), while 7 banks provide it for agricultural land purchase. Most of the loans taken by farmers are within this programme. Land purchase is still a very minor part as it was included in the programme only in 2004. Conditions for receiving a supported loan for land purchase are that farmers (except for young farmers) have to had been farming on the purchased land for a minimum of 3 years, farmers have to farm on the purchased land in the future during a minimum of 10 years, and the value of the purchased land cannot exceed 10 millions CZK. For purchase of non-state agricultural land banks charge market interest rate on loans between 5.5 and 8.0 percent, with 4 to 5 percent being covered by SGFFF. In any case a farmer has to pay a minimum interest rate of 1 percent.

Another support exists in the form of loan guarantees in the frame of the SGFF programme. For operational loans the fund guarantees 50 percent of the loan value, and for non-land investment the rate is 30 percent (except for young farmers where the rate can be up to 60 percent).

As for collateral, only since 2004 Czech farmers are allowed to use land as collateral. This new legislation is aimed as supporting the consolidation programmes. It seems that in general banks accept to use non-built land as collateral, although frequently they would prefer other guarantees. For land purchase farmers can receive a loan amounting to 80 percent of the value of this land.

France

The French government extends preferential loans and grants via 6 banks. Subsidised loans exist for 6 credit lines, 4 of them for individual farmers. Individual farmers can receive investment loans for upgrading the farm buildings, for purchasing livestock equipment, for purchasing equipment or plants for perennial cultures such as orchards and vineyards, and for starting a farm if they are young farmers (less than 40 years old). The two other credit lines are aimed at partnerships for renewing equipment, and at farmers' machinery cooperatives (the "CUMA").

Before 2004 for all loans the interest rate was 4 percent in less favoured areas (LFA) and 3 percent elsewhere. Since 2004 the interest rate is the same for the whole country. 70 percent of the investment sum can be covered with these loans. The loans for upgrading the farm buildings are in particular aimed at making the farm comply with the EU environment and health standards. This credit line can also receive a capital grant of 20 to 60 percent (in LFA) of the investment sum, for a maximum of 60,000 (in non LFA) to 100,000 euros (in LFA). Both subsidised loans and capital grants for this credit line are financed for 50 percent by the European Commission.

As for young farmers' loans, the interest rate is 3.5 percent in LFA and 2 percent elsewhere, with a maximum investment sum of 110,000 euros in LFA and 95,000 euros elsewhere. Young farmers need to already have a farm (the loan can only be used to modernise), to have at least a lower secondary agricultural education, to have followed a 40-hour internship on a farm, and to stay on their farm during the next 10 years at least. Besides the subsidised loans they can also benefit from an aid to settlement, of 17,950 euros in LFA and 8,000 euros elsewhere.

There exist no preferential loans for purchasing land.

Banks consider agricultural land as good collateral.

Germany

In Germany the state-owned bank Landwirtschaftliche Rentenbank is specialised in loans to farmers, and offers lower rates than the market rates. For example in 2005 rates ranged from 2.85 percent to 3.90 percent, which is lower than the average market rate (5.79 percent in 2003). All investment projects are considered, and investments by young farmers or environmentally targeted investments are even cheaper. Besides this, credit to farmers can be additionally supported by the Agrarinvestitionsförderungsprogramm (AFP) that was created after the Second World War. It is funded for 60 percent by the federal government and for 40 percent by each Länder. The support is either in the form of a subsidisation of 5 percent of the interest rate (which makes the interest rate to be paid by farmers usually 0), or in the form of a grant of up to 35 percent of the whole investment sum. However, only credit for specific purposes is supported, such as landscape and biodiversity conservancy, organic farming and alternative energy uses. Hence, land purchase is not included in the scheme. Loan guarantees are also available for farmers, in the frame of a programme co-financed by the federal government and the Länders, and in the frame of specific Länders' programmes. Up to 80 percent of the investment sum is covered by the programme. Land purchases are included in this scheme.

Banks consider agricultural land as good collateral, at least better than buildings.

Italy

A few small farms in Italy experience credit rationing due to high transaction costs and the lack of suitable guarantees, but in general Italian farmers do not wish to resort to formal credit, despite the availability of government support. The latter is of three types. Firstly, young farmers who want to start a farm can benefit from an aid from the government of 30,000 euros, that can be also used to purchase agricultural land only. Secondly, under the scheme of agricultural rural credit investment loans are guaranteed up to 70 percent of the amount. Finally, there exist subsidised loans since 1985 for short-term (less than 18 months) and long-term credit. The subsidisation on the interest rate is at the discretion of banks but has to comply with two rules. For short-term loans the subsidised interest rate eventually charged to farmers cannot be lower than the official rate charged to other sectors. For long-term loans the subsidised interest rate charged has to be at least 30 (for farms in LFA) to 60 percent (for other farms) of a reference rate set by the government. This reference rate is updated every

month. For example in December 2003 the reference rate was 5.05 percent. Land purchase is included in the long-term subsidised credit.

Nowadays the use of subsidised credit is becoming less frequent. In 2002 the amount borrowed under this programme amounted only 10 percent of the amount of total credit to the agricultural sector. Land is usually regarded as good collateral by banks. In general banks lend up to 75 percent of the value of the collateral.

Lithuania

Lithuanian farmers can receive two types of preferential loans: loan guarantees and subsidised loans. Only credit for working capital is eligible for loan guarantees. Up to 70 percent (80 percent for young farmers) of the loan amount is guaranteed by the State Guarantee Fund. Credit for investment and working capital are eligible for subsidised loans. These do not consist in the usual subsidisation of the interest rate, but in a compensation of the total interest to be paid. Part of the total interest is paid by the General Programming Document scheme, which is partly funded by the European Commission. The share of the total investment paid by the scheme is as follows:

– for agricultural land purchase, 50 percent (60 percent for young farmers, under 40; there is a plan of increasing this share to 100 percent); if the purchase will specifically help land consolidation the share is 100 percent for young farmers;
– for modernisation of greenhouses, 48 percent;
– for other investments, 30 percent (40 percent for young farmers);
– for operational credit, 60 percent (70 percent for young farmers).

Requirements for eligibility are that physical entities need to be registered as farmers or to hold an agricultural degree or proof of farming experience, and that legal entities get at least 50 percent of their income from agricultural production. Additionally, farmers need to bring a personal capital contribution, that is to say that the whole investment sum cannot be covered by the loan. For land purchase the personal contribution is 10 percent (5 percent for young farmers) of the price.

Government support in Lithuania is therefore obviously very much targeted to land transactions, in a bid to help farms enlarge and to reduce farm fragmentation. However, despite all these preferential credit lines, small farms usually experience difficulties to benefit from the supports, and practically no farmers were reported to have made use of the preferential loans for land purchase. The first obstacle is the personal contribution that most

of them are not able to provide, and the second impediment comes from banks in the form of high collateral requirements in order to discourage small applicants that would entail high lending costs. Trade credit is thus the main source of credit for small farms: farms get credit from suppliers and processors, in order to intensify and modernise their production. Such credit is widespread for dairy, cereal, oilseed and sugar beet farms, but of course does not concern land purchases. Currently preferential credit is being discontinued, and public funds are switched towards top-ups programme.

Land, especially in the past six months due to land price increase, is regarded as good collateral.

Slovakia

In Slovakia farmers can benefit from subsidised credit for various loans including land purchase. This programme, supported by the state, exists since 1998, and subsidises the interest rates by 4 percent. However farmers must support a minimum rate of 2 percent. Loan guarantees are also available, provided by the Slovak Guarantee and Development Bank since 1991 to non-farmers and 1993 to farmers. The guarantee is 40 percent of the collateral, for loans between 100,000 and 15,000,000 SK, and only operational credits are eligible. Agricultural land is not usually brought as collateral because banks generally refuse it. CAP direct payments are among best collaterals. Banks frequently provide credit amounting to 80 percent of the collateral value.

Sweden

No preferential loans for agriculture exist in Sweden. However, there does not seem to exist any obvious credit rationing. Since an agricultural property has a relatively stable value and is regarded as good collateral, most of the commercial banks offer loans to farmers. They can receive a first mortgage loan of up to 75 percent of the value of the property, which is assessed on the occasion of the loan. Borrowers can choose between fixed or variable interest rates, with a repayment duration between 1 and 12 years. If the amount of the first mortgage loan is not sufficient, farmers can contract a final mortgage loan, where the interest rate is variable and higher than for the first mortgage loan, and the instalment time is usually shorter.

United Kingdom

Farmers in the UK usually pay a rate which is 2-2.5 percent higher than other clients. Although until the early 1990es the Agricultural Mortgage Corporation and the Agricultural Credit Corporation used to provide loans that were guaranteed by the government, there are

nowadays no preferential loans to farmers in the UK. However British banks allow farmers, where collateral is available, to use overdraft as a method of financing medium-term and often long-term investments. British farmers also traditionally prefer overdrafts to long-term loans as the former are cheaper and more flexible.

Comparison of all countries

Sweden and the UK are the only countries where there exists no public support in terms of credit. Among the other countries, only in France land purchases are not concerned by any preferential credit.

Interest rates, even subsidised, seem to be high in Slovakia in comparison with the other countries. Usual collateral requirements are similar across countries: about 70-80 percent of the value of the collateral is lent by banks. Land is considered as good collateral in all countries, except in the Czech Republic and in Slovakia.

Table 21: Schemes of credit support to farmers and consideration of land as collateral, in all countries

	Credit support to farmers
Czech R.	Subsidised loans for operational and investment loans, including land purchase Loan guarantees for 30 to 60% of loan, excluding land purchase
France	Subsidised loans and capital grants for specific investments, excluding land purchase
Germany	Low rates from Landwirtschaft Rentenbank Interest rate subsidisation and capital grants by AFP for investment, excluding land purchase Loan guarantees for up to 80% of investment, including land purchase
Italy	Capital grants for young farmers, including land purchase Subsidised loans for short-term and long-term credit, including land purchase
Lithuania	Total interest subsidised for operational and investment loans, including land purchase Loan guarantees for up to 80% of loan for operational loans
Slovakia	Subsidised loans, including land purchase Loan guarantees for 40% of collateral, only for operational credit
Sweden	No preferential loans to farmers
United K.	No preferential loans to farmers Overdrafts more commonly used than loans

Table 22: Average interest rates and collateral requirements in all countries

	Average interest rate on loans	Average subsidised interest rate on loans	Average interest rate on deposits	Loan amount as % of the value of the collateral
Czech R.	5.30%	1.41%	1.42%	80 90 for subsidised loans
France	5.69%	2.5-4%	3.63%	80
Germany	5.79%	2.85-3.90% in Land. Rentenbank 0% (interest rate reduced by 5% for AFP loans)	1.94-3.38%	66.6
Italy	3.72%	Min of 5.53% for short-term and of 1.52 for long-term	1.37%	75
Lithuania	6%	(30-70% of total interest paid)	2%	70
Slovakia	9.5% *	6.4% (interest rate reduced by 4%)	0.3-1.65%	80
Sweden	3.75%	No subsidised loans	2.25%	75
United K.	4.00%**	No subsidised loans	1.79%	80
Date of the statistics	CZ 2003; FR 2003; GER 2003; IT Dec 2003; LIT 2003; SVK: 2003; SW 2003; UK 2002	CZ 2003; FR 2003; GER 2005; IT Dec 2003; LIT 2004; SVK 2005;	CZ 2003; FR 2003; GER 2003; IT 2002; LIT 2003; SVK 2005; SW 2003; UK 2002	

* For loans to agriculture only (subsidised and non-subsidised).
** Loans to farmers are usually 2-2.5 percent higher.

5.4. Summary

The analysis of the factor markets has shown in particular that Italy was affected by low wages and education in agriculture, and Slovakia by high fees on the land market and high

interest rates. Swedish and English farmers benefit from no preferential loans at all, and French farmers from no preferential loans for land purchase.

6. Conclusion

The objective of the present deliverable was to provide a compilation of land market information (legal aspects and basic statistics) for the involved partner countries to be used as an empirical background for the modelling work (specification and calibration) carried out in workpackages 4 and 9.

It was not possible to provide a complete view of all aspects that relate to the functioning of agricultural land markets. However we tried to review the most important ones, i.e., agricultural structures, institutional and legal aspects and factor markets. For each of these aspects a set of quantitative and qualitative information is provided for each partner country. This allows to get a view of the current situation as well as the observed evolution over the last decade in each country and to compare situations across partner countries. All these information should help modelling work carried out in workpackages 4 and 9.

Information and basic statistics describing agricultural structures in partner countries show that globally there is not much difference between agricultural output structures and the way agricultural land is used in partner countries. The main difference rather lies in farm structures. Partner countries differ quite a lot in the number of farms, the proportion of individual and other legal form farms, the average UAA size of farms, the distribution of farm size and, to a lesser extent, the share of rented UAA.

Information provided on institutional and legal aspects indicate that partner countries differ significantly as regards the role of the state on agricultural land markets. For each retained institutional or legal element, we have tried to analyse its main consequences as regards the functioning of agricultural land markets. This should give modellers some useful indications for their specification and calibration work. For instance, the existence or the absence of legal restrictions on agricultural land use provide indications on the degree of mobility of land between agricultural and other sectors in each country. In the same way, the significant state intervention on agricultural land market that is observed in some countries suggests that the standard supply-demand modelling is probably not totally appropriate for representing the functioning of land markets in such countries.

Finally, the information and basic statistics provided on agricultural land sale and rental market activities and prices should be useful for calibrating the initial situation of these markets in models developed within workpackages 4 and 9.

References

Dale, P. and Baldwin, R. (2000), Emerging land markets in Central and Eastern Europe. In Csaki, C. and Lerman, Z. (eds.), Structural change in the farming sectors in Central and Eastern Europe. Lessons for EU accession. Second World Bank/FAO Workshop, June 27-29, 1999. World Bank Technical Paper, 465. Europe and Central Asia Environmentally and Socially Sustainable Development Series.

Daugaliene, V. (2004), Preparation on land consolidation in Lithuania. Symposium on moderne land consolidation, September 10-11, Volvic, France.

Daugaliene, V. and Kauers, B. (2004), Institutional, organisational and legal framework for the lease and sale of state owned agricultural land in the Republic of Lithuania. Final report of the Twining Light Project Lithuania-Germany LT 2002/000-601.06.03.05.

Hudecova, L. and Csókásová, T. (2004), Slovakia, Report based on exchange programme documents, Budapest, CelkCenter.

Banderová, A. and Marišová, E. (2003), Importance of ownership and lease of agricultural land in Slovakia in the pre-accession period. *Agric. Econ. – Czech*, 49 (5): 213-216.

Buday, Š. (2003), Agricultural land market in selected regions of the Slovak Republic. *Agric. Econ. – Czech*, 49 (4): 189-193.

Němec, J. (2005), Sale of agricultural land in the Czech Republic after accession to the EU. *Agric. Econ. – Czech*, 51 (5): 202-206

Appendix 1: Detailed statistics about Section 2 “Agricultural structure”

a) Agriculture in the economy

Table A1: Evolution of the share of agriculture in GDP in all countries (%)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R.	n.a	n.a	4.6	4.7	4.2	4.1	3.7	3.9	3.7	3.1	2.8
France	3.0	3.2	3.2	3.2	3.2	3.1	3.0	2.7	2.7	2.6	2.6
Germany	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.1
Italy	3.2	3.2	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.6	2.5
Lithuania	14.2	10.7	11.4	12.4	11.4	9.8	8.3	7.8	7.0	7.0	6.2
Slovakia	6.1	6.7	5.9	5.5	5.6	5.3	4.7	4.6	4.9	4.4	4.0
Sweden	2.6	2.7	2.7	2.4	2.4	2.2	2.1	1.9	1.9	1.8	1.8
United K.	1.8	1.7	1.8	1.7	1.4	1.2	1.1	1.0	1.0	0.9	0.9

Source: Eurostat n.a: not available

Table A2: Evolution of the share of farm labour in total employment in all countries (%)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R.	n.a	n.a	6.6	6.1	5.8	5.5	5.2	5.1	4.8	4.8	4.5
France	5.3	5.1	4.9	4.8	4.7	4.6	4.4	4.3	4.2	4.1	4.1
Germany	3.3	3.1	3	2.7	2.7	2.6	2.6	2.5	2.5	2.4	2.4
Italy	6.5	6.3	6.0	5.7	5.6	5.3	5.0	4.9	4.8	4.6	4.4
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	19.9	17.1	17.6	17.8
Slovakia	n.a	n.a	8.9	8.0	7.6	7.0	6.2	5.6	5.3	5.0	4.4
Sweden	3.4	3.3	3.2	3.1	2.9	2.8	2.7	2.7	2.5	2.4	2.3
United K.	1.4	1.3	1.2	1.2	1.3	1.3	1.2	1.2	1	0.9	0.9

Source: Eurostat n.a: not available

Table A3: Evolution of the share of UAA in total area in all countries (%)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R.	55.4	55.4	55.4	55.4	55.4	55.3	55.4	55.4	55.7	47.3	47.5
France	56.0	55.8	55.8	55.8	55.8	55.8	54.9	54.8	54.7	54.6	54.5
Germany	49.3	49.7	49.7	50.5	50.5	50.7	49.1	48.9	48.8	48.6	48.7
Italy	56.0	55.8	55.0	53.4	53.4	53.0	53.7	53.1	52.3	52.2	51.1
Lithuania	56.2	56.1	56.0	55.9	55.9	55.8	55.8	55.7	46.5	46.3	40.4
Slovakia	50.3	50.9	50.9	50.8	50.8	50.8	50.8	49.9	46.9	46.5	46.5
Sweden	7.8	8.2	7.6	7.7	7.5	7.5	7.4	7.2	7.4	7.6	7.6
United K.	67.9	67.2	67.0	67.2	67.3	66.9	66.5	64.4	n.a	n.a	66.0

Source: Eurostat n.a: not available

b) Farm structures

Table A4: Distribution of farms according to their UAA in 2003 in each country; share of farms in the total number of farms in %

Czech Republic

	all farms	individual farms	other forms
1-2 ha	0.4	1.3	0.0
2-5 ha	0.6	2.2	0.0
5-10 ha	0.9	3.2	0.0
10-20 ha	1.6	5.6	0.0
20-30 ha	1.3	4.6	0.1
30-50 ha	2.0	6.6	0.1
50-100 ha	3.9	13.1	0.3
> 100 ha	89.2	63.4	99.4

France

	all farms	individual farms	other forms
1-2 ha	0.3	0.5	0.0
2-5 ha	0.9	1.6	0.1
5-10 ha	1.5	2.5	0.3
10-20 ha	3.3	5.5	0.8
20-30 ha	4.1	6.4	1.3
30-50 ha	10.7	16.1	4.5
50-100 ha	30.4	36.7	23.1
> 100 ha	48.8	30.6	69.9

Germany

	all farms	individual farms	other forms
1-2 ha	0.1	0.2	0.0
2-5 ha	1.3	1.9	0.1
5-10 ha	2.6	3.7	0.2
10-20 ha	6.7	9.6	0.5
20-30 ha	5.9	8.3	0.5
30-50 ha	12.4	17.2	1.7
50-100 ha	22.7	30.0	6.5
> 100 ha	48.3	29.2	90.5

Italy

	all farms	individual farms	other forms
1-2 ha	6.9	7.8	0.1
2-5 ha	10.2	11.4	0.5
5-10 ha	10.9	12.2	1.0
10-20 ha	13.0	14.6	1.3
20-30 ha	9.0	10.0	1.6
30-50 ha	11.2	12.4	2.0
50-100 ha	13.5	14.6	5.2
> 100 ha	25.4	17.0	88.4

Lithuania

	all farms	individual farms	other forms
1-2 ha	2.1	2.4	0.0
2-5 ha	17.0	19.3	0.0
5-10 ha	16.0	18.2	0.1
10-20 ha	15.6	17.8	0.2
20-30 ha	7.2	8.2	0.2
30-50 ha	7.6	8.6	0.5
50-100 ha	8.3	9.2	1.6
> 100 ha	26.2	16.3	97.5

Slovakia

	all farms	individual farms	other forms
1-2 ha	1.4	9.2	0.0
2-5 ha	1.1	7.2	0.0
5-10 ha	0.5	3.1	0.0
10-20 ha	0.7	4.3	0.0
20-30 ha	0.5	3.0	0.0
30-50 ha	0.9	5.4	0.1
50-100 ha	1.8	10.5	0.3
> 100 ha	93.3	57.3	99.5

Sweden

	all farms	individual farms	other forms
1-2 ha	0.0	0.0	0.0
2-5 ha	0.6	0.8	0.1
5-10 ha	2.4	2.9	0.3
10-20 ha	6.3	7.5	1.2
20-30 ha	6.3	7.2	1.4
30-50 ha	12.1	14.4	2.9
50-100 ha	25.8	29.1	11.1
> 100 ha	46.5	38.1	83.0

United Kingdom

	all farms	individual farms	other forms
1-2 ha	0.2	0.2	0.0
2-5 ha	0.7	0.8	0.1
5-10 ha	1.2	1.4	0.2
10-20 ha	2.7	3.2	0.5
20-30 ha	2.9	3.3	0.6
30-50 ha	6.4	7.4	1.1
50-100 ha	15.8	17.9	3.0
> 100 ha	70.2	65.8	94.4

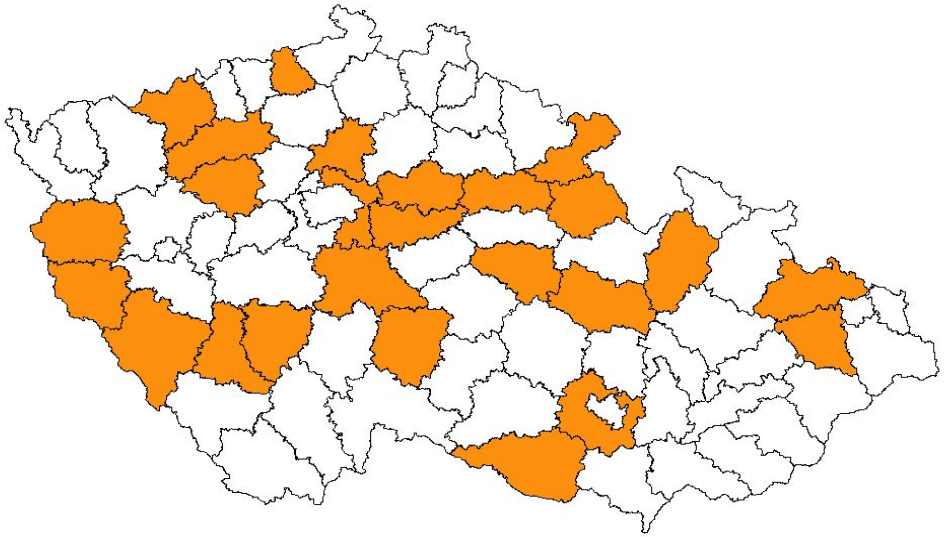
Source: Eurostat

Appendix 2: Detailed statistics about Section 4 “Land market activity”

a) Additional explanations to main text

Czech Republic

Map 1: Location of the 25 districts followed for the land market survey in the Czech Republic



Source: VUZE

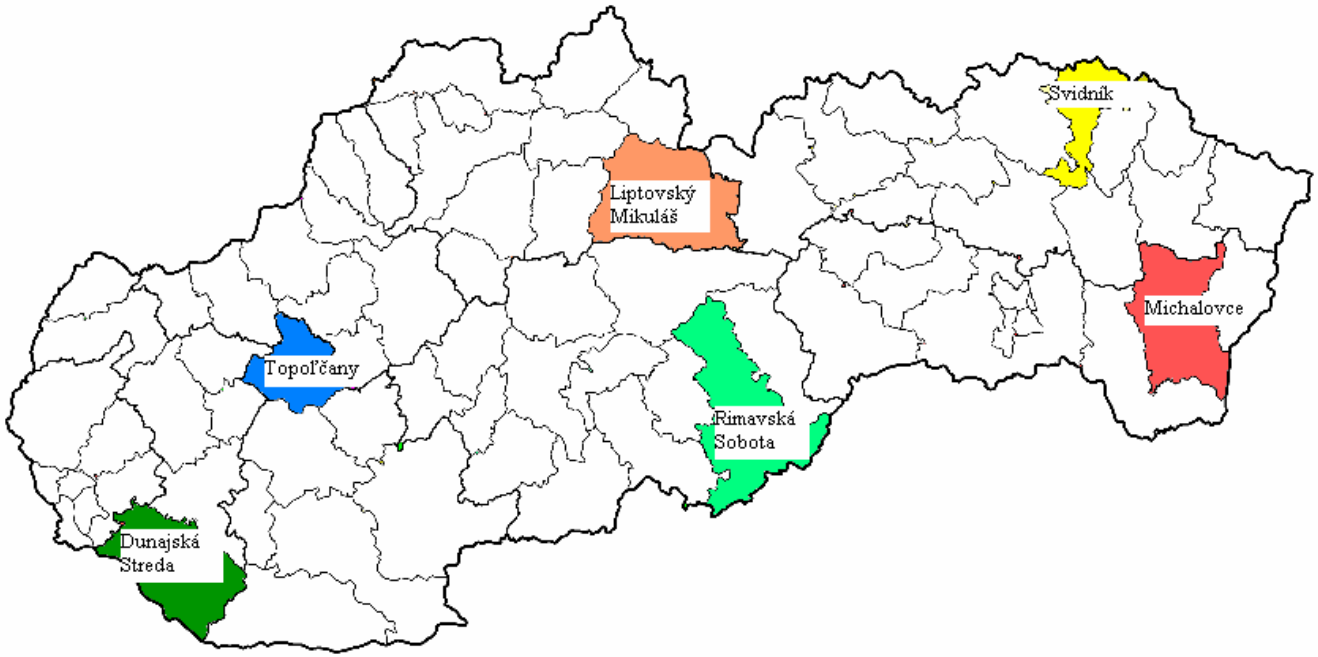
Table A5: UAA of the 25 districts followed for the land market survey in the Czech Republic

Name of the district	UAA (ha)
Benešov	94,844
Kolín	59,939
Mělník	47,001
Nymburk	61,237
Praha-východ	40,916
Rakovník	48,816
Pelhřimov	79,237
Písek	63,764
Strakonice	66,912
Domažlice	61,797
Klatovy	89,821
Tachov	66,889
Chomutov	39,250
Louny	80,372
Ústí nad Labem	18,462
Hradec Králové	62,154
Chrudim	63,740
Náchod	52,749
Rychnov nad Kněžnou	54,283
Svitavy	81,288
Brno-venkov	62,382
Znojmo	113,226
Nový Jičín	60,101
Opava	70,121
Šumperk	56,592
Total UAA of the followed districts	1,595,893
Total UAA of the Czech Republic	4,269,218

Source: VUZE

Slovakia

Map 2: Location of the 6 regions followed for the land market survey in Slovakia



Source: VUEPP

Table A6: UAA of the 6 regions followed for the land market survey in Slovakia

Name of the region	UAA (ha)
Dunajská Streda	79,728
Topoľčany	35,518
Liptovský Mikuláš	34,660
Rimavská Sobota	71,855
Svidník	18,699
Michalovce	66,558
Total UAA of the followed regions	307,018
Total UAA of Slovakia	2,100,629

Source: VUEPP

b) Sale market of agricultural land

Czech Republic

Table A7: Number of transactions and of total area transferred of agricultural land in the 25 districts followed for the land market in the Czech Republic between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of transactions												
All plots	4,990	6,241	5,163	5,575	5,157	7,441	8,711	9,307	8,132	10,814	11,859	6,260
Plots < 1 ha	4,508	5,616	4,613	5,032	4,748	6,775	7,888	8,316	7,262	9,443	10,546	5,365
Plots 1-5 ha	389	506	436	424	315	497	639	767	670	1,001	919	633
Plots > 5 ha	93	119	114	119	94	169	184	224	200	370	394	262
Total area transferred (ha)												
All plots	2,405	3,115	2,862	2,779	2,475	3,654	4,648	5,335	4,550	8,682	9,513	6,460
Plots < 1 ha	672	861	685	738	694	886	1,146	1,200	1,074	1,415	1,538	818
Plots 1-5 ha	814	1,043	921	890	683	1,098	1,345	1,677	1,440	2,234	2,011	1,412
Plots > 5 ha	919	1,211	1,255	1,151	1,098	1,670	2,157	2,458	2,036	5,033	5,964	4,230

Source: VUZE

Note: The statistics are for public and private land and do not include gifts. 2004 statistics include only statistics for the first half of the year.

Table A8: National estimations of the number of transactions and of total area transferred of agricultural land in the Czech Republic between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of transactions												
All plots	13,349	16,696	13,811	14,913	13,796	19,906	23,302	24,897	21,754	28,929	31,724	16,746
Plots < 1 ha	12,059	15,024	12,340	13,461	12,702	18,124	21,101	22,246	19,427	25,261	28,212	14,352
Plots 1-5 ha	1,041	1,354	1,166	1,134	843	1,330	1,709	2,052	1,792	2,678	2,458	1,693
Plots > 5 ha	249	318	305	318	251	452	492	599	535	990	1,054	701
Total area transferred (ha)												
All plots	6,432	8,334	7,654	7,435	6,620	9,773	12,433	14,272	12,173	23,226	25,447	17,282
Plots < 1 ha	1,798	2,305	1,833	1,975	1,856	2,371	3,066	3,211	2,873	3,786	4,113	2,188
Plots 1-5 ha	2,178	2,790	2,463	2,381	1,828	2,936	3,597	4,486	3,853	5,976	5,379	3,777
Plots > 5 ha	2,458	3,239	3,358	3,079	2,936	4,466	5,770	6,675	5,447	13,464	15,955	11,317

Source: VUZE

Note: The statistics are for public and private land and do not include gifts. 2004 statistics include only statistics for the first half of the year.

Table A9: Average size of exchanged plots of agricultural land in the Czech Republic between 1993 and 2004 (ha)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
All plots	0.48	0.50	0.55	0.50	0.48	0.49	0.53	0.57	0.56	0.80	0.80	1.03
Plots < 1 ha	0.15	0.15	0.15	0.15	0.15	0.13	0.15	0.14	0.15	0.15	0.15	0.15
Plots 1-5 ha	2.09	2.06	2.11	2.10	2.17	2.21	2.10	2.19	2.15	2.23	2.19	2.23
Plots > 5 ha	9.88	10.18	11.01	9.67	11.68	9.88	11.72	10.97	10.18	13.60	15.14	16.15

Source: VUZE

Note: The statistics are for public and private land and do not include gifts. 2004 statistics include only statistics for the first half of the year.

Table A10: Average market sale price of agricultural land in the Czech Republic between 1993 and 2004 (CZK/ha)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
All plots	134,771	n.a	n.a	n.a	280,113	318,444	254,177	271,222	348,506	212,444	238,977	205,896
Plots < 1 ha	274,961	341,000	540,000	421,800	1,249,438	1,019,434	794,470	921,360	1,087,776	971,424	1,166,803	1,215,186
Plots 1-5 ha	129,628	196,300	170,600	172,600	146,361	174,206	95,994	135,994	199,450	129,042	132,286	126,832
Plots > 5 ha	36,789	61,600	46,600	37,100	65,297	40,979	65,684	41,971	55,664	34,020	35,742	37,173
Per land type												
Arable land	112,573	169,930	193,407	224,745	694,775	567,560	348,297	343,151	499,339	307,045	328,710	286,386
Pasture	124,283	84,070	74,010	71,049	89,032	66,576	65,586	129,824	251,693	103,885	112,783	93,617
Hop garden	100,347	97,986	60,500	81,435	n.a	113,147	82,781	25,468	69,393	127,798	56,404	38,998
Vineyard	111,613	151,876	107,712	512,699	n.a	1,820,247	82,772	44,566	238,906	324,233	571,884	149,221
Orchard	269,158	371,609	351,358	591,249	1,369,738	647,785	477,463	1,134,558	747,773	430,871	804,356	392,634
Garden	466,456	502,889	981,922	309,177	810,485	651,322	693,765	1,033,181	1,426,512	1,149,379	1,320,688	1,754,241

Source: VUZE

Note: The statistics are for public and private land and do not include gifts. 2004 statistics include only statistics for the first half of the year.

Table A11: Average, maximum and minimum of administrative price of agricultural land in the Czech Republic since 1990 (CZK/ha)

	01.09.1990 to 31.10.1991	01.11.1991 to 31.10.1994	01.11.1994 to 30.09.2000	01.10.2001 up to today
Average	55,096	44,971	50,200	52,400
Minimum	7,000	5,000	5,000	7,000
Maximum	118,000	124,000	135,000	148,100

Source: Official laws and 'Bonitace a oceňování zemědělské půdy ČR' ('Valuation and appreciation of agricultural land in CR'), by J. Němec, VÚZE, 2001

France

Table A12: Number of transactions, total area transferred, average size of exchanged plots and average market sale price of agricultural land in France between 1994 and 2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of transactions											
All land	80,648	81,248	80,751	83,991	86,719	87,129	86,115	82,180	83,059	83,475	81,708
Arable land and pasture	62,032	62,739	60,994	61,442	63,994	62,538	59,473	55,696	53,940	53,108	53,209
Vineyard	8,452	8,549	8,807	9,358	9,452	10,375	10,985	10,706	10,791	11,272	10,149
Other land	10,164	9,960	10,950	13,191	13,273	14,216	15,657	15,778	18,328	19,095	18,350
Total area transferred (ha)											
All land	272,684	287,567	284,290	285,960	288,475	286,062	276,015	268,177	281,003	288,217	274,271
Arable land and pasture	224,587	236,726	228,082	221,795	226,403	220,507	206,016	200,743	205,163	206,918	200,245
Vineyard	8,717	9,201	9,617	10,101	10,722	11,642	12,273	12,249	11,921	12,965	12,006
Other land	39,380	41,640	46,591	54,064	51,349	53,912	57,725	55,185	63,920	68,333	62,020
Average size of exchanged plots (ha)											
All land	3.38	3.54	3.52	3.40	3.33	3.28	3.21	3.26	3.38	3.45	3.36
Arable land and pasture	3.62	3.77	3.74	3.61	3.54	3.53	3.46	3.60	3.80	3.90	3.76
Vineyard	1.03	1.08	1.09	1.08	1.13	1.12	1.12	1.14	1.10	1.15	1.18
Other land	3.87	4.18	4.25	4.10	3.87	3.79	3.69	3.50	3.49	3.58	3.38
Average market sale price (euros/ha)											
All land	4,495	4,356	4,547	4,848	5,481	5,956	6,666	7,215	8,019	8,325	9,341
Arable land and pasture	3,768	3,621	3,857	3,826	4,157	4,593	4,913	5,384	5,778	6,079	6,569
Vineyard	18,185	19,528	18,001	21,724	27,053	23,106	26,545	26,314	30,993	32,575	37,001
Other land	5,251	4,932	4,962	5,608	6,287	7,114	8,279	9,127	10,257	10,179	12,287

Source: SAFER

Note: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha. Gifts are not included. Average size of exchanged plots calculated as the ratio of Total area transferred/Number of transactions.

Table A13: Average market sale price of arable land and pasture in France's administrative regions between 1994 and 2004 (euros/ha)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alsace	4,830	5,040	4,960	5,080	4,880	4,870	4,780	4,900	5,050	5,140	5,220
Aquitaine	3,620	3,410	3,350	3,410	3,570	3,820	4,200	4,660	5,280	5,840	6,630
Auvergne	2,180	2,100	2,070	2,090	2,100	2,310	2,450	2,790	3,010	3,370	3,510
Basse-Normandie	3,090	3,020	2,980	3,010	3,060	3,220	3,440	3,690	3,900	4,220	4,490
Bourgogne	1,920	1,880	1,880	1,880	1,900	1,990	2,150	2,290	2,430	2,610	2,750
Bretagne	2,710	2,640	2,630	2,700	2,800	2,920	2,990	3,120	3,270	3,530	3,650
Centre	3,010	2,920	2,940	2,930	2,980	3,050	3,220	3,530	3,730	3,940	3,950
Champagne-Ardenne	3,440	3,550	3,600	3,630	3,750	3,940	4,110	4,360	4,680	5,120	5,370
Corse	4,340	3,770	3,790	4,010	4,630	4,260	4,080	4,400	6,710	9,980	17,530
Franche-Comté	1,890	1,840	1,830	1,800	1,790	1,850	1,910	2,240	2,300	2,550	2,420
Haute-Normandie	4,350	4,220	4,200	4,270	4,340	4,450	4,590	4,780	4,880	5,150	5,410
Ile-de-France	5,110	4,960	4,780	4,580	4,620	5,040	5,470	5,750	5,800	5,920	6,960
Languedoc-Roussillon	2,720	2,690	2,650	2,740	2,790	2,990	3,300	3,660	4,360	4,780	5,280
Limousin	2,010	1,940	1,900	1,970	1,970	2,120	2,240	2,540	2,640	2,690	2,600
Lorraine	2,330	2,330	2,370	2,400	2,460	2,570	2,750	3,000	3,210	3,390	3,380
Midi-Pyrénées	3,010	2,950	3,020	3,120	3,190	3,380	3,660	4,110	4,620	5,040	5,320
Nord-Pas-de-Calais	4,410	4,240	4,290	4,320	4,570	4,930	5,390	6,000	6,300	6,750	6,960
Pays-de-la-Loire	1,740	1,660	1,640	1,690	1,800	1,930	2,020	2,110	2,240	2,360	2,460
Pircardie	4,190	4,090	4,090	4,150	4,310	4,410	4,610	4,820	5,080	5,290	5,460
Poitou-Charentes	2,330	2,250	2,240	2,230	2,270	2,350	2,500	2,660	2,800	2,910	3,040
Provence-Alpes-Côte-d'Azur	6,840	6,220	5,590	5,310	5,240	5,470	5,930	6,740	8,960	11,070	14,290
Rhône-Alpes	3,560	3,360	3,300	3,370	3,390	3,500	3,670	4,090	4,490	4,750	6,050

Source: SAFER

Note: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha. Gifts are not included.

Table A14: Average value of agricultural land in France between 1990 and 2003 (euros/ha)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All land	3,034	3,003	2,912	2,790	2,744	2,790	2,805	2,866	2,942	3,079	3,280	3,400	3,530	3,640
Arable land	3,369	3,339	3,232	3,095	3,049	3,125	3,156	3,217	3,308	3,461	3,590	3,710	3,870	3,970
Pasture	2,454	2,409	2,332	2,226	2,195	2,211	2,211	2,226	2,302	2,424	2,560	2,660	2,750	2,850
Orchards	8,918	8,949	8,842	8,537	8,430	8,385	8,339	8,179	8,255	8,187	8,180	8,390	8,500	8,530
Vineyard	23,576	25,810	25,985	23,584	23,660	24,910	25,878	26,759	28,920	31,561	35,735	38,715	39,935	41,920

Source: Agreste

Note: These statistics are estimated from the market prices collected by SAFER and adjusted with expert assessments about the market activity in each region.

Table A15: Average value of agricultural land in France per administrative region between 1994 and 2004 (euros/ha)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Ile-de-France										
All land	4,780	4,734	4,704	4,810	4,887	5,039	5,374	5,490	5,220	5,270
Arable land	4,780	4,750	4,704	4,826	4,902	5,039	5,404	5,510	5,230	5,280
Pasture	4,613	4,613	4,613	4,613	4,628	4,841	4,871	4,900	5,000	5,000
Champagne-Ardenne										
All land	3,380	3,456	3,562	3,654	3,684	3,912	4,141	4,550	4,790	4,990
Arable land	3,791	3,897	4,019	4,141	4,156	4,460	4,734	5,050	5,340	5,560
Pasture	2,177	2,177	2,253	2,268	2,283	2,329	2,405	2,510	2,550	2,650
Picardie										
All land	4,384	4,399	4,536	4,704	4,780	4,856	5,008	5,340	5,630	5,710
Arable land	4,567	4,582	4,719	4,902	4,978	5,039	5,206	5,520	5,820	5,900
Pasture	3,532	3,577	3,669	3,775	3,806	3,943	4,049	4,170	4,370	4,440
Haute-Normandie										
All land	4,034	4,049	4,034	4,110	4,308	4,613	4,734	4,900	5,080	5,280
Arable land	4,323	4,339	4,217	4,369	4,536	4,826	4,917	5,040	5,230	5,410
Pasture	3,623	3,623	3,791	3,730	3,973	4,293	4,460	4,580	4,750	4,980
Centre										
All land	2,679	2,694	2,710	2,740	2,816	2,892	2,984	3,150	3,320	3,440
Arable land	2,892	2,923	2,938	2,968	3,060	3,136	3,227	3,320	3,500	3,630
Pasture	1,644	1,598	1,598	1,629	1,659	1,705	1,827	1,960	2,060	2,100
Basse-Normandie										

All land	3,045	3,121	3,121	3,105	3,243	3,547	3,684	3,930	4,050	4,330
Arable land	3,364	3,456	3,532	3,547	3,577	3,973	4,141	4,360	4,490	4,710
Pasture	2,892	2,968	2,923	2,908	3,090	3,349	3,486	3,590	3,710	4,030
Bourgogne										
All land	1,857	1,857	1,857	1,903	1,979	2,040	2,116	2,180	2,280	2,350
Arable land	2,101	2,116	2,131	2,192	2,268	2,344	2,436	2,460	2,590	2,670
Pasture	1,553	1,538	1,522	1,538	1,614	1,675	1,720	1,770	1,820	1,900
Nord-Pas-de-Calais										
All land	4,186	4,171	4,217	4,323	4,536	4,673	4,810	5,010	5,150	5,440
Arable land	4,476	4,460	4,506	4,613	4,856	5,039	5,282	5,410	5,570	5,920
Pasture	3,456	3,440	3,501	3,562	3,714	3,730	3,638	3,720	3,790	3,860
Lorraine										
All land	2,268	2,283	2,329	2,390	2,436	2,542	2,725	2,960	3,060	3,140
Arable land	2,390	2,405	2,451	2,527	2,573	2,694	2,908	3,120	3,230	3,320
Pasture	2,162	2,177	2,207	2,283	2,299	2,390	2,542	2,740	2,820	2,890
Alsace										
All land	4,689	4,597	4,613	4,658	4,673	4,658	4,704	4,810	4,910	5,020
Arable land	5,206	5,130	5,145	5,206	5,206	5,206	5,267	5,250	5,350	5,460
Pasture	3,380	3,258	3,288	3,273	3,288	3,288	3,273	3,270	3,380	3,470
Franche-Comté										
All land	1,857	1,827	1,827	1,827	1,857	1,964	1,994	2,160	2,170	2,250
Arable land	2,040	2,040	2,040	2,055	2,086	2,253	2,314	2,380	2,390	2,420
Pasture	1,781	1,720	1,720	1,720	1,751	1,827	1,842	1,990	2,000	2,100
Pays-de-la-Loire										
All land	1,644	1,598	1,583	1,690	1,796	1,933	1,979	2,150	2,290	2,350
Arable land	1,766	1,720	1,720	1,812	1,933	2,070	2,131	2,280	2,430	2,490
Pasture	1,461	1,416	1,385	1,492	1,598	1,751	1,781	1,820	1,920	2,000
Bretagne										
All land	3,075	3,060	3,090	3,121	3,166	3,273	3,334	3,470	3,560	3,530
Arable land	3,319	3,319	3,349	3,380	3,440	3,547	3,623	3,670	3,760	3,730
Pasture	1,964	1,949	1,949	1,949	1,979	2,040	2,055	1,970	2,020	2,030
Poitou-Charentes										
All land	2,344	2,329	2,283	2,253	2,268	2,405	2,573	2,770	2,770	2,880
Arable land	2,527	2,497	2,466	2,436	2,466	2,618	2,801	2,910	2,920	3,030
Pasture	1,751	1,751	1,675	1,644	1,659	1,720	1,796	1,820	1,760	1,920

Aquitaine										
All land	2,603	2,634	2,649	2,710	2,847	2,953	3,121	3,410	3,530	3,660
Arable land	2,816	2,877	2,923	2,999	3,182	3,349	3,562	3,740	3,870	4,020
Pasture	2,192	2,162	2,131	2,131	2,162	2,207	2,268	2,440	2,550	2,630
Midi-Pyrénées										
All land	2,877	2,923	2,999	3,060	3,182	3,380	3,501	3,660	3,850	3,960
Arable land	2,923	2,968	3,045	3,121	3,258	3,486	3,623	3,770	3,970	4,080
Pasture	2,771	2,801	2,862	2,862	2,908	3,060	3,121	3,300	3,450	3,570
Limousin										
All land	1,644	1,675	1,644	1,675	1,766	1,933	1,979	2,110	2,220	2,280
Arable land	1,827	1,842	1,888	1,918	1,994	2,146	2,192	2,310	2,420	2,440
Pasture	1,553	1,598	1,538	1,568	1,659	1,842	1,888	1,990	2,090	2,170
Rhône-Alpes										
All land	3,045	3,029	3,014	3,014	3,090	3,121	3,243	3,350	3,450	3,540
Arable land	3,593	3,577	3,532	3,501	3,593	3,638	3,760	3,820	3,980	4,140
Pasture	2,512	2,497	2,512	2,527	2,588	2,603	2,740	2,820	2,860	2,880
Auvergne										
All land	2,314	2,329	2,344	2,436	2,512	2,649	2,755	2,920	3,050	3,160
Arable land	2,755	2,801	2,831	2,923	3,014	3,151	3,227	3,230	3,410	3,560
Pasture	2,086	2,101	2,116	2,192	2,253	2,405	2,512	2,740	2,840	2,930
Languedoc-Roussillon										
All land	3,303	3,212	3,197	3,243	3,334	3,425	3,684	3,720	3,750	3,800
Arable land	3,730	3,623	3,593	3,638	3,745	3,836	4,156	4,250	4,250	4,300
Pasture	1,888	1,918	1,918	1,979	1,994	2,101	2,177	2,160	2,290	2,320
Provence-Alpes-Côte-d'Azur										
All land	4,445	4,399	4,369	4,339	4,445	4,567	4,734	5,070	5,340	5,610
Arable land	4,491	4,491	4,445	4,430	4,506	4,613	4,750	5,040	5,360	5,610
Pasture	4,232	4,049	4,049	3,943	4,186	4,369	4,689	5,190	5,290	5,610
Corse										
All land	3,440	3,166	2,786	3,045	2,938	3,349	3,532	2,830	2,770	2,740
Arable land	3,912	3,501	3,045	3,349	3,730	4,156	4,643	4,220	4,330	4,430
Pasture	2,923	1,964	1,857	1,979	2,070	2,451	2,314	2,110	1,970	1,870

Source: Agreste

Note: These statistics are estimated from the market prices collected by SAFER and adjusted with expert assessments regarding the land market activity in each region.

Germany

Table A16: Number of transactions, total area transferred, average size of exchanged plots and average market sale price of arable land and permanent pasture in Germany between 1990 and 2004

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Whole Germany															
Number of transactions	n.a	31,598	30,669	30,010	28,559	30,639	32,608	33,428	37,847	39,211	38,005	38,040	36,260	34,016	35,027
Total area transferred (ha)	n.a	58,140	62,175	64,909	65,441	71,959	79,442	85,984	102,394	110,893	105,667	101,784	97,683	96,878	95,812
Average size of exchanged plots (ha)	n.a	1.81	2.01	2.13	2.27	2.33	2.40	2.53	2.67	2.78	2.73	2.63	2.64	2.80	2.70
Average market sale price (euros/ha)	n.a	13,441	12,201	11,309	11,168	10,880	10,394	9,908	9,500	8,938	9,081	9,427	9,465	9,184	9,233
West Germany															
Number of transactions	29,874	28,511	26,792	25,734	24,532	25,421	26,796	26,511	28,734	28,503	27,474	27,386	25,311	24,228	24,369
Total area transferred (ha)	42,252	43,515	43,484	41,779	41,642	40,851	43,316	43,313	45,712	46,300	43,208	42,163	40,630	40,627	41.692
Average size of exchanged plots (ha)	1.40	1.50	1.60	1.60	1.67	1.59	1.59	1.61	1.57	1.61	1.56	1.53	1.59	1.66	1.69
Average market sale price (euros/ha)	17,199	16,695	15,430	15,227	15,402	16,452	16,285	16,458	17,194	16,530	16,830	17,246	16,966	16,489	16,035
East Germany															
Number of transactions	n.a	3,087	3,877	4,276	4,027	5,218	5,812	6,917	9,113	10,708	10,531	10,654	10,949	9,788	10,658
Total area transferred (ha)	n.a	14,624	18,691	23,131	23,799	31,108	36,126	42,672	56,681	64,593	62,469	59,621	57,053	56,251	54,120
Average size of exchanged plots (ha)	n.a	4.65	4.78	5.35	5.88	5.92	6.12	6.05	6.11	5.89	5.79	5.46	5.06	5.61	4.98
Average market sale price (euros/ha)	n.a	3,734	4,720	4,255	3,836	3,610	3,310	3,240	3,254	3,421	3,631	3,811	4,014	3,831	3,944

Source: Statistisches Bundesamt and Statistische Jahrbücher. Note: The statistics do not include gifts.

Italy

Table A17: Average market sale price of agricultural land in Italy between 1992 and 2003 (euros/ha; fixed euro value after 1999)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All land	10,890	11,157	11,496	11,964	12,213	12,561	12,980	13,292	13,766	14,383	14,968	15,462
Arable land	11,861	12,198	12,639	13,238	13,548	13,961	14,481	14,921	15,587	16,354	17,113	17,805
Pasture	4,796	4,931	5,068	5,246	5,345	5,488	5,615	5,691	5,882	6,042	6,171	6,348
Orchard	27,404	27,676	27,970	28,520	28,987	29,219	29,657	29,345	29,037	29,318	29,773	30,252
Olive trees	11,091	11,263	11,469	11,770	11,841	11,881	11,911	12,009	12,063	12,174	12,237	12,311
Vineyard	16,908	17,246	17,777	18,500	18,922	20,042	21,271	22,229	23,318	25,459	27,207	27,855

Source: INEA
Note: The statistics do not include gifts. The category arable land includes horticulture.

Table A18: Total area transferred of agricultural land in Lombardy region in Italy between 1990 and 1996

	1990-94	1993	1994	1995	1996
Area transferred (ha)	14,895	13,428	9,850	12,651	12,093

Source: INEA
Note: The statistics do not include gifts.

Lithuania

Table A19: Number of transactions, total area transferred and average size of exchanged plots of agricultural land in Lithuania between 2000 and 2004

	2000	2001	2002	2003	2004
Private land					
Number of transactions	20,992	20,328	15,448	17,000	34,636
Total area transferred (ha)	58,051	57,865	58,126	59,120	126,879
Average size of exchanged plots (ha)	2.76	2.85	3.76	3,48	3,66
Public land: sold					
Number of transactions	n.a	n.a	4,691	16,007	23,228
Total area transferred (ha)	n.a	n.a	5,274	17,765	24,945
Average size of exchanged plots (ha)	n.a	n.a	1.12	1.11	1.07

Source: LAEI. Note: Statistics for private land include gifts.

Table A20: Minimum and maximum of market prices of agricultural land in all districts of Lithuania between 2001 and 2004 (LTL/ha)

Districts	2001	2002	2003	2004
Alytaus	980 – 1,700	849 – 1,160	680 – 890	680 - 860
Kaunas	1,000 – 1,900	1,021 – 3,190	610 – 2,100	600 – 2,080
Klaipėda	950 – 2,900	931 – 3,240	750 – 3,100	760 – 2,020
Marijampolė	1,100 – 1,300	1,142 – 1,276	720 – 1,200	740 – 1,120
Panevėžys	950 – 1,200	932 – 1,241	550 – 1,300	500 – 1,510
Šiauliai	650 – 1,200	670 – 1,174	700 – 1,500	700 – 1,430
Tauragė	930 – 1,300	836 – 1,001	650 – 890	600 - 850
Telšiai	880 – 1,000	943 – 1,137	420 – 700	360 - 700
Utenos	930 – 1,700	1,154 – 1,910	710 – 840	620 - 780
Vilnius	920 - 8,900	1,088- 11,716	930 – 64,730	995 – 86,000

Source: LAEI. Note: The statistics are for public and private land and are for plots greater than 1 ha. They do not include gifts. 2004 statistics are provisional.

Table A21: Market prices from various sources of agricultural land in all districts of Lithuania in 2004 (LTL/ha)

	According to local planning specialists				In newspapers	From the massive evaluation
	All land; Including a), b), c)	a) Near cities	b) Fertile land in other areas	c) Unfertile land		
Districts	Average	Average	Average	Average	Average	Min-Max
Alytaus	900	2,400	1,200	650	n.a	n.a
Kaunas	1,700	2,250	1,400	750	1,450	600-4,340
Klaipėda	1,900	n.a	1,000	650	1,500	760-19,700
Marijampolė	1,600	2,800	1,500	1,100	1,700	740-1,920
Panevėžys	1,500	1,500	1,500	900	1,200	500-1,670
Šiauliai	1,300	2,500	1,400	650	1,100	700-9,470
Tauragė	800	1,100	1,100	750	1,000	600-1,400
Telšiai	900	n.a	1,000	600	750	360-1,100
Utenos	800	1,250	1,100	550	1,400	500-1,760
Vilnius	2,200	2,250	1,800	650	1,850	500-111,000

Source: LAEI

Note: The statistics are for public and private land and are for plots greater than 1 ha. They do not include gifts and are provisional.

Slovakia

Table A22: Number of transactions, total area transferred, average size of exchanged plots and average market sale price of agricultural land in Slovakia between 2001 and 2003

	2001	2002	2003
Number of transactions			
All 6 regions surveyed	1,976	2,117	688
Dunajská Streda	813	1,095	456
Topoľčany	157	122	330
Liptovský Mikuláš	756	576	75
Rimavská Sobota	97	130	55
Svidník	63	73	31
Michalovce	90	85	38
National estimation	13,520	14,485	4,707
Total area transferred (ha)			
All 6 regions surveyed	2,110	1,451	912
Dunajská Streda	1,443	990	860
Topoľčany	130	147	12
Liptovský Mikuláš	199	185	11
Rimavská Sobota	286	22	8
Svidník	9	18	6
Michalovce	42	89	13
National estimation	14,437	9,928	6,240
Average size of exchanged plots (ha)			
All 6 regions surveyed	1.07	0.70	1.32
Dunajská Streda	1.78	0.90	1.89
Topoľčany	0.83	1.21	0.38
Liptovský Mikuláš	0.26	0.32	0.15
Rimavská Sobota	2.95	0.17	0.15

Svidník	0.15	0.25	0.21
Michalovce	0.47	1.04	0.35
Average market sale price (SK/ha)			
All 6 regions surveyed	80,935	141,482	93,877
Dunajská Streda	92,114	182,376	94,726
Topoľčany	78,344	32,009	110,456
Liptovský Mikuláš	110,172	75,917	12,000
Rimavská Sobota	7,505	55,464	49,001
Svidník	71,369	28,602	n.a
Michalovce	68,169	48,078	52,800
Arable land	157,265	186,640	94,325
Pasture	39,554	51,004	52,800
Vineyard	26,084	46,860	none
Orchard	334,368	450,664	96,647
Horticulture	none	550,335	none

Source: VUEPP and Institute of Geodesy and Cartography, except for national estimations (authors' own calculations)
Note: The statistics refer to private land only and do not include gifts. None means that no transactions were recorded for this item. See main text for calculation of the national estimations.

Table A23: Administrative price of agricultural land in 6 regions of Slovakia between 2001 and 2003 (SK/ha)

	2001			2002			2003		
	All land	Arable land	Pasture	All land	Arable land	Pasture	All land	Arable land	Pasture
All 6 regions	44,295	58,556	14,442	44,244	58,724	14,378	44,295	58,556	14,431
Dunajská Streda	90,955	92,494	54,468	91,041	92,497	55,585	90,955	92,400	55,600
Topoľčany	59,629	61,235	22,070	59,394	60,995	21,993	58,500	60,000	21,900
Liptovský Mikuláš	12,040	17,867	9,871	11,975	17,912	9,884	11,900	17,800	9,800
Rimavská Sobota	25,938	36,047	13,701	25,814	36,016	13,521	25,800	36,047	13,400
Svidník	17,237	26,168	11,987	17,127	26,128	12,349	17,000	26,300	12,600
Michalovce	34,845	41,443	17,916	34,747	41,429	17,792	34,600	41,500	17,800

Source: VUEPP and Institute of Geodesy and Cartography

Sweden

Table A24: Number of transactions, total area transferred and average plot size of sold agricultural land in Sweden in 2001

	Number of transactions	Total area transferred (ha)	Average size of exchanged plots (ha)
All country	2,283	20,293	8.9
Per production area			
Plain districts in southern Götaland	124	1,664	13.4
Central districts in Götaland	202	2,526	12.5
Plain districts in northern Götaland	208	3,044	14.6
Plain districts in Svealand	245	3,378	13.8
Forest districts in Götaland	728	5,215	7.1
Forest districts in central Sweden	258	1,705	6.6
Lower parts of Norrland	331	1,586	4.8
Upper parts of Norrland	187	1,175	6.3

Source: Yearbook except for Average size of exchanged plots (authors' own calculation).
Note: The statistics do not include gifts. Average size of exchanged plots calculated as the ratio of Total area transferred/Number of transactions.

Table A25: Average market sale price of arable land and permanent pasture in Sweden between 1993 and 2001 (SEK/ha)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
All country	10,100	10,900	10,800	11,600	12,800	14,600	15,400	16,800	18,400
Per region									
Stockholm	11,600	11,700	11,200	9,300	10,600	14,700	12,200	n.a	n.a
Östra Mellansverige	8,700	8,700	9,500	10,300	10,200	11,900	14,500	n.a	n.a
Småland m öarna	7,400	7,000	7,500	7,100	8,000	8,700	8,400	n.a	n.a
Sydsverige	22,200	22.600	21,800	24,400	28,500	31,300	33,300	n.a	n.a
Västsverige	10,900	11,400	12,400	12,600	12,600	14,500	16,500	n.a	n.a
Norra Mellansverige	3,900	4,100	4,900	4,400	5,000	5,900	5,300	n.a	n.a
Mellersta Norrland	2,200	2,300	2,500	2,500	2,400	2,900	2,700	n.a	n.a
Övre Norrland	2,300	2,500	2,300	2,500	2,800	3,000	3,300	n.a	n.a
Per production area									
Plain districts in southern Götaland	24,900	26,200	25,800	29,900	37,500	40,400	39,200	40,100	46,600
Central districts in Götaland	13,700	16,700	13,800	15,200	15,400	20,300	20,900	22,800	20,900
Plain districts in northern Götaland	11,700	12,700	13,800	13,400	14,500	15,800	19,000	20,100	21,400
Plain districts in Svealand	8,000	8,300	8,700	8,300	9,100	12,100	11,900	13,900	18,900
Forest districts in Götaland	8,500	8,800	9,100	10,200	10,400	11,400	11,700	14,200	14,100
Forest districts in central Sweden	5,800	4,900	5,100	6,600	6,500	5,500	7,200	6,500	6,900
Lower parts of Norrland	2,400	2,800	2,900	2,600	2,700	3,100	3,200	3,000	3,000
Upper parts of Norrland	2,300	2,400	2,200	2,400	2,600	3,000	3,200	3,200	3,200

Source: Yearbook and SJV

Note: The statistics do not include gifts.

England

Table A26: Number of transactions, total area transferred, average plot size and average market sale price of agricultural land in England between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of transactions												
All land	1,856	1,893	1,964	2,417	2,915	2,464	2,446	2,322	1,868	2,081	1,599	821
Arable land	548	546	627	764	713	578	466	483	392	353	230	159
Land used for livestock farming	575	540	538	502	594	484	517	454	419	473	349	173
Land used for mixed farming	87	101	160	286	357	283	338	259	149	151	139	61
Land used for fruits *	13	8	12	12	10	12	8	9	6	7		0
Other land	633	698	627	853	1,241	1,107	1,117	1,117	902	1,099	879	428
Total area transferred (ha)												
All land	35,378	37,958	43,207	50,031	58,562	48,544	50,556	44,775	36,518	42,181	33,562	15,417
Arable land	13,003	11,575	15,694	18,750	17,351	14,879	11,460	11,830	10,190	7,305	6,076	4,217
Land used for livestock farming	8,738	9,128	10,223	9,218	9,408	7,817	10,472	7,697	7,590	8,705	8,533	2,598
Land used for mixed farming	2,348	2,200	3,551	5,564	7,378	5,718	7,281	5,580	2,916	3,195	2,613	920
Land used for fruits *	209	132	152	131	161	130	134	189	59	215		-
Other land	11,079	14,924	13,587	16,368	24,265	20,000	21,209	19,480	15,764	22,791	16,311	7,683
Average size of exchanged plots (ha)												
All land	19.1	20.1	22.0	20.7	20.1	19.7	20.7	19.3	19.5	20.3	21.0	18.8
Arable land	23.7	21.2	25.0	24.5	24.3	25.7	24.6	24.5	26.0	20.7	26.4	26.5
Land used for livestock farming	15.2	16.9	19.0	18.4	15.8	16.1	20.3	17.0	18.1	18.4	24.4	15.0
Land used for mixed farming	27.0	21.8	22.2	19.5	20.7	20.2	21.5	21.5	19.6	21.2	18.8	15.1
Land used for fruits *	16.1	16.5	12.7	10.9	16.1	10.9	16.8	21.0	9.8	30.7		-
Other land	17.5	21.4	21.7	19.2	19.6	18.1	19.0	17.4	17.5	20.7	18.6	17.9
Average market price (£/ha)												
All land	3,390	3,687	4,255	5,490	5,834	5,704	5,479	5,707	5,784	5,700	5,556	6,557
Arable land	3,339	4,392	5,202	6,358	6,947	6,401	6,483	6,325	6,220	6,329	6,269	5,975
Land used for livestock farming	3,337	3,223	3,481	3,851	4,540	4,058	3,728	4,141	4,668	4,926	4,486	6,743
Land used for mixed farming	3,007	3,838	3,653	4,849	5,307	5,418	5,066	5,028	5,071	5,001	5,441	6,352
Land used for fruits *	5,914	4,974	5,712	5,919	4,731	6,872	7,532	6,109	6,624	4,101		-
Other land	3,525	3,390	3,883	5,634	5,708	5,903	5,930	6,140	6,167	5,906	5,870	6,839

Source: DEFRA except for Average size of exchanged plots (authors' own calculation). Note: see next page.

Note to Table A26: The statistics are for plots greater than 5 ha and do not include gifts. Data for 2001- 2004 is provisional. Average size of exchanged plots calculated as the ratio of Total area transferred/Number of transactions.
*: Includes orchards, vineyard and hop gardens; data for 2002 & 2003 has been grouped to ensure that details of individual sales cannot be identified.

Table A27: Estimated value of agricultural land in England and Wales between 2002 and 2005 (£/ha)

	Arable	Dairy	Mixed	Hill
April 2002				
England and Wales	6,044	5,859	5,335	1,638
Per region:				
North East	5,558	-	4,602	679
North West	5,434	7,304	6,103	618
Yorkshire and Humberside	6,817	5,846	5,229	2,717
East Midlands	6,128	5,017	4,817	-
West Midlands	7,262	6,052	5,876	-
Eastern	6,318	-	5,651	-
South East	5,469	-	5,110	-
South West	5,110	5,214	4,858	2,347
Wales	-	6,580	5,311	1,050
April 2003				
England and Wales	5,985	5,750	5,301	1,470
Per region:				
North East	5,434	-	4,478	642
North West	5,434	7,235	6,210	618
Yorkshire and Humberside	6,410	5,311	4,940	2,594
East Midlands	5,982	4,787	4,663	-
West Midlands	7,057	5,970	5,787	-
Eastern	5,866	-	5,404	-
South East	5,434	-	5,172	-
South West	5,449	5,325	4,913	2,470
Wales	-	6,471	5,362	1,112
January 2004				
England and Wales	6,093	5,975	5,567	1,625

Per region:				
North East	5,434	-	4,478	642
North West	5,434	7,551	6,731	618
Yorkshire and Humberside	6,694	5,392	5,454	2,964
East Midlands	6,175	5,249	4,570	-
West Midlands	6,741	5,681	5,434	-
Eastern	5,970	-	5,639	-
South East	5,928	-	5,681	-
South West	5,558	5,627	5,187	2,470
Wales	-	6,867	5,822	1,359
January 2005				
England and Wales	6,869	6,849	6,558	1,971
Per region:				
North East	5,681	-	4,594	506
North West	5,434	7,674	6,864	679
Yorkshire and Humberside	8,769	7,205	7,452	3,582
East Midlands	6,869	5,866	5,187	-
West Midlands	7,709	6,526	6,405	-
Eastern	6,195	-	5,886	-
South East	6,316	-	6,284	-
South West	6,407	6,368	5,928	3,088
Wales	-	8,749	8,223	1,793

Source: Valuation Office Agency

Note: These values are not directly empirical statistics but are based on the Valuation Office Agency's valuers' opinions. The valuers appraise the value of bare agricultural land for typical property types by basing their opinion on their local knowledge of the farms and the background to transactions. Only some farms that are deemed to be representative for the land types and the regions are selected, and their value is reconsidered every six months. They are all non-tenanted farms and values exclude the value of milk quotas. Where there is no entry the land type is not typical within the area.

Comparison of all countries

Table A28: Evolution of the average market sale price of agricultural land in all countries between 1991 and 2004 (euros/ha)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	3,733	n.a	n.a	n.a	7,759	8,821	7,040	7,513	9,944	6,647	7,568	6,353
France	3,230	3,200	3,110	2,980	2,900	2,890	2,920	3,000	3,200	3,440	3,730	4,050	4,310	4,580
Germany	13,441	12,201	11,309	11,168	10,880	10,394	9,908	9,500	8,938	9,081	9,427	9,465	9,184	9,233
West Germany	16,695	15,430	15,227	15,402	16,452	16,285	16,458	17,194	16,530	16,830	17,246	16,966	16,489	16,035
East Germany	3,734	4,720	4,255	3,836	3,610	3,310	3,240	3,254	3,421	3,631	3,811	4,014	3,831	3,944
Italy	n.a	10,890	11,157	11,496	11,964	12,213	12,561	12,980	13,292	13,766	14,383	14,968	15,462	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	779	920	898	585
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	1,842	3,307	2,262	n.a
Sweden	n.a	n.a	1,166	1,164	1,162	1,306	1,476	1,684	1,623	1,962	2,084	n.a	n.a	n.a
England	n.a	n.a	4,190	4,847	5,339	6,346	7,873	8,619	7,767	9,180	9,268	9,367	8,541	n.a

Notes:
Exchange rates with euro used are the official rates on 1 January of the year considered, except for 1991-1999 in the Czech Republic where the rate is the one on 1 January 2000.
Statistics do not include gifts. Statistics for private land only, except in the Czech Republic and in Lithuania where they are for private and public land together.
Czech Republic: 2004 statistics include only statistics for the first half of the year.
France: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha.
Germany: prices for arable land and permanent pasture together only (not for all agricultural land).
Lithuania: Statistics for plots greater than 1 ha. Provisional data for 2004. Data reported in the table are the maximum prices for Klaipėda district, which is one of the most expensive districts due to its seaside location.
Sweden: prices for arable land and permanent pasture together only (not for all agricultural land).
England: Statistics for plots greater than 5 ha. Provisional data for 2001- 2004.

Table A29: Evolution of the number of transactions on the agricultural land market per 1,000 ha of UAA in all countries between 1991 and 2004

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	3.1	3.9	3.2	3.5	3.2	4.7	5.4	5.8	5.1	7.9	8.6	4.6
France	n.a	n.a	n.a	2.7	2.7	2.7	2.8	2.9	2.9	2.9	2.8	2.8	2.8	2.8
Germany	1.8	1.8	1.7	1.6	1.8	1.8	1.9	2.1	2.3	2.2	2.2	2.1	2.0	2.1
West Germany	2.4	2.3	2.2	2.1	2.2	2.3	2.3	2.5	2.5	2.4	2.4	2.2	2.1	2.1
East Germany	0.6	0.8	0.8	0.7	0.9	1.0	1.2	1.6	1.9	1.9	1.9	2.0	1.7	1.9
Italy	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	6.0	7.0	5.3	6.7	13.3
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	6.4	6.9	2.2	n.a
Sweden	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	0.7	n.a	n.a	n.a
England	n.a	n.a	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1

Notes:
Authors' own calculations based on data about the number of transactions and the UAA in each country.
Statistics do not include gifts except for Lithuania. Statistics for private land only, except in the Czech Republic where they are for private and public land together.
Czech Republic: 2004 statistics include only statistics for the first half of the year.
France: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha.
Germany: Statistics for arable land and permanent pasture only (not for all agricultural land).
England: Statistics for plots greater than 5 ha. Provisional data for 2001- 2004.

Table A30: Evolution of the share of UAA sold in total UAA in all countries between 1991 and 2004 (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	0.15	0.19	0.18	0.17	0.15	0.23	0.29	0.33	0.28	0.64	0.69	0.48
France	n.a	n.a	n.a	0.91	0.96	0.95	0.96	0.96	0.96	0.93	0.90	0.95	0.97	0.93
Germany	0.34	0.37	0.38	0.38	0.41	0.45	0.49	0.58	0.65	0.62	0.60	0.58	0.57	0.56
West Germany	0.37	0.37	0.35	0.35	0.35	0.37	0.37	0.39	0.40	0.38	0.37	0.36	0.36	0.36
East Germany	0.28	0.37	0.44	0.44	0.56	0.65	0.76	1.01	1.15	1.11	1.06	1.02	1.00	0.97
Italy	n.a	n.a	1.24	0.91	1.16	1.11	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	1.66	1.99	2.00	2.34	4.87
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	0.69	0.47	0.30	n.a
Sweden	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	0.66	n.a	n.a	n.a
England	n.a	n.a	0.22	0.23	0.27	0.31	0.36	0.30	0.32	0.29	0.24	0.27	0.21	0.10

Notes:
Authors' own calculations based on data about the transferred area and the UAA in each country.
Statistics do not include gifts except for Lithuania. Statistics for private land only, except in the Czech Republic where they are for private and public land together.
Czech Republic: 2004 statistics include only statistics for the first half of the year.
France: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha.
Germany: Statistics for arable land and permanent pasture only (not for all agricultural land).
England: Statistics for plots greater than 5 ha. Provisional data for 2001- 2004.

Table A31: Evolution of the average size of plots sold on the agricultural land market in all countries between 1991 and 2004 (ha)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	0.48	0.5	0.55	0.5	0.48	0.49	0.53	0.57	0.56	0.8	0.8	1.03
France	n.a	n.a	n.a	3.38	3.54	3.52	3.40	3.33	3.28	3.21	3.26	3.38	3.45	3.36
Germany	1.81	2.01	2.13	2.27	2.33	2.4	2.53	2.67	2.78	2.73	2.63	2.64	2.8	2.7
West Germany	1.5	1.6	1.6	1.67	1.59	1.59	1.61	1.57	1.61	1.56	1.53	1.59	1.66	1.69
East Germany	4.65	4.78	5.35	5.88	5.92	6.12	6.05	6.11	5.89	5.79	5.46	5.06	5.61	4.98
Italy	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	2.76	2.85	3.76	3.48	3.66
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	1.07	0.7	1.32	n.a
Sweden	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
England	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Notes:
Statistics do not include gifts except for Lithuania. Statistics for private land only, except in the Czech Republic where they are for private and public land together.
Czech Republic: 2004 statistics include only statistics for the first half of the year.
France: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha.
Germany: Statistics for arable land and permanent pasture only (not for all agricultural land).
England: Statistics for plots greater than 5 ha. Provisional data for 2001- 2004.

c) Rental market of agricultural land

Czech Republic

Table A32: Average shares of rented agricultural land per farm in the Czech Republic between 1995 and 2003

	1995	2000	2003
All farms (%)	89.4	91.6	89.3
Individual farms (%)	71.0	71.8	70.0
Corporate farms (%)	94.9	98.7	96.7

Source: Agrocensus and Agricultural Structural Survey

Table A33: Average agricultural land rentals in the Czech Republic between 1999 and 2004 (CZK/ha)

	All farms											
	1999	2000	2001	2002	2003	2004						
Whole country	416	425	643	670	719	810						
	Individual farms						Corporate farms					
	1999	2000	2001	2002	2003	2004	1999	2000	2001	2002	2003	2004
Whole country	649	649	794	886	875	944	345	345	588	590	660	759
Production area												
Maize	1,330	1,330	1,083	1,494	1,485	1,505	597	597	975	926	1,089	1,077
Sugar-beet	846	846	1,159	1,295	1,278	1,276	731	731	889	892	1,054	1,208
Cereal	447	447	559	552	572	613	174	174	478	463	404	517
Potato	761	761	338	401	496	596	158	158	295	294	343	405
Mountain	205	205	245	315	366	445	68	68	165	217	187	281

Source: Green Report and VUZE

Note: The rental figures include contracts where no rent is paid. The Czech Republic is divided into five production areas (or agri-environmental areas), that can be ranked from the most to the least favourable region for farming in the following order: maize, sugar-beet, cereal, potato, mountain.

France

Table A34: Average shares of rented agricultural land per farm in France between 1990 and 2003

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Average share of rented land (%)	65.7	66.9	68.1	70.6	71.2	72.3	77.1	78.7	79.3	79.5	80.1	80.7	81.3	81.3

Source: French FADN
Note: These statistics are for FADN farms only, whose average UAA (68 ha in 2003) is larger than the population average (42 ha).

Table A35: Average agricultural land rentals in France between 1994 and 2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Average rental (euros/ha)	112.1	113.5	115.1	117.6	121.4	124.4	124.0	123.1	123.6	122.7	122.3

Source: SAFER
Note: These statistics are estimations based on county's regulations regarding the establishment of rentals and hence do not include contracts where no rent is paid.

Germany

Table A36: Average shares of rented agricultural land per farm and average agricultural land rentals in Germany between 1991 and 2003

	1991	1993	1995	1997	1999	2001	2003
Whole Germany							
Average share of rented land (%)	53.3	59.0	60.9	62.1	63.0	63.9	63.9
Individual farms	n.a	n.a	n.a	51.5	52.6	n.a	54.5
Partnerships	n.a	n.a	n.a	84.0	78.3	n.a	74.2
Corporate farms	n.a	n.a	n.a	95.0	93.8	n.a	90.1
Average rental (euros/ha)	141	143	147	150	158	164	174
Arable land	n.a	n.a	n.a	173	165	n.a	193
Pasture	n.a	n.a	n.a	119	117	n.a	121
West Germany							
Average share of rented land (%)	42.5	45.1	47.0	48.2	50.0	52.0	53.6
Individual farms	n.a	n.a	n.a	59.4	48.7	n.a	n.a
Partnerships	n.a	n.a	n.a	57.0	57.3	n.a	n.a
Corporate farms	n.a	n.a	n.a	47.0	47.8	n.a	n.a
Average rental (euros/ha)	217	217	216	218	221	225	261
Arable land	276	263	264	271	285	287	294
Pasture	188	170	163	169	163	161	148
East Germany							
Average share of rented land (%)	77.5	89.8	90.1	91.1	89.8	88.1	85.1
Individual farms	n.a	n.a	n.a	84.1	81.1	n.a	n.a
Partnerships	n.a	n.a	n.a	92.8	90.2	n.a	n.a
Corporate farms	n.a	n.a	n.a	95.8	94.7	n.a	n.a
Average rental (euros/ha)	67	77	85	90	97	104	116
Arable land	n.a	86	101	112	119	135	140
Pasture	n.a	47	49	55	61	61	66

Source: Statistisches Bundesamt and Statistische Jahrbücher
Note: The rental figures do not include contracts where no rent is paid.

Italy

Table A37: Average shares of rented agricultural land per farm in Italy between 1991 and 2002

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
All farms (%)	29.9	28.3	30.6	31.3	34.2	32.7	32.2	35.0	37.2	35.6	37.9	41.8
According to specialisation (%):												
Farms with specialisation field crops	26.7	27.0	27.3	29.7	30.6	31.9	30.5	33.8	33.8	34.5	35.3	40.1
Farms with specialisation horticulture	27.8	23.8	20.0	25.0	23.5	22.7	33.3	33.3	28.6	30.4	31.8	36.4
Farms with specialist permanent crops	10.5	13.0	14.8	14.8	16.1	13.7	13.5	16.7	18.9	18.4	18.4	21.2
Including vineyard farms	10.5	10.2	14.5	17.9	15.8	16.1	14.3	18.2	20.0	20.3	17.9	19.4
Including fruit farms	12.5	11.9	14.6	13.3	15.6	14.6	14.3	19.0	20.5	19.6	23.8	22.6
Including olive farms	10.2	13.8	17.9	15.4	16.7	10.9	13.0	16.7	17.0	15.0	12.2	19.1
Farms with specialisation grazing livestock	52.4	46.6	49.6	50.2	53.2	51.4	51.7	53.4	55.1	53.0	55.0	58.6
Farms with specialisation granivores	21.4	38.5	38.8	56.8	52.6	40.2	37.6	50.7	50.0	23.4	42.6	39.6
Farms with specialisation mixed cropping	17.4	16.5	18.3	18.1	24.8	25.5	22.6	25.8	29.6	26.3	30.5	36.3
Farms with specialisation mixed livestock	28.1	33.1	31.7	31.1	42.8	42.1	41.0	39.4	55.8	48.5	45.5	44.2
Farms with specialisation mixed crop-livestock	33.5	30.9	35.5	35.4	38.0	35.2	35.9	38.6	45.6	43.4	50.0	50.5

Source: Italian FADN.

Note: These figures are only for farms present in Italian FADN. Such farms are with more than 2 Economic Unit of Gross Income (2,400 euros), and it is evaluated that the above figures are almost double than figures for the whole country.

Table A38: Average agricultural land rental in Italy between 2001 and 2003 (euros/ha)

	2001	2002	2003
All land (weighted average by UAA)	376.6	387.0	396.8
Arable land and horticulture	385	385	390
Pasture	97.5	96.25	102.2
Orchard	970	950	970
Olive trees	410	430	440
Vineyard	1,060	1,225	1,285

Source: INEA

Note: The rental figures do not include contracts where no rent is paid.

Lithuania

Table A39: Average agricultural land rentals in some districts of Lithuania in 2003 (LTL/ha)

	2003
Klaipėda	57
Marijampolė	94
Panevėžys	70.75
Šiauliai	79.2
Tauragė	50
Telšiai	50
Utenos	43.5
Vilnius	57.5
Average all districts	70

Source: LAEI
Note: The rental figures include contracts where no rent is paid.

Slovakia

Table A40: Average shares of rented agricultural land per farm in Slovakia between 2000 and 2003

	2000	2001	2002	2003
All land (%)	63.1	75.1	77.8	80.7

Source: Central Database Ministry of Agriculture SR, VUEPP, Information lists

Sweden

Table A41: Average shares of rented agricultural land per farm in Sweden between 1991 and 1999

	1991	1992	1993	1994	1995	1996	1997	1998	1999
All land (%)	43.3	43.6	43.9	44	44.9	44.6	44.9	45	45.6

Source: SJV

Table A42: Average rentals for arable land in Sweden between 1997 and 2004 (SEK/ha)

	1997	1999	2000	2002	2004
All country	981	1,063	1,079	1,203	1,238
Sydsverige	1,916	2,051	2,106	2,412	2,808
Västsverige	1,182	1,165	1,223	1,336	1,446
Småland möarna	728	820	885	973	992
Östra mellansverige	869	991	934	1,109	1,072
Norra mellansverige	n.a	436	485	551	374
Norra Sverige	60	188	203	127	150

Source: Yearbook and SJV
Note: Data include rentals where no rent is paid.

England

Table A43: Average shares of rented agricultural land per farm in England and the United Kingdom between 1997 and 2004

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
United Kingdom (%)	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	31.6	31.7	32.1
England (%)	37.0	36.7	35.9	35.4	34.7	34.9	33.9	34.2	34.1	34.3	33.9	34.2	34.7
including													
Land under FATs (%)	n.a	n.a	n.a	n.a	n.a	27.0	25.5	25.4	23.7	23.2	21.5	20.9	20.2
Land under FBTs (%)	n.a	n.a	n.a	n.a	n.a	3.6	4.8	4.8	6.4	7.0	8.4	9.1	9.8
Land under lettings of less than 1 year (%)	n.a	n.a	n.a	n.a	n.a	4.3	3.6	4.0	4.0	4.1	4.0	4.2	4.7

Source: DEFRA

Table A44: Average agricultural land rentals in England between 1996 and 2004 (£/ha)

	1996	1997	1998	1999	2000	2001	2002	2004
According to the agreement type								
a) Land under FATs	106.27	115.65	118.14	118.62	114.76	111.33	110.13	109.97
b) Land under FBTs	174.14	178.9	177.47	173.78	164.98	161.33	156.05	143.33
c) Land under lettings of less than 1 year	136.77	142.29	126.28	131.34	123.77	129.71	102.85	114.36
Average of a), b), c)								
Weighted by land area	n.a	n.a	126.4	127.9	125.3	124.5	120.2	119.8
Non weighted	139.1	145.6	140.6	141.2	134.5	134.1	123.2	122.6
According to the type of farm, FATs only								
Cereal	119.97	127.34	134.04	135.23	128.88	124.39	125.14	124.63
General cropping	125.54	142.26	144.28	145.80	143.89	140.66	134.64	140.18
Dairy	129.90	137.30	139.58	140.61	143.15	137.61	131.67	128.64
Cattle and sheep (LFA)	31.05	38.29	39.15	37.96	34.74	31.42	32.94	33.04
Cattle and sheep (lowland)	85.85	91.99	90.84	90.84	85.39	102.37	101.15	111.96

Source: DEFRA

Note: The rental figures do not include contracts where no rent is paid.

Comparison of all countries

Table A45: Evolution of the average rental price of agricultural land in all countries between 1991 and 2004 (euros/ha)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	12	12	18	21	22.8	25
France	n.a	n.a	n.a	112	114	115	118	121	124	124	123	124	123	122
Germany	141	n.a	143	n.a	147	n.a	150	n.a	158	n.a	164	n.a	174	n.a
West Germany	217	n.a	217	n.a	216	n.a	218	n.a	221	n.a	225	n.a	261	n.a
East Germany	67	n.a	77	n.a	85	n.a	90	n.a	97	n.a	104	n.a	116	n.a
Italy	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	377	387	397	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	20	n.a
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	25	26	25	n.a
Sweden	n.a	n.a	n.a	n.a	n.a	n.a	113	123	114	140	140	n.a	n.a	n.a
England	n.a	n.a	n.a	n.a	n.a	n.a	n.a	191	181	202	199	197.5	n.a	170

Notes:
Exchange rates with euro used are the official rates on 1 January of the year considered, except for 1991-1999 in the Czech Republic where the rate is the one on 1 January 2000.
The rental figures do not include contracts where no rent is paid, except in the Czech Republic, Lithuania and Sweden.
Slovakia: Data reported in the table are 2.5% of the average administrative price in the country.
Sweden: Rentals for arable land only.

Table A46: Evolution of the average share of rented UAA per farm in all countries between 1991 and 2004 (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	n.a	n.a	89.4	n.a	n.a	n.a	n.a	91.6	n.a	n.a	89.3	n.a
France	66.9	68.1	70.6	71.2	72.3	77.1	78.7	79.3	79.5	80.1	80.7	81.3	81.3	n.a
Germany	53.3	n.a	59	n.a	60.9	n.a	62.1	n.a	63	n.a	63.9	n.a	63.9	n.a
West Germany	42.5	n.a	45.1	n.a	47	n.a	48.2	n.a	50	n.a	52	n.a	53.6	n.a
East Germany	77.5	n.a	89.8	n.a	90.1	n.a	91.1	n.a	89.8	n.a	88.1	n.a	85.1	n.a
Italy	29.9	28.3	30.6	31.3	34.2	32.7	32.2	35	37.2	35.6	37.9	41.8	n.a	n.a
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Slovakia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	63.1	75.1	77.8	80.7	n.a
Sweden	43.3	43.6	43.9	44	44.9	44.6	44.9	45	45.6	n.a	n.a	n.a	n.a	n.a
England	37.0	36.7	35.9	35.4	34.7	34.9	33.9	34.2	34.1	34.3	33.9	34.2	34.7	37.0

Notes:
France and Italy: Data are for FADN farms only.

d) Sale market of non-agricultural land

Czech Republic

Table A47: Average market price of forest land and of building and other land in the Czech Republic between 1993 and 2004 (CZK/ha)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Forest land	185,210	88,601	164,433	105,092	104,559	102,441	122,960	113,010	102,685	103,686	112,832	76,848
Building land and other	872,825	1,108,020	1,523,564	909,645	1,315,432	1,315,092	1,908,564	2,048,355	2,215,994	645,692	717,437	4,924,633

Source: VUZE
Note: 2004 statistics include only statistics for the first half of the year.

France

Table A48: Average market price of forest land in France between 1990 and 2004 (euros/ha)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Average	2,320	2,247	2,049	1,940	1,928	1,832	1,742	1,740	1,758	1,931	2,057	2,221	2,394	2,462	2,673
Minimum	552	547	519	508	505	506	493	492	510	526	532	548	586	609	628
Maximum	6,950	6,339	5,553	4,961	4,906	4,855	4,599	4,590	4,615	4,921	5,546	6,039	6,427	6,835	7,258

Source: SAFER
Note: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha. Gifts are not included.

Germany

Table A49: Average market price of building land in Germany between 1990 and 2003 (euros/ha)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Whole Germany														
Average sale price	n.a	n.a	250,900	305,900	355,800	359,300	415,300	444,700	482,500	496,000	517,900	501,800	584,300	769,000
West Germany														
Average sale price	456,300	463,800	480,600	493,600	503,300	506,000	534,800	551,600	564,600	596,700	630,300	616,300	682,900	923,700
East Germany														
Average sale price	n.a	n.a	101,800	144,700	197,200	199,100	265,000	274,700	308,700	292,000	307,500	278,600	351,500	350,400

Source: Statistische Jahrbücher. Note: Statistics do not include gifts.

Lithuania

Table A50: Minimum and maximum market prices of forest land in the districts of Lithuania between 2001 and 2003 (LTL/ha)

Districts	2001	2002	2003
Alytaus	1,700 – 2,500	1,780 – 2,550	1,780 – 2,560
Kaunas	600 – 1,900	1,150 – 2,000	1,150 – 2,230
Klaipėda	1,100 – 1,500	1,300 – 1,770	1,300 – 1,770
Marijampolė	1,000 – 2,000	1,560 – 2,100	1,440 – 2,170
Panevėžys	1,100 – 1,800	1,280 – 1,760	1,280 – 1,760
Šiauliai	900 – 1,500	1,060 – 1,370	1,070 – 1,370
Tauragė	1,400 – 2,200	1,580 – 2,030	1,580 – 2,030
Telšiai	1,000 – 1,600	1,180 – 1,430	1,180 – 1,430
Utenos	1,600 – 2,200	1,550 – 2,100	1,550 – 2,020
Vilnius	1,200 – 4,600	1,200 – 3,600	1,200 – 3,230

Source: LAEI

England

Table A51: Number of transactions, total area transferred and average market sale price of forest land in England between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of transactions	108	140	148	139	228	160	141	108	92	125	111	52
Total area transferred (ha)	2,538	4,005	4,314	3,577	6,465	5,212	4,041	2,243	1,823	3,705	3,008	1,929
Average market price (£/ha)	1,999	2,405	3,405	3,139	2,754	2,714	2,819	3,524	3,484	2,910	3,504	3,114

Source: DEFRA

Note: The statistics are for plots greater than 5 ha and do not include gifts. Data for 2001- 2004 are provisional.

Comparison of all countries

Table A52: Evolution of the average market sale price of forest land in the Czech Republic, France, Lithuania and England between 1991 and 2004 (euros/ha)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Czech Republic	n.a	n.a	5,130	2,454	4,555	2,911	2,896	2,838	3,406	3,130	2,930	3,244	3,573	2,371
France	2,247	2,049	1,940	1,928	1,832	1,742	1,740	1,758	1,931	2,057	2,221	2,394	2,462	2,673
Lithuania	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	1,236	1,022	936	n.a
England	n.a	n.a	2,471	3,161	4,272	3,629	3,716	4,101	3,996	5,668	5,582	4,782	5,387	n.a

Notes:

Exchange rates with euro used are the official rates on 1 January of the year considered, except for 1991-1999 in the Czech Republic where the rate is the one on 1 January 2000.

Czech Republic: 2004 statistics include only statistics for the first half of the year.

France: The statistics include all transactions for plots greater than 0.5 ha and some transactions for plots smaller than 0.5 ha. Gifts are not included.

Lithuania: Statistics for plots greater than 1 ha. Provisional data for 2004. Data reported in the table are the maximum prices for Vilnius district.

England: Statistics for plots greater than 5 ha. Gifts are not included. Data for 2001- 2004 are provisional.

Appendix 3: Detailed statistics about Section 5 “Potential imperfections on factor markets ”

a) Transaction costs on the land markets

Lithuania

Table A53: Fee for issuing certificates indicating the market value of the plot sold in Lithuania (LTL)

Issuance within			
7 workdays	5 workdays	3 workdays	1 workday
11,80	15,34	17,70	23,60

Source: Registrų Centras

Table A54: Fee for plot registration in cadastre in Lithuania

For plots in urban areas							
Market value of the plot (LTL)	< 1,000	1,001 – 2,000	2,001 – 4,000	> 4,000			
Fee (LTL)	20	25 – 40	40 - 50	50 – 1,000 (for physical entities) 50 – 10,000 (for legal entities)			
For plots in rural areas							
Market value of the plot (LTL)	< 1,000	1,001 – 3,000	3,001 – 5,000	5,001 – 7,000	7,001 – 10,000	10,001 – 30,000	> 30,000
Fee (LTL)	20	25 – 40	40 – 50	50 – 60	60 – 70	70 – 90	90 – 1,000 (for physical entities) 90 – 10,000 (for legal entities)

Source: Registrų Centras
Note: Registration of public land rental contract is less 25% of defined fee.

Table A55: Other administration prices that may arise during land transactions in Lithuania (LTL)

	Issuance of the certificate within			
	7 workdays	5 workdays	3 workdays	1 workday
Certificate of land owned	25.0	32.5	37.5	50.0
Extract from the register about the real estate according to its address	10.0	13.0	15.0	20.0
Extract from the register about the real estate according to its owner	10.0 and 10.0	13.0 and 10.0	15.0 and 10.0	20.0 and 10.0
Duplicate	25.0	32.5	37.5	50.0
Certificate about the property rights of the plot	10.0 and 10.0	13.0 and 10.0	15.0 and 10.0	20.0 and 10.0
Certificate about neighbouring plots' property rights	10.0 and 10.0	13.0 and 10.0	15.0 and 10.0	20.0 and 10.0

Source: Registrų Centras
Note: In cells containing two figures the first figure refers to the establishment of the certificate and the second price refers to the search in the register.

England

Table A56: Scale of the stamp duty for transfer of land in England

Value of the property	Rate (%)
Up to £60,000 if residential property, up to £150,000 if not	0
Between £60,000 (residential property) or £150,000 and £250,000	1
Between £250,000 and £500,000	3
Over £500,000	4

Source: 35th 'Farm Management Pocketbook' by John Nix, 2005

Table A57: Fees for registration of land in cadastre in England

Value of the property (£)	Fee for registration during a transaction (£)	Fee for voluntary registration outside a transaction (£)
0 - 50,000	40	30
50,001 - 80,000	60	45
80,001 - 100,000	100	75
100,001 - 200,000	150	110
200,001 - 500,000	220	165
500,001 - 1,000,000	420	315
Over 1,000,001	700	525

Source: UK Land Registry

b) Wages in agriculture

Czech Republic

Table A58: Average monthly wages in the Czech Republic between 1991 and 2003

	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Whole economy (CZK)	3,792	5,817	6,894	8,172	9,676	10,695	11,688	12,658	13,491	14,642	15,707	16,917
In agriculture (CZK) *	3,791	5,061	5,840	6,882	7,829	8,493	9,143	9,405	10,134	11,762	11,506	11,762
Ratio agriculture * / whole economy (%)	100.0	87.0	84.7	84.2	80.9	79.4	78.2	74.3	75.1	76.1	73.3	69.5

Source: Green Report
* Individual farms not included

France

Table A59: Average annual incomes in France between 1990 and 2000

	1990	1993	1994	1995	1996	1997	1998	1999	2000
Whole economy (euros)	22,562	25,951	n.a.	n.a.	26,625	23,820	n.a.	24,769	25,588
In agriculture (euros)	21,114	24,512	n.a.	n.a.	23,322	23,539	n.a.	24,205	22,324
Ratio agriculture / whole economy (%)	93.6	94.5	n.a.	n.a.	87.6	98.8	n.a.	97.7	87.2

Source: INSEE

Germany

Table A60: Average hourly wages in Germany between 1991 and 2004

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Whole economy (euros)	13.35	14.55	15.37	15.71	16.39	16.87	17.05	17.28	17.67	18.18	18.67	19.07	19.38	19.40
In agriculture (euros)	8.15	8.11	8.88	9.32	9.77	9.92	9.97	10.07	10.33	10.60	10.78	11.04	11.19	11.12
Ratio agriculture / whole economy (%)	61.0	55.7	57.8	59.3	59.6	58.8	58.5	58.3	58.5	58.3	57.7	57.9	57.7	57.3

Source: Statistisches Bundesamt

Italy

Table A61: Ratio between gross incomes in agriculture and whole economy in Italy between 1991 and 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Ratio agriculture / whole economy (%)	59.6	62.1	62.6	61.9	61.5	59.6	58.9	58.7	58.3	57

Source: INEA

Lithuania

Table A62: Average monthly wages in Lithuania between 1993 and 2002

	1993	1994	1995	1996	1997	2000	2001	2002
Whole economy (LTL)	166	325	481	621	785	971	982	1,014
In agriculture, hunting and forestry (LTL)	85	157	289	381	517	694	716	764
Ratio agriculture/whole economy (%)	51	48	60	61	66	72	73	75

Source: Lithuanian Statistics Department

Slovakia

Table A63: Average monthly wages in Slovakia between 1991 and 2003

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Whole economy (SKK)	3,770	4,543	5,379	6,294	7,195	8,154	9,226	10,212	10,945	11,864	12,931	14,214	15,261
In agriculture (SKK)	3,771	4,148	4,556	5,191	5,835	6,579	7,149	7,826	8,392	9,076	9,842	10,478	10,958
Ratio agriculture / whole economy (%)	100.0	91.3	84.7	82.5	81.1	80.7	77.5	76.6	76.7	76.5	76.1	73.7	71.8

Source: Green Report

Sweden

Table A64: Average hourly wages in Sweden in 2003

	2003
Whole economy (SEK)	140
In agriculture, forestry and fishing (SEK)	110
Ratio agriculture/whole economy (%)	78.6

Source: Statistics Sweden

United Kingdom

Table A65: Average weekly wages in the United Kingdom between 1993 and 2005 *

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Whole economy (£)	240	300	310	328	336	350	367	385	401	416	432	448	463
In agriculture and fishing (£)	165	210	227	219	231	244	245	297	285	302	313	295	335
Ratio agriculture / whole economy (%)	68.8	70.0	73.2	66.8	68.8	69.7	66.8	77.1	71.1	72.6	72.5	65.8	72.4

Source: UK National Statistics
*: In spring each year

c) Education in agriculture

Czech Republic

In the Czech Republic there are three main educational levels: primary education for 9 years, secondary education for 2 to 4 years, university or practical schools for 2 to 3 years. Schools at all levels within the education system may be specialised in agriculture or related fields (e.g. agro-tourism). In recent years the number of agriculture specialised schools has declined, a trend triggered by the decrease in the agricultural workforce and accentuated by the loss of interest for farming by young people.

Table A66: Highest education level of persons employed in agriculture in the Czech Republic in 2004

Any education	Share of persons employed in agriculture, forestry and fishing (%)
No education or primary (9 years or less)	18.6
Secondary (2-4 years)	75.2
Post-secondary (> 2 years)	6.2

Source: Green Report

France

In France school is compulsory until 16 years old. Pupils start with primary school from 4 to 11 years old, and go on with low secondary education during 4 years and high secondary education during 3 years. Both low and high secondary education can be technical. Secondary education can then be followed by university (at least 3 years) or by technical post-secondary education (2 years). Agricultural specialisation is possible in the secondary level and in the post-secondary, both university and non-university.

Table A67: Highest education level of farmers in France in 1991, 1997, 2003

	1991	1997	2003
	Share of farmers (%)		
Any education			
No education	6.6	6.1	4.6
Primary (8 years)	58.3	43.4	29.5
Lower secondary (4 years)	31.5	43.3	50.7
Upper secondary (3 years)	3.2	6.5	13.2
Post-secondary (2 years or more)	0.4	0.7	2.0
Agricultural education			
No agricultural education	15.4	9.8	6.9
Courses or training in agriculture	49.2	38.0	26.9
Lower secondary	28.6	39.5	44.4
Upper secondary	5.1	9.5	15.6
Post-secondary	1.7	3.2	6.2

Source: Authors' own calculations based on French FADN (RICA)
Note: These statistics are for FADN farms only, whose average UAA (68 ha in 2003) is larger than the population average (42 ha).

Germany

In Germany the primary school lasts for four years, from 6 to 10. Then children attend a secondary school for at least 5 years (5 years in "Hauptschule", 6 years in "Realschule", 9 years in "Gymnasium"), which is the minimum compulsory education duration. After 5 or 6 years in secondary education ("Realschule" and "Hauptschule") people follow an apprenticeship, while after 9 years ("Gymnasium") people are allowed to go to university (3 years minimum). The specialisation in agriculture can start during the secondary level as a school with special emphasis on agriculture and after the secondary level as apprenticeship for 2 or 3 years (after "Hauptschule") or as higher education for 3 years (after "Gymnasium").

Table A68: Highest education level of farmers in Germany in 1999

	Share of farmers (%)
Any education	
No education or primary (4 years or less)	3.8
Secondary (5-9 years)	85.0
Post-secondary non-university (2-3 years)	8.2
Post-secondary university (3 years or more)	3.0
Agricultural education	
No agricultural education	38.3
Secondary	54.1
Post-secondary non-university	5.8
Post-secondary university	1.8

Source: Authors' own calcultations after Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft
Note: The statistics do not include those farmers who have both agricultural and non-agricultural education.

Italy

In Italy school is obligatory up to 14 years old. Primary school from 6 to 11 years old is followed by lower secondary education of 3 years, higher secondary education up to 5 years, and then by university education of 3 years minimum. Agricultural education is dispensed at the secondary level (technical and professional schools) or at the university level.

Table A69: Highest education level of farmers owners in Italy in 2000

Any education	Share of farmers owners (%)
No education	10.3
Primary (5 years)	46.5
Lower secondary (3 years)	23.9
Secondary (3-5 years)	15.8
Post-secondary (3 years or more)	3.5

Source: ISTAT

Lithuania

The education system in Lithuania consists of five basic educational levels: primary level for 5 years or less, lower secondary level for 5 years, upper secondary for 2 years upper, non-university post secondary for 3-4 years, university for at least 4 years. Agricultural education can be opted for in the last three levels (from upper secondary on).

Table A70: Highest education level of persons employed in agriculture in Lithuania in 2003

Any education	Share of persons employed in agriculture, forestry and fishing (%)
No education or primary (5 years or less)	8.3
Lower secondary (5 years)	29.3
Upper secondary, secondary professional (2 years)	57.6
Post-secondary non-university (3-4 years)	2.0
Post-secondary university (> 4 years)	2.7

Source: Lithuanian Statistics Department

Slovakia

In Slovakia the primary level of 9 years is compulsory. The options at the end of the primary school are to go to get a low technical degree after 3 years, or to go to secondary education, general or technical, for 4 years. Post-secondary includes only universities, technical or non-technical, for at least 3 years.

Table A71: Highest education level of persons employed in agriculture in Slovakia in 2003

Any education	Share of persons employed in agriculture (%)
No education or primary (9 years or less)	14.8
Short secondary (3 years)	54.5
Long secondary (4 years)	24.0
Post-secondary (> 3 years)	6.7

Source: Statistical Office SR

Sweden

The Swedish educational system consists of nine years of compulsory school, which is usually followed by a secondary school during three years. The most common agricultural education is secondary school for natural resource use.

Table A72: Highest education level of persons employed in agriculture in Sweden in 2002

	Share of persons employed in agriculture, forestry and fishing (%)
Any education	
No education or primary (9 years or less)	31.8
Short secondary (<2 years)	37.2
Long secondary (>2 years)	18.4
Short post-secondary (<3 years)	8.4
Long post-secondary (>3 years)	4.2
Agricultural education	
No agricultural education	67.6
Short secondary	17.5
Long secondary	8.8
Short post-secondary	4.6
Long post-secondary	1.5

Source: SCB AMPAK

United Kingdom

In the UK the primary level lasts for 6 years, and is followed by 7 years of secondary education. Compulsory education is up to 16 years old. After the secondary degree students can opt for further education, called vocational education, which delivers industrial certificates, and higher education, usually in universities.

Table A73: Highest education level of farmers in England in 2002

	Share of farmers (%)
Any education	
No education or primary	6.9
Lower secondary	22.6
Long secondary	51.6
Short post-secondary	15.9
Long post-secondary	3.0

Source: Authors' own calculations based on English FADN (FBS)
Note: These statistics are for FADN farms only.

d) Interest rates

Czech Republic

Table A74: Annual interest rates on loans (subsidised and commercial loans) and on deposits in the Czech Republic between 1994 and 2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Annual interest rate on loans (%)	13.11	12.80	12.54	13.22	12.86	8.69	7.16	7.05	6.23	5.30
Annual total interest rate for SGFFF loans (%) including a) + b)	n.a	n.a	n.a	n.a	17.21	11.63	11.64	10.73	9.61	8.30
a) subsidised rate by SGFFF (%)	n.a	n.a	n.a	n.a	12.01	9.27	9.66	8.98	8.10	6.89
b) rate paid by farmers in SGFFF programs (%)	2.70	3.80	3.20	6.40	5.20	2.36	1.98	1.75	1.51	1.41
Annual interest rate on deposits in CZK (%)	7.06	6.69	6.79	7.72	8.09	4.47	3.39	2.97	2.17	1.42

Source: Green Report

France

Table A75: Annual interest rate on loans and on deposits in France between 1993 and 2005

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Annual interest rate on loans to individuals (%) [a]	11.50	9.51	9.29	9.17	8.12	7.33	6.18	6.48	6.96	6.05	5.69	5.12	4.72
Annual interest rate on loans to companies (%) [a]													
< 2 years	13.21	11.23	11.95	11.30	9.25	8.17	7.22	7.43	7.90	7.94	7.02	6.37	5.75
> 2 years	11.76	9.92	9.73	8.91	7.48	7.00	6.00	6.04	6.66	6.11	5.76	4.93	4.82
Annual interest rate on deposits in euros (%) [b]													
< 2 years	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	2.75	2.52	2.68
> 2 years	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	3.63	3.58	3.61

Source: Banque de France

[a]: for the first term of each year. [b]: in May/June.

Germany

Table A76: Annual interest rate on loans and on deposits in Germany between 1997 and 2003

	1997	1998	1999	2000	2001	2002	2003
Annual interest rate on loans between 100,000 and 500,000 euros (%)	6.67	6.27	5.98	7.08	6.69	6.54	5.79
Annual interest rate on deposits in euros (%)							
< 1 year	2.95	3.16	2.67	3.71	3.46	2.71	1.94
1 - 4 years	3.73	3.73	3.16	4.35	3.77	3.23	2.30
> 4 years	4.65	4.39	4.00	4.68	4.37	4.10	3.38

Source: Bundesbank

Italy

Table A77: Annual interest rate on loans and on deposits in Italy between 2000 and 2003

	2000	2001	2002	2003
A) Annual interest rate on loans to all sectors (%)	5.87	5.26	4.82	3.72
B) Annual interest rate on loans to agriculture (%)	6.39	5.56	5.14	4.33
C) Annual interest rate on deposits (%)	1.65	1.87	1.37	n.a.

Source: INEA for A) and B); Eurostat for C)

Lithuania

Table A78: Annual interest rate on loans and on deposits in Lithuania between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual interest rate on loans (%)												
Average	92	62	27	22	14	12	13	12	10	7	6	16
< 1 month	111	77	31	25	14	13	15	14	11	6	7	17
1 - 3 months	105	68	30	24	13	13	14	13	9	7	6	19
3 - 6 months	88	63	29	25	16	13	15	13	10	7	6	16
6 - 12 months	66	54	27	23	16	13	14	12	10	7	6	11
1 - 5 years	49	34	18	12	15	13	13	12	10	7	7	14
> 5 years	49	34	18	12	6	7	8	10	9	6	5	5
Annual interest rate on deposits in LTL (%)	n.a	n.a	n.a	n.a	n.a	n.a	6	6	6	3	2	2

Source: Lietuvos Bankas

Slovakia

Table A79: Annual interest rate on (subsidised and all) loans to agriculture in Slovakia between 1990 and 2004

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual rate (%)	16.2	16.0	18.0	18.1	16.0	15.2	15.5	17.2	16.5	14.0	10.5	9.9	9.5	9.9
Annual subsidised rate (%)	9.5	10.0	12.0	12.0	11.0	8.8	8.8	8.8	8.8	8.8	8.8	7.9	6.4	4.5

Source: Statistical Office SR, Informative Letters, CD Ministry of Agriculture SR, VUEPP

Sweden

Table A80: Annual interest rate on loans and on deposits in Sweden between 1994 and 2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual interest rate on loans (%)	7.5	9.0	7.5	5.25	5.25	4.25	4.25	4.5	5.0	3.75	2.75
Annual interest rate on deposits in SEK (%)	6.0	7.5	6.0	3.75	3.75	2.75	2.75	3.0	3.5	2.25	1.25

Source: Landshypothek and Föreningssparbanken

United Kingdom

Table A81: Annual interest rate on loans and on deposits in the United Kingdom between 1993 and 2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual interest rate on loans (%)	5.38	6.13	6.38	5.94	7.25	6.25	5.50	6.00	4.00	4.00	n.a	n.a
Annual interest rate on deposits in £ (%)	n.a	n.a	n.a	n.a	n.a	n.a	2.46	2.93	2.55	1.79	1.74	2.62

Source: Eurostat and UK National Statistics