

## AGRICULTURE AND FISHERIES

THEME 5 - 1/2000

#### **AGRICULTURE**

#### Contents



Manuscript completed on: 3/03/2000 ISSN 1562-1340 Catalogue number: CA-NN-00-001-EN-I Price in Luxembourg per single copy (excl. VAT): EUR 6

© European Communities, 2000

# Thirty years of agriculture in Europe Farm numbers declining as farms grow in size

#### Claude VIDAL

From the 1960s until the early 1990s, the main objective of the Common Agricultural Policy with its various reforms was to guarantee the security of supplies, boost productivity and ensure a fair standard of living for farmers. In order to meet this challenge, the agricultural sector in Europe had to undergo thorough restructuring. In particular, it lost a large number of farms during these three decades as the European Union progressively expanded.

#### **Decline in the number of farms in Europe**

Between 1967 and 1997, the number of farms fell by 42%, i.e. a loss of 2.7 million farms in the six EU founding members<sup>1</sup>. France, Germany and Italy lost 1 million, 700 000 and 660 000 farms respectively (Figure 1).

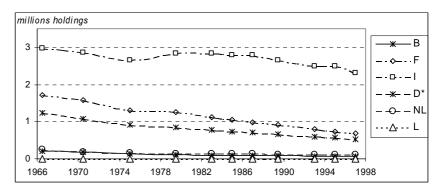


Figure 1: Changes in the number of farms in EU-6 between 1967 and 1997

Of the six founding members, Italy is a special case. Almost two out of three European farms and almost four out of five European farms of less than 5 ha are located in Italy. The way in which farms in Italy are passed on from one generation to another results in the land being progressively subdivided and hence also explains why the number of farms in Italy has declined less sharply than in other parts of Europe (22% in Italy) and, in particular, the number of farms of less than 5 ha (20% in Italy as against 37% for EU-6 as a whole between 1967 and 1997).

<sup>&</sup>lt;sup>1</sup> In this article, "Germany" (represented by a  $D^*$  in the graphs) should be understood as the West Germany up to the 1987 survey, and as the reunified Germany thereafter.

For the other five Member States, this reduction varies between 56% in the Netherlands and 69% in Belgium (Figure 2).

For the period 1975-1997, among the Member States which joined the EU in 1973, the introduction of the CAP led to a restructuring of the agricultural sector in Ireland and Denmark. Both countries lost relatively more farms than the founding members (35% and 52% respectively as against 29% for EU-6). On the other hand, the United Kingdom, where the agricultural sector has always been composed of large farms, experienced a fall of only 17%.

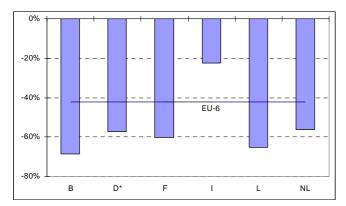


Figure 2: Changes in the number of farms in EU-6 between 1967 and 1997

Between 1987 and 1997, there was a fall of 24% in the number of farms in EU-12, which corresponded to a loss of 2 million farms (Figure 3). This development was particularly marked in Spain and Portugal while the number of farms in Ireland and France also fell steadily. In Denmark, the sharp decline in the number of agricultural holdings between 1975 and 1997 was particularly evident from 1975 to 1987.

Finally, between 1995 and 1997, the decline continued with a 5% fall in the number of farms in EU-15. This time, the decline was scarcely affected by the entry of three new Member States. However, there was an apparent increase in the number of farms in Sweden owing to the lowering of the threshold for the farms surveyed.

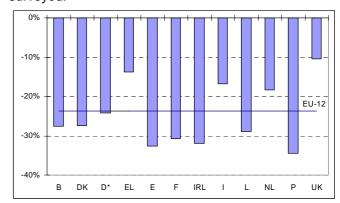


Figure 3: Changes in the number of farms in EU-12 between 1987 and 1997

#### Smallest holdings rapidly disappearing

Between 1967 and 1997, the agricultural sector in EU-6 lost almost 1.3 million farms under 5 ha, which accounted for almost half the number of farms lost. The countries which experienced the greatest losses were Italy, Germany and France which lost 430 000, 360 000 and 325 000 farms respectively.

The decline in the number of small farms (under 20 ha) in EU-6 was more marked than the decline in the number of farms as a whole (Table 1). In the five founding countries other than Italy (cf. above) over 60% of agricultural holdings of less than 5 ha and of 5-20 ha were lost (Figure 4).

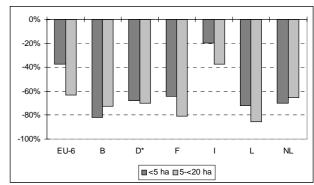


Figure 4: Changes in the number of farms of less than 20 ha in EU-6 between 1967 and 1997

	Change	Average annual variations				
UAA period	1967 - 1997	1967 - 1997	1967 - 1975	1975-1987	1987 - 1997	
Less than 5 ha	-37%	-1.5%	-2.6%	-0.3%	-2.2%	
5-20 ha	-63%	-3.3%	-4.2%	-2.4%	-3.6%	
20 and more	-6%	-0.2%	+1.1%	-0.2%	-1.3%	
Total	-42%	-1.8%	-2.6%	-0.8%	-2.3%	

Table 1: Changes in the number of holdings by size of UAA in EU-6



From 1975 to 1997, the reduction in the number of holdings of less than 5 ha was more marked in Ireland and Denmark than in the founding countries (a reduction of 68% and 87% respectively as against 23% in EU-6).

For the 1987-1997 period, the number of holdings under 5 ha fell by a quarter in the 12 EU Member States. This reduction was most apparent in Spain and Portugal which lost 40% of their farms in this category (Figure 5).

Finally, between 1995 and 1997 the decrease in the number of holdings under 5 ha remained steady in EU-15 (7%). Ireland and Finland lost a quarter of their farms under 5 ha whereas in Sweden (with its change in threshold cf. above) the number of such farms increased by one in six and in the United Kingdom by one in eight.

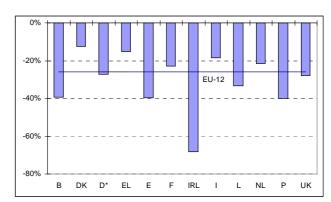
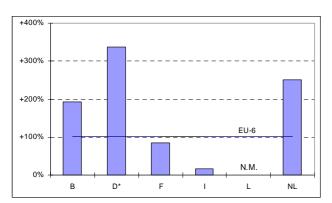


Figure 5: Changes in the number of farms of less than 5 ha in EU-12 between 1987 and 1997

#### Large farms on the rise

While there was a significant fall in the number of small holdings across Europe, the number of farms of 50 ha and more increased steadily.

In Germany, the number of large farms in this category increased by a factor of 4.4 between 1967 and 1997. In the old *Länder*, this figure rose by a factor of 3.8. German reunification was one reason for this increase (14% of German agricultural holdings of 50 ha and more were located in the new *Länder* in 1997). Moreover, the very large farms in the former East Germany were divided up, going from an average UAA of 198 ha in 1993 to 174 ha in 1997.



L: due to a small number of holdings the calculation is not meaningful (N.  $M.). \label{eq:local_local_local}$ 

Figure 6: Increase in the number of farms of 50 ha and more in EU-6 between 1967 and 1997

The number of holdings of at least 50 ha doubled between 1967 and 1997 in the six EU founding members. In Italy, the number of such farms rose by only 17% but more than tripled in the Benelux states (Figure 6).

Between 1975 and 1997, there was an increase of 74% in the number of large holdings in Denmark where the agricultural sector underwent radical restructuring. The United Kingdom, on the other hand, witnessed a slight fall in the number of large farms (Figure 7).

From 1995 to 1997, the general trend towards a greater number of farms of 50 ha or more continued in most of the EU Member States. In Greece the number of such farms continued to fall. In the United Kingdom, concentration among such farms has also led to a reduction in number. In Portugal there appears to have been a reversal of the trend to increasing number of large holdings. In Finland, their number increased by 17% in two years however.

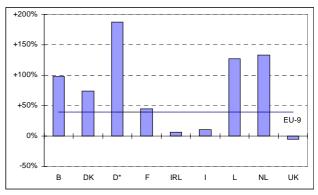


Figure 7: Changes in the number of farms of 50 ha and more in EU-9 between 1975 and 1997



#### More UAA per farm

As the UAA in EU-6 was relatively stable (around 60 million hectares) between 1967 and 1997, the changes in the average UAA per agricultural holding were strongly linked to the fall in the number of holdings. In EU-6, the average UAA per farm rose from 10 ha to 17 ha in thirty years. The developments explained above were again evident because the average UAA rose only by 7% in Italy and more than doubled in the five other EU Member States (Figure 8).

Between 1987 and 1997, the reorganisation of the farming sector in Spain and Portugal was characterised by a sharp increase in the average UAA. In Germany, the UAA almost doubled over this period because of the inclusion of the very large farms from the new *Länder*. The United Kingdom and Greece were the only countries where the average UAA per farm remained relatively unchanged (Figure 9).

The distribution of farms by UAA classes in 1975, 1987 and 1997 shows the strong tendency towards an increase in the average UAA per holding in most EU Member States including new entrants (Figure 10).

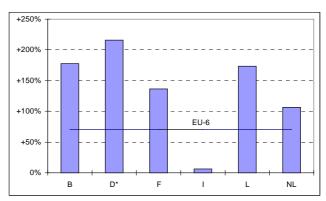


Figure 8: Changes in the average UAA in EU-6 between 1967 and 1997

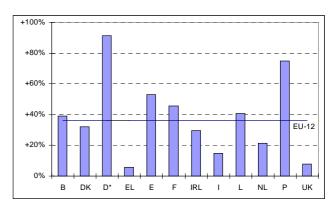


Figure 9: Changes in the average UAA in EU-12 between 1987 and 1997

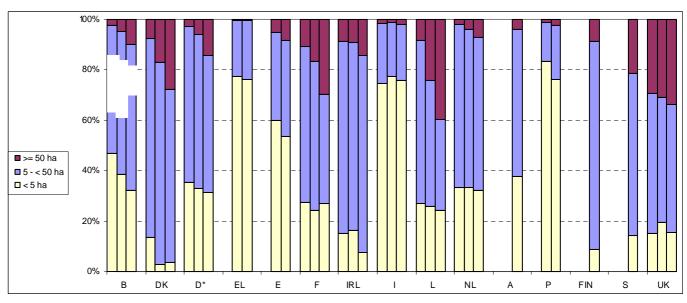


Figure 10: Percentage distribution of the number of farms by size of UAA in 1975, 1987 and 1997



By comparing the distribution of the number of holdings with the total UAA for each UAA class (Figure 11) it is possible to examine the holdings in greater detail. Hence Spain and Portugal had few holdings of 50 ha and over, but their average UAA was very high. The United Kingdom had a large number of holdings in this category whose average

UAA was also very high (one holding in three and 5/6 of the UAA). In the same way, holdings of 50 ha and over in Germany in 1997 had a high average UAA, largely because of reunification. On the other hand, in Belgium, Ireland, the Netherlands and Finland, holdings of 50 ha and more did not have a very high average UAA.

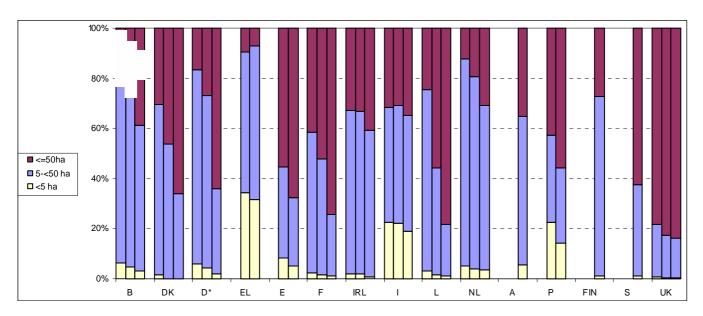


Figure 11: Percentage distribution of UAA by size of UAA for holdings in 1975, 1987 and 1997

#### Steady increase in economic size

The economic size of agricultural holdings can be represented by the standard gross margin (SGM) which they produce. Expressed as European Size Units (ESUs), it is comparable in time and space.

From 1975 onwards, the economic size of farms has risen in every country including later entrants with the expansion of the European Union (Figure 12).

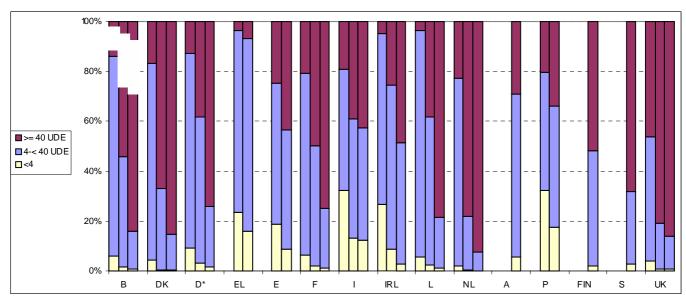


Figure 12: Share of the SGM produced according to economic size of holdings in 1975, 1987 and 1997



The total SGM generated by agricultural holdings in EU-9 grew by a factor of 2.3 between 1975 and 1997 (Table 2).

The loss of those farms which were economically the smallest has been much more significant. Thus, between 1975 and 1997, 43% of farms with an SGM under 4 ESU compared to only 7% of farms over 4 ESU were lost in the first nine EU Member States. The number of farms with an SGM of at least 40 ESU increased almost sixfold.

There has thus been a significant increase in the economic size of agricultural holdings. This is due, on the one hand, to the physical concentration of farms (drop in numbers and increase in physical size) and, on the other, to an overall gain in productivity.

Economically large agricultural holdings are, on the one hand, farms which are physically large such as those in the United Kingdom and, on the other, intensive farms like those in Belgium and the Netherlands. In these countries, the SGM per hectare is almost four times the European average. In Denmark, the SGM per holding is three times the European average because of a combination of the above two factors.

		EU-9		EU-12		EU-15	
		1975	1997	1987	1997	1995	1997
Total SGM (millions of ESU)		39.6	89.7	93.3	110.0	109.9	116.6
Average	Value(ESU)	6.8	21.6	10.8	16.7	14.9	16.7
SGM	Growth during the period	+218.3%		+54.4%		+11.9%	
per holding	Annual growth	+5.4%		+4.4%		+5.8%	

Table 2: Evolution de la MBS européenne

In 1975, holdings under 4 ESU in the six EU founder members (almost two out of every three holdings) generated one eighth of the total SGM. In 1997, for the same countries, one has to take all holdings under 16 ESU, i.e. half of all holdings, to generate the same proportion of total SGM.

In 1997, one in ten European farms produced two thirds of the total SGM. Half of all holdings generated 95% of SGM. The economic weight of the other half of agricultural holdings was therefore very insignificant. These holdings nevertheless played a significant role in terms of land management and conservation of the countryside (Table 3).

Percentage of	Economic size	EU-9		EU-12		EU-15	
		1975	1997	1987	1997	1995	1997
Number of holdings	Less than 4 ESU	60.1%	48.0%	56.8%	51.4%	52.8%	50.5%
	4 to less than 40 ESU	38.1%	37.1%	37.3%	38.1%	37.9%	38.9%
	40 ESU and over	1.9%	14.9%	5.9%	10.5%	9.3%	10.5%
SGM	Less than 4 ESU	12.3%	3.4%	7.9%	4.9%	5.2%	4.8%
	4 to less than 40 ESU	67.7%	25.5%	46.0%	30.9%	34.5%	31.9%
	40 ESU and over	21.0%	71.1%	46.1%	64.2%	60.2%	63.3%

Table 3: Percentage of holdings by economic size



#### Owner-occupied farms still the most common type of agricultural holding

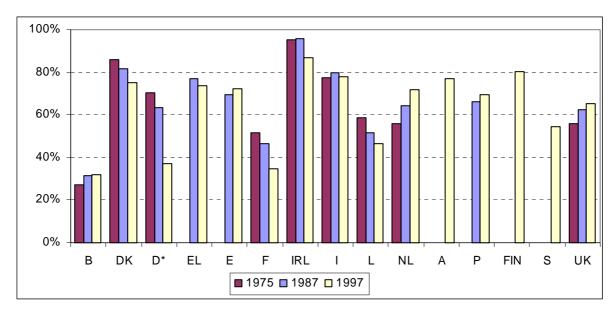


Figure 13: Share of UAA used by owner-occupied farms in 1975, 1987 and 1997

In EU-15, owner-occupied and tenant farms accounted for 98% of the types of agricultural holding in the UAA in 1997.

In 1970, in EU-6, broadly two thirds of the UAA was given over to owner-occupied farms and one third to tenant farms. Between 1970 and 1997, there was a steady increase in tenant farming at the expense of owner-occupied farming. In 1997, the proportion of the UAA farmed by owner-occupied holdings fell to almost 47% in EU-6 and tenant farms became the most common type of agricultural holding.

These trends are discernible in EU-12 and EU-15 over shorter periods and are thus less pronounced. Thus between 1987 and 1997, the proportion of the

UAA managed by owner-occupied farms in EU-12 fell from 68% to 58%. In EU-12 as in EU-15, the majority of farms have been owner-occupied. In 1997, 59% of the UAA in EU-15 was still farmed by owner-occupied holdings.

The situation nevertheless differs from country to country, doubless because of various traditions and legislation relating to the land (Figure 13).

This phenomenon is due, on the one hand, to the sharp decline in the number of small farms which are usually owner-occupied. On the other, the need for large amounts of capital to purchase farms of ever increasing size often leads to tenant farming.

#### Abbreviations used

The **utilised agricultural area (UAA)** is the area used for farming, i.e. arable land, permanent grassland, permanent crops and kitchen gardens.

The **gross margin** of an agricultural holding is the monetary value of gross production, from which certain specific corresponding costs are deducted. The **standard gross margin** (**SGM**) is the value of the gross margin corresponding to the average situation of a given region for each farm activity.

The economic size of the holding (or the total standard gross margin) is defined on the basis of the total standard gross margin of the holding. It is expressed in **European size units (ESU)** and corresponds to ECU 1 000 up to 1983, 1 000 in 1985 and ECU 1 200 since 1987.



### Further information:

#### Databases

New Cronos Domain Eurofarm

BELGIQUE/BELGIË	DANMARK	DEUTSCHLAND	ESPAÑA	FRANCE	ITALIA – Roma  ISTAT Centro di Informazione Statistica Sede di Roma, Eurostat Data Shop Via Ces are Balbo, 11a I-00184 ROMA Tel. (39-06) 46 73 31 02/06 Fax (39-06) 46 73 31 01/07 E-Mail: dipdiff@istat.it	
Eurostat Data Shop Bruxelles/Brussel Planistat Belgique 124 Rue du Commerce Handesstraat 124 B-1000 BRUXELLES / BRUSSEL Tel. (32-2) 234 67 50 Fax (32-2) 234 67 51 E-Mail: datashop@planistat.be	DANMARKS STATISTIK Bibliotek og Information Eurostat Data Shop Sejrøgade 11 DK-2100 KØBENHAVN Ø Tel. (45-39) 17 30 03 F-ax (45-39) 17 30 03 E-Mail: bib@dst.dk	STATISTISCHES BUNDESAMT Eurostat Data Shop Berlin Otto-Braun-Straße 70-72 D-10178 BERL IN Tel. (49-30) 23 24 64 27/28 Fax (49-30) 23 24 64 30 E-Mail: datashop@statistik-bund.de	INE Eurostat Data Shop Paseo de la Castellana, 183 Oficina 009 Entrada por Estébanez Calderón E-28046 MADRID Tel. (34-91) 583 91 67 Fax (34-91) 579 71 20 E-Mail: datashop.eurostat@ine.es	INSEE Info Service Eurostat Data Shop 195, rue de Bercy Tour Gamma A F-75582 PARIS CEDEX 12 Tel. (33-1) 53 17 88 44 Fax (33-1) 53 17 88 22 E-Mail: datashop@insee.fr		
ITALIA – Milano	LUXEMBOURG	NEDERLAND	NORGE	PORTUGAL	SCHWEIZ/SUISSE/SVIZZERA	
ISTAT Ufficio Regionale per la Lombardia Eurostat Data Shop Via Fieno 3 1-20123 MILANO Tel. (39-02) 8061 32460 Fax (39-02) 8061 32304 E-mail: mileuro@tin.it	Eurostat Data Shop Luxembourg BP 453 L-2014 LUXEMBOURG 4, rue A. Weicker L-2721 LUXEMBOURG Tel. (352) 43 35 22 51 Fax (352) 43 35 22 221 E-Mail: dslux@eurostat.datashop.lu	STATISTICS NETHERLANDS Eurostat Data Shop-Voorburg po box 4000 2270 JM VOORBURG Nederland Tel. (31-70) 337 49 00 Fax (31-70) 337 59 84 E-Mail: datashop@cbs.nl	Statistics Norway Library and Information Centre Eurostat Data Shop Kongens gate 6 P. b. 81 31, dep. N-0033 O SL O Tel. (47-22) 86 46 43 Fax (47-22) 86 45 04 E-Mail: datashop@ssb.no	Eurostat Data Shop Lisboa INE'Serviço de Difusão Av. António José de Almeida, 2 P-1000-043 LISBOA Tel. (351-21) 842 61 00 Fax (351-21) 842 63 64 E-Mail: data.shop@ine.pt	Statistisches Amt des Kantons Zürich, Eurostat Data Shop Bleicherweg 5 CH-8090 Zürich Tel. (41-1) 225 12 12 Fax (41-1) 225 12 99 E-Mail: datashop@zh.ch Internetadresse: http://www.zh.ch/statistik	
SU OM I/FIN LAND	SVERIGE	UNITED KINGDOM	UNITED KINGDOM	UNITED STATES OF AMERI	CA	
Eurostat Data Shop Helsinki Tilastokirjasto Postiosoite: PL 2B Käyntiosoite: Työpajakatu 13 B, 2 krs FIN-00022 Tilastokeskus Tel. (358-9) 17 34 22 21 Fax (358-9) 17 34 22 279 Sposti datas hop.lilastokeskus @ilastokeskus.f. Interneladresse: http://www.libastokeskus.fitk/ikk/datashop.html  Media Support Eurostat (for professis Bech Building Office A3/48 - L-2920 Lu;	URL: http://www.scb.se/info/datashop/ eudatashop.asp onal journalists only).	Eurostat Data Shop Enquiries & advice and publications Office for National Statistics Customers & Electronic Services Unit 1 Drummond Gate - B1/05 UK-LONDON SW1V 2QQ Tel. (44-171) 533 56 76 Fax (44-1633) 812 762 E-Mait eurostat.datashop@ons.gov.uk	Eurostat Data Shop Electronic Data Extractions, Enquiries & advice - R. CADE Unit 11. Mountoy Research Centre University of Durham UK - DURHAM DH1 3SW Tel: (44-191) 374 7350 Fax: (44-191) 384 4971 E-Mail: r-cade @dur.ac.uk URL: http://www-rcade.dur.ac.uk @cec.eu.int	HAVER ANALYTICS Eurostat Data Shop 60 East 42nd Street Suite 331 0 USA-NEW YORK, NY 10165 Tel. (1-21 2) 986 93 00 Fax (1-21 2) 986 58 57 E-Mail: eurodata@haver.com		
For information on r	nethodology					
		HALMANN- Eurostat/F	1, L-2920 Luxembourg	g - E-mail:claude.vida	I@cec.eu.int	
ORIGINAL: French	-					
Please visit our web site a	www.europa.eu.int/comn	n/eurostat/ for further inforr	nation!			
A list of worldwide sales or	ıtlets is available at the Offi	ce for Official Publication	s of the European Comm	unities.		
2 rue Mercier – L-2985 Luxembourg Tel. (352) 2929 42118 Fax (352) 2929 4 Internet Address http://eur-op.eu.int/fr e-mail: info.info@cec.eu.int	.2709 PORTUGAL – /general/s-ad.htm EESTI – HRVA	SUOMI/FINLAND - SVERIGE - UNITEI	) KINGDOM - ÍSLAND - NORGE - S POLSKA - ROMÂNIA - RUSSIA - SLO	CHWEIZ/SUISSE/SVIZZERA – BALGA DVAKIA – SLOVENIA – TÜRKIYE – AL	DURG – NEDERLAND – ÖSTERREICH RIJA – CESKÁ REPUBLIKA – CYPRUS STRALIA – CANADA – EGYPT – INDIA	
Ord	er <u>f</u> orm		containing a selection	ree copy of 'Eurostat Mini- on of Eurostat products and DE DE R		
	Statistics in focus (from 1.1 es office addresses see abo	·		oducts and services	eferences', the information	
<b>☐ Formula 1</b> : All 9 ther	nes (approximately 140 issu	ues)	☐ Mr ☐ Mrs	☐ Ms		
☐ Paper:	EUR 360		(Please use block capital			
•	EUR 264		Surname:	Forename:		
□ Paper + PDF: 1	EUR 432		Company:			
			Function:			

Language required: ☐ DE ☐ EN ☐ FR Address: \_\_\_ ☐ Formula 2: One or more of the following seven themes: ☐ Theme 1 'General statistics' Country: \_\_\_\_\_ ☐ Paper: EUR 42 ☐ PDF: EUR 30 ☐ Combined: EUR 54 \_\_\_\_\_ Fax: \_\_\_\_\_ ☐ Theme 2 'Economy and finance' ☐ Theme 3 'Population and social conditions' Payment on receipt of invoice, preferably by: ☐ Theme 4 'Industry, trade and services Bank transfer ☐ Theme 5 'Agriculture and fisheries' Visa 

Eurocard ☐ Theme 6 'External trade' Card No: Expires on: \_ ☐ Theme 8 'Environment and energy Please confirm your intra-Community VAT number: ☐ Paper: EUR 84 ☐ PDF: EUR 60 ☐ Combined: EUR 114 If no number is entered, VAT will be automatically applied. Subsequent Language required: ☐ DE ☐ EN ☐ FR reimbursement will not be possible.